

BANCO SANTANDER, S.A.

ANNUAL REPORT

FOR THE YEAR ENDED 31 DECEMBER 2021

TABLE OF CONTENTS

Part 1.- Consolidated directors' report, auditor's report and consolidated financial statements 3
Part 2.- Supplemental information 811

Part 1.

Consolidated directors´ report, auditor's report and consolidated financial statements



Annual report 2021

santander.com

Santander



2021
Annual report

Unless otherwise specified, references in this annual report to other documents, including but not limited to other reports and websites, including our own, are for information purposes only. The contents of such other documents and websites are not incorporated by reference in this annual report nor otherwise considered to be a part of it.

Unless the context requires otherwise, 'Banco Santander' means Banco Santander, S.A., and 'Santander', 'the Group' and 'Santander Group' mean Banco Santander, S.A. and subsidiaries.

Consolidated directors' report

6 Business model and strategy

15 Responsible banking
Consolidated non-financial statement

23 Our approach
33 Doing things the right way
71 Promoting inclusive and sustainable growth
117 Key metrics
131 Further information
- 131 Non-financial information Law content index
- 136 UNEP FI Principles for Responsible Banking reporting index
- 144 Global Reporting Initiative (GRI) content index
- 164 Sustainability Accounting Standards Board (SASB) content index
- 166 Stakeholder Capitalism Metrics content index
- 172 SDGs contribution content index
- 175 Independent verification report

179 Corporate Governance

182 2021 Overview
188 Ownership structure
193 Shareholders. Engagement and general meeting
200 Board of directors
247 Management team
249 Remuneration
273 Group structure and internal governance
276 Internal control over financial reporting (ICFR)
284 Other corporate governance information

320 Economic and financial review

322 Economic, regulatory and competitive context
325 Group selected data
327 Group financial performance
368 Financial information by segments
410 Research, development and innovation (R&D&I)
412 Significant events since year end
413 Trend information 2022
421 Alternative performance measures (APM)

430 Risk management and compliance

432 Risk management and compliance
439 Risk management and control model
446 Credit risk
466 Market, structural and liquidity risk
480 Capital risk
483 Operational risk
489 Compliance and conduct risk
496 Model risk
498 Strategic risk
499 Climate and environmental risk

Auditor's report and consolidated financial statements

514 Auditor's report

524 Consolidated financial statements

540 Notes to the consolidated financial statements

767 Appendix

504 Glossary

808 General information

2021 consolidated directors' report

This report was approved unanimously by our board of directors on 24 February 2022

Our approach to this document

We changed the layout of our consolidated directors' report in 2018 by including the contents previously provided in these documents which we ceased to prepare separately:

- Annual report
- Consolidated directors' report
- Annual corporate governance report (CNMV format document)
- Report of the board committees
- Sustainability report
- Annual report on our directors' remuneration (CNMV format document)

The consolidated directors' report also includes all information required by Spanish Act 11/2018 on non-financial information and diversity. It can be found in the 'Responsible banking' chapter, which constitutes the consolidated non-financial information statement.

This report's format presents information more clearly, avoiding repetition and raising the level of disclosure.

Auditors' reviews

As required by law, contents of our 2021 consolidated directors' report has been subjected to three types of reviews by our independent statutory auditors, PricewaterhouseCoopers Auditores, S.L., summarized as follows:

- PricewaterhouseCoopers Auditores, S.L. has verified that the information in this report is consistent with our consolidated financial statements, and that its contents comply with the applicable regulations. For more details, see 'Other information: Consolidated management report section of the 'Auditor's report' within 'Auditor's report and consolidated annual accounts'.
- PricewaterhouseCoopers Auditores, S.L. has issued a verification report, with limited assurance, on the non-financial and diversity information required by Spanish Act 11/2018 included in this report. To read that report, see the 'Independent verification report' in the 'Responsible banking' chapter.
- PricewaterhouseCoopers Auditores, S.L. has issued an independent reasonable assurance report on the design and effectiveness of Banco Santander's internal control over financial reporting, found in section 8.6 of the 'Corporate governance' chapter.

Non-IFRS and alternative performance measures

This report contains, in addition to financial information prepared in accordance with International Financial Reporting Standards (IFRS) and derived from our consolidated financial statements, alternative performance measures (APMs) as defined in the Guidelines on Alternative Performance Measures issued by the European Securities and Markets Authority (ESMA) on 5 October 2015 and other non-IFRS measures. These financial measures that qualify as APMs and non-IFRS measures have been calculated with information from Santander Group; however, those financial measures are not defined or detailed in the applicable financial reporting framework nor have been audited or reviewed by our auditors.
We use these APMs and non-IFRS measures when planning, monitoring and evaluating our performance. We consider these APMs and non-IFRS measures to be useful metrics for our management and investors to compare operating performance between accounting periods.

Nonetheless, these APMs and non-IFRS measures should be considered supplemental information to, and are not meant to substitute IFRS measures. Furthermore, companies in our industry and others may calculate or use APMs and non-IFRS measures differently, thus making them less useful for comparison purposes.

For more details on APMs and non-IFRS measures, see section 8 of the 'Economic and financial review'.

Forward-looking statements

Banco Santander advises that this annual report contains "forward-looking statements" as per the meaning of the US Private Securities Litigation Reform Act of 1995. These statements may be identified by words like *expect*, *project*, *anticipate*, *should*, *intend*, *probability*, *risk*, *target*, *goal*, *objective*, *estimate*, *future* and similar expressions. Found throughout this report, they include (but are not limited to) statements on our future business development, economic performance and shareholder remuneration policy. However, a number of risks, uncertainties and other important factors may cause actual developments and results to differ materially from our expectations.

The following important factors, in addition to others discussed elsewhere in this annual report, could affect our future results and could cause materially different outcomes from those anticipated in forward-looking statements:

- general economic or industry conditions of areas where we have significant operations or investments (such as a worse economic environment; higher volatility in capital markets; inflation or deflation; changes in demographics, consumer spending, investment or saving habits; and the effects of the covid-19 pandemic on the global economy);
- exposure to various market risks (particularly interest rate risk, foreign exchange rate risk, equity price risk and risks associated with the replacement of benchmark indices);
- potential losses from early repayments on our loan and investment portfolio, declines in value of collateral securing our loan portfolio, and counterparty risk;
- political stability in Spain, the United Kingdom, other European countries, Latin America and the US;
- changes in legislation, regulations, taxes, including regulatory capital and liquidity requirements, especially in view of the UK exit of the European Union and increased regulation in response to financial crisis;
- our ability to integrate successfully our acquisitions and related challenges that result from the inherent diversion of management's focus and resources from other strategic opportunities and operational matters; and
- changes in our access to liquidity and funding on acceptable terms, in particular if resulting from credit spread shifts or downgrades in credit ratings for the entire group or significant subsidiaries.

Numerous factors could affect our future results and could cause those results deviating from those anticipated in the forward-looking statements. Other unknown or unpredictable factors could cause actual results to differ materially from those in the forward-looking statements.

Our forward-looking statements speak only as at date of approval of this annual report and are informed by the knowledge, information and views available as at the date of this report. Banco Santander is not required to update or revise any forward-looking statements, regardless of new information, future events or otherwise.

Past performance is not indicative of future results

Statements about historical performance or accretion must not be construed to indicate that future performance, share price or earnings (including earnings per share) in any future period will necessarily match or exceed those of any prior period. Nothing in this annual report should be taken as a profit forecast.

XHTML electronic format and XBRL tags

This annual report has been prepared in eXtensible HyperText Markup Language (XHTML) format, and the consolidated financial statements it includes have been tagged with eXtensible Business Reporting Language (XBRL), in accordance with Directive 2004/109/EC and Commission Delegated Regulation (EU) 2019/815.

To view the XBRL tags, you must open this document using an appropriate viewer. You can find this document with an XBRL viewer on Banco Santander's corporate website.

No offer

Neither this annual report nor any of the information contained herein constitutes an offer to sell, or the solicitation of an offer to buy, any securities.

Business model and strategy

We follow The Santander Way:

Our aim

To be the **best open financial services platform,** by acting **responsibly** and earning the **lasting loyalty** of our people, customers, shareholders and communities

Our purpose

To **help people and businesses prosper**

Our how

Everything we do should be **Simple, Personal and Fair**



For more information see the 'Responsible banking' chapter.

Our **business model** | Our customer focus, global scale and diversification are the foundations for generating value for our shareholders

01. Customer focus

Deepening the relationships with our customers through a simpler value proposition, superior customer experience and our digital proposition



- We have increased our number of customers over the last seven years, and notably in 2021, with balanced growth by region and business.
- Our aim is to further enhance our customers' experience and satisfaction.
- We also help a new generation of customers with new ways to interact with their finances, which is reflected in an increase in digitalization (54% digital sales / total sales in 2021).

Total customers 153 mn
+5 mn in 2021
+32 mn since 2015

Top 3 Customer satisfaction[A] 8 countries



A. NPS (Net Promoter Score) – Customer Satisfaction internal benchmark of individual customers' satisfaction audited by Stiga / Deloitte in H2'21.

02. Our scale

Local scale and global reach



- Regional and global scale based on three geographic regions, where we maintain leadership positions in our core markets.
- Worldwide reach through our global businesses and PagoNxt, enabling greater collaboration across the Group to generate higher revenue and efficiencies.

Top 3[A] in 10 of our markets



A. Market share in lending as of Sep-21 including only privately-owned banks. UK benchmark only covers the mortgage market (source: central banks). Digital Consumer Bank (DCB) refers to auto financing market shares in the majority of our Europe footprint (source: information from local auto associations and market intelligence reported by SCF units).

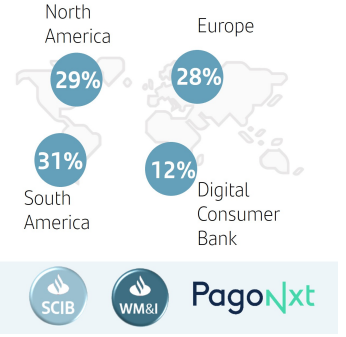
03. Diversification

Our geographic and business diversification makes us more resilient under adverse circumstances



- We have a diversified geographical footprint which is well balanced between emerging and developed markets.
- Business diversification between customer segments (individuals, SMEs, mid-market companies and large corporates).
- This diversification remains a source of great strength and earnings stability.

Underlying attributable profit by region[A]

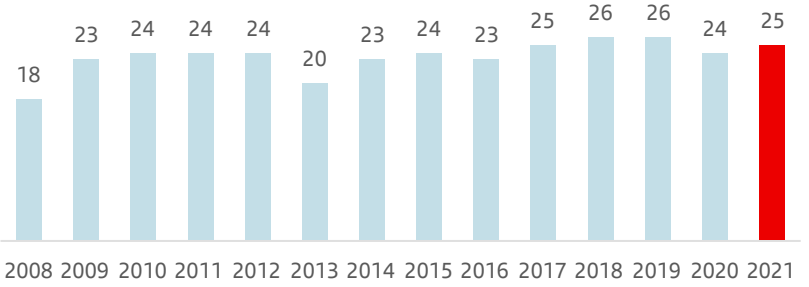


A. 2021 underlying attributable profit by region. Operating areas excluding Corporate Centre.

Our strong model is reflected in the resilience of our business. It is a competitive strength that continues to differentiate us.

Group net operating income (Pre-Provision Profit)

EUR billion



2021 results: growth, profitability, strength and shareholder value creation

Over the last seven years, we have laid the foundations to deliver great value and service to our customers, while increasing profit, improving profitability and strengthening our capital base.

In 2021, we delivered an all-time record profit before tax (PBT) of EUR 15.3 billion, reflecting strong business momentum across the Group.

We improved our efficiency, cost of risk and profitability, reached our capital target and improved our shareholder value creation by 11% in 2021.

Strong operating performance in 2021: EUR 8.7bn of underlying profit

2021 (vs. 2020)

Growth	Profitability	Strength
Total customers **153mn** (+5mn)	RoTE [B] **12.7%** (+529bps)	FL CET1 [C] **12.0%** (+7bps)
Total revenue [A] **EUR 46.4bn** (+7%)	Efficiency ratio **46.2%** (-86bps)	Cost of credit [D] **0.8%** (-51bps)

2021 Shareholder value creation: +11% [E]

A. Changes in constant euros. In euros: +4%.
B. Underlying RoTE. Statutory RoTE: 12.0%.
C. Including acquisition of SC USA minority interest which closed on 31 January 2022 and the announced acquisition of Amherst Pierpont which is subject to completion, regulatory approval and other conditions.
D. Provisions to cover losses due to impairment of loans in the last 12 months / average customer loans and advances of the last 12 months.
E. TNAV per share + cash DPS of EUR 7.6 cents paid in calendar year 2021.

Geographical and business diversification delivers growth and profitability

2021 (vs. 2020)
EUR billion

	Loans [A] +4% YoY	Customer funds [B] +6% YoY	Revenue +7% YoY	Underlying profit +78% YoY	% of Group's customer loans	% of Group's underlying profit [C]
Europe	576	712	16.3	3.0	60%	28%
North America	134	137	11.0	3.1	14%	29%
South America	129	162	15.4	3.3	14%	31%
Digital Consumer Bank	117	58	5.3	1.3	12%	12%

Note: YoY changes in constant euros.
A. Gross loans and advances to customers excluding reverse repos.
B. Customer funds: customer deposits excluding repos + marketed mutual funds.
C. Underlying contribution as a % of operating areas and excluding the Corporate Centre.

Looking ahead

Thanks to our scale, geographic footprint and business diversification, we have numerous opportunities to grow, which should allow us to remain our customers' first choice.

To make the most of those opportunities, our focus is on implementing plans that enhance the existing connectivity across all the geographies and businesses, and improve the profitability of our core businesses through disciplined capital allocation.

We will do this while delivering on our commitment to offer our customers financial products and services in a Simple, Personal and Fair way, and creating value for our shareholders.

Our focus and 2022 goals

2022 Group goals

Growth	Profitability	Balance Sheet Strength	Shareholder Remuneration [B]
Mid-single digit[A] Revenue growth	C/I **45%** RoTE **>13%**	FL CET1 **12%**	Payout **40%**

A. Constant EUR.
B. For the 2022 results the shareholder remuneration policy that the board intends to apply is a total remuneration of approximately 40% of the group's underlying profit, split in approximately equal parts between cash dividends and share buybacks, thus continuing the policy applied with respect to 2021 results. The implementation of the shareholder remuneration policy is subject to future corporate and regulatory decisions and approvals.

Improving customer service and increasing connectivity

Investing in Tech ...

Tech investment to transform the business...
EUR 2bn / year
...and help customers transact online.
In 2021:

76%
digital transactions of our core banks
(vs 55% in 2019)

54%
digital sales / total sales
(vs 36% in 2019)

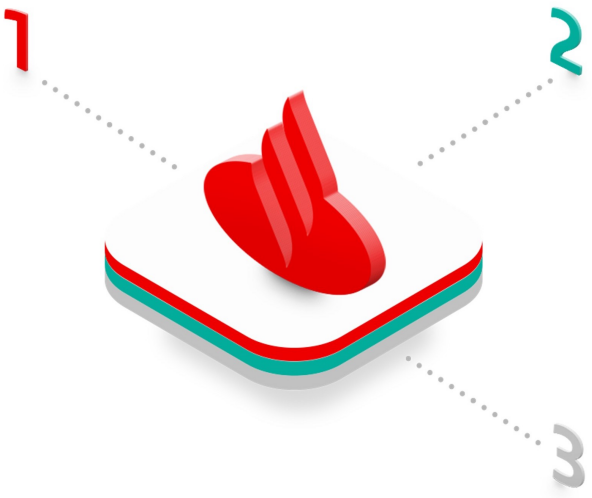
... and building common solutions

→ **PagoNxt:** common tech backbone for payments of Santander customers and open market.

→ **One Santander:**
- Regional Consumer Finance platform in South America.
- Common App and Regional Business Owners in Europe.
- T&O shared services in North America.
- Global Financial Crime & Compliance solutions.

→ **Digital Consumer Bank:** re-platform auto, consumer and retail.

Continuing to execute our **three strategic priorities:**



1. One Santander

The aim is to create a better bank for our customers that is more efficient, profitable and sustainable. This project incorporates improved customer service, our omni-channel strategy and a common operating model in each region.

2. PagoNxt

Our common tech backbone that will unify the payments of all Santander customers.

3. Digital Consumer Bank

The combination of our auto and consumer businesses, leveraging the technology of Openbank – Santander's full service native digital bank - to accelerate the tech transformation of our Consumer Finance business to maintain its high profitability and growth.

1. One Santander



Europe

2021 Key data

Loans	Customer funds	Efficiency
EUR 576bn	EUR 712bn	51.0 %
↑ +3%	↑ +6%	↓ -5.4pp
Cost of credit	**Profit**	**RoTE[A]**
0.39 %	EUR 3.0bn	7.4 %
↓ -19bps	↑ +110%	↑ +3.8pp

2022 Strategic focus

- **Profitable growth** from individual customers.
- **SME value proposition** leveraging PagoNxt.
- **Disciplined capital allocation;** growing Santander Corporate & Investment Banking and Wealth management & Insurance.
- **Common operating model** to drive EUR 1bn run-rate savings by end 2022.
- **Cost of credit normalization.**

Note: 2021 data and year-on-year changes (underlying profit, loans and funds in constant euros).
A.Underlying RoTE. RoTE adjusted based on Group's deployed capital calculated as contribution of RWAs at 12% would be 9.9% (+5.4pp).



North America

2021 Key data

Loans	Customer funds	Efficiency
EUR 134bn	EUR 137bn	45.6 %
↑ +4%	↑ +9%	↑ +1.8pp
Cost of credit	**Profit**	**RoTE[A]**
0.93 %	EUR 3.1bn	13.1 %
↓ -199bps	↑ +109%	↑ +6.2pp

2022 Strategic focus

Positioned to deliver **above cost of capital returns across core businesses.**

- **Refocusing US** on our market leading **consumer franchise.**
- **Simplifying: disciplined capital allocation.** Exit home lending / Review certain Corporate & Investment segments.
- **Synergies from 2021's strategic investments;** (Amherst Pierpont / SC USA minorities)[B].

8 pp increase in digital transactions from 47% to 55%; digital sales up from 62% to 70% driven by greater **customer focus & tech investment.**

Note: 2021 data and year-on-year changes (underlying profit, loans and funds in constant euros).
A. Underlying RoTE. RoTE adjusted based on Group's deployed capital calculated as contribution of RWAs at 12% would be 24.6% (+13.8pp).
B. Acquisition of SC USA minority interest closed on 31 January 2022. The announced acquisition of Amherst Pierpont is subject to completion, regulatory approval and other conditions.



South America

2021 Key data

Loans	Customer funds	Efficiency
EUR 129bn	EUR 162bn	35.0 %
↑ +12%	↑ +9%	↓ -1.0pp
Cost of credit	**Profit**	**RoTE[A]**
2.60 %	EUR 3.3bn	20.3 %
↓ -72bps	↑ +24%	↑ +2.6pp

2022 Strategic focus

Double-digit **growth in retail** segments.

Leading regional Consumer Finance.

Accelerate connectivity in Corporate and Santander Corporate & Investment Banking segments.

Proven **risk management capabilities** able to control cost of credit.

Fee businesses and transactional services on the back of **Group´s payments platforms** will drive "recurrence" growth from our current 70% to ~80%.

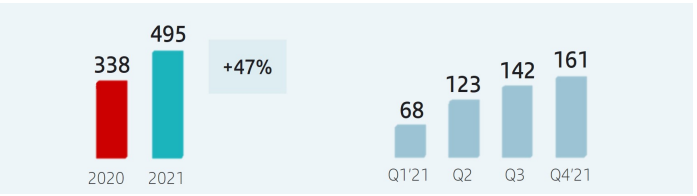
Note: 2021 data and year-on-year changes (underlying profit, loans and funds in constant euros).
A Underlying RoTE. RoTE adjusted based on Group's deployed capital calculated as contribution of RWAs at 12% would be 26.0% (+3.9pp).

Building a more responsible bank by embedding ESG in our strategic priorities

In 2021, One Santander focused on helping customers in the transition to a green economy, jointly developing green products and services across regions, while promoting the financial health of our diverse customer base, especially the most vulnerable.

2. PagoNxt

2021 Revenue performance [A]



Merchant acquiring

Getnet

Santander banks with Getnet	Total payments volume (TPV) [B]	Total active merchants
6	EUR 116bn	1.2 mn
	↑ +50%	

International Trade

One Trade

Santander banks with One Trade	One Trade active SMEs and corporates	Ebury revenue growth [C]
8	>8k	+30 %

2022 Strategic focus

Continue to expand our global platforms.

Consolidating our retail leadership positions with Getnet.

Deploy One Trade's international payments services.

Implement the instant functionality of **Payments Hub** in various markets.

Continue the gradual **migration of** our global payments services and financial inclusion platform of **Superdigital in Latin America**.

A. Constant EUR mn and YoY changes in constant euros.
B. TPV: Total Payments Volume.
C. Changes in constant euros (estimated fiscal year from May'21-April'22 vs May'20-April'21). Management accounting data.

Building a more responsible bank by embedding ESG in our strategic priorities

In 2021, PagoNxt continued to develop consumer solutions, such as Superdigital, to tackle financial exclusion in Latin America, while supporting entrepreneurship with solutions for merchants, such as Getnet.

3. Digital Consumer Bank

2021 Key data

Loans	Customer funds	Efficiency
EUR 117bn	EUR 58bn	45.0 %
↓ -1%	↑ +10%	0.0pp
Cost of credit	**Profit**	**RoTE[A]**
0.46 %	EUR 1.3bn	14.0 %
↓ -38bps	↑ +16%	↑ +2.3pp

2022 Strategic focus

To become the largest digital consumer bank leveraging SCF's footprint in auto and consumer finance, profiting from Openbank's technology stack and reinforcing leadership position with strategic alliances.

Auto: Strengthening auto financing leadership by reinforcing mobility solutions with focus on leasing and subscription.

Consumer (non-auto): Gaining market share in consumer lending, with focus on e-commerce checkout lending and buy now, pay later (BNPL).

Simplification for efficiency: maintaining high speed digitalization in order to transform the business and improve efficiency.

Note: 2021 data and year-on-year changes (underlying profit, loans and funds in constant euros).
A. Underlying RoTE. RoTE adjusted based on Group's deployed capital calculated as contribution of RWAs at 12% would be 14.8% (+2.5pp).

Building a more responsible bank by embedding ESG in our strategic priorities

In 2021, Digital Consumer Bank focused on developing green finance solutions (both in auto and consumer loans), while making progress in measuring the emissions financed in our loan portfolio.

Global businesses (SCIB and WM&I) enhance our local scale with global reach and collaboration

Our global businesses built on their 2020 results, reporting outstanding performance in 2021, with double-digit profit growth.

SCIB and WM&I continue to bring connectivity across the Group to generate higher revenue and efficiencies.

Santander Corporate & Investment Banking

2021 Key data

Revenue **EUR 5.7bn** ↑ +10%	Fee income **EUR 1.8bn** ↑ +16%
Profit **EUR 2.2bn** ↑ +26%	RoTE **18.1 %** ↑ +2.5pp

2022 Strategic focus

Santander CIB supports corporate and institutional customers, offering tailored services and value-added wholesale products suited to their complexity and sophistication.

Continue the **business transformation** to partner with our clients as strategic advisors, strengthening our value-added services, with an increased focus on ESG and Digital solutions.

Our aim in **Europe** is to become one of the top wholesale banks in the region, while strengthening our leadership position in **LatAm** and to up-tier our franchise in the **US** to compete on a level playing field.

Note: 2021 data and YoY changes (underlying profit, revenue lines and commercial activity in constant euros).

Wealth Management & Insurance

2021 Key data

Assets under management **EUR 399bn** ↑ +8%	Commercial activity (Flows) **EUR 11.7bn** Private Banking	**EUR 8bn** Santander Asset Management
Insurance Premiums [A] **+12 %**		
Fee contribution **EUR 3.4bn** ↑ +12% 32% of Group total fees	RoTE **59.7 %** ↑ +5.6pp	
Profit **EUR 907 mn** ↑ +13%	Contribution to Group's profit [B] **EUR 2.3bn** ↑ +12%	

2022 Strategic focus

Our aim: to become the **best responsible wealth and insurance manager** in Europe and the Americas.

Private Banking: continue to build our global platform, expand and develop our product and service proposition, and deploy the best digital tools. We aim to renew or improve our top 3 position as Best Global Private Bank according to *Euromoney*[C].

SAM: continue to be the preferred funds partner for our retail network by completing the creation of the global hubs, expanding the One Investments model and methodologies, and working to complete the implementation of our digital funds distribution platforms.

Insurance: optimize our customer service by completing our digital proposition using customer data; manage our portfolio to extend policy life; and increase customer base penetration.

ESG transversal across our businesses: offer sustainable investment management in our private banking platform, expand our ESG range to help reach our commitment of EUR 100bn AuM by 2025, work towards our Net Zero commitments and create a sustainable insurance value proposition.

Note: 2021 data and YoY changes (underlying profit, revenue lines and commercial activity in constant euros).
A. Protection business.
B. Including fees generated by asset management and insurance transferred to the commercial network.
C. Clients up to USD 250 million.

ESG commitments: we are creating value for our shareholders by focusing on delivering profitable growth in a responsible way

In 2021, we continued to deliver on our ESG commitments, supporting our customers' green transition and financially empowering more people

Supporting the green transition

EUR 66bn
Green finance since 2019[A]

>200%
YoY green finance in retail[B]

EUR 27bn
AuM in Sustainable funds[C]

#1
Financial advisor in Project Finance renewables[D]

Building a more inclusive society

7.5mn
People financially empowered since 2019

>EUR 550mn
Credit allocated to microfinance in 2021

1.4mn
Microentrepreneurs supported since 2019

8
Countries with microfinance initiatives underway

With a talented and diverse team

6
Geographies where we are Top 10 company to work for

>26%
Women in senior leadership positions

ESG
Metrics included in executives' incentives

#1
Bank in Bloomberg Gender Equality Index

Note: audited data.
A. Only SCIB global business.
B. All segments excluding SCIB and WM&I.
C. AuMs classified as Article 8 and 9 funds (SFDR) from SAM, plus third-party funds and other ESG products according to EU taxonomy from Private Banking. We apply equivalent ESG criteria to SAM's funds in Latin America.
D. Banco Santander, S.A. emerged as the top financial advisor for renewable energy project financing in 2021, with a total deal credit of USD 10.3 billion and a market share of 28%, according to Bloomberg NEF's H2'21 Clean Energy League Tables.

We continued to progress towards our 2025 ESG commitments and in our Net Zero target by 2050. In 2021 we set the first decarbonization targets to support the green transition:

→ Reduce our thermal coal exposure to zero.
→ Align our power generation portfolio to the Paris Agreement by 2030.

For more information see the 'Responsible banking' chapter.

Responsible banking

Consolidated Statement of Non-Financial Information 2021



About this chapter

GRI 102-45, 102-46, 102-48, 102-49, 102-50, 102-51, 102-52, 102-54 and 102-56

This chapter is the consolidated non-financial statements of Banco Santander, S.A. and subsidiaries. It provides detailed information in accordance with Art. 49, sections 5, 6, 7, 8 and 9 of the Spanish Commercial Code as amended by Ley ("Act") 11/2018, which transposes into Spanish law Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information.

Scope

This chapter covers the core activities of Banco Santander and its subsidiaries in Europe, the United States and Latin America from 1 January to 31 December 2021 (for more details, see Notes 3 and 52 to the consolidated financial statements and Sections 3 and 4 of the Economic and financial review). It gives economic, social and environmental information according to the bank's accounting criteria. Significant criteria differences from the 2020 Responsible banking chapter are explained in the related section as well as in the Global Reporting Initiative (GRI) Content Index.

International standards considered in preparing this Responsible banking chapter

Banco Santander follows international standards to prepare sustainability reports. This chapter meets the GRI Standards (comprehensive option), the GRI G4 guidelines on financial services disclosures, the Sustainability Accounting Standards Board's (SASB) 2018-10 industry standards, and the World Economic Forum's Stakeholder Capitalism Metrics. It shows Santander's progress with respect to the UN Principles for Responsible Banking, the TCFD recommendations, the 2030 Agenda and the UN Sustainable Development Goals. It also takes into account the European Taxonomy regulation (Regulation (EU) 2020/852 and Commission Delegated Regulations 2021/2139 of 4 June and 2021/2178 of 6 July).

Material aspects and stakeholder involvement

Banco Santander maintains active dialogue with its stakeholders to understand their expectations. It conducts a materiality assessment of ESG matters and closely monitors questionnaires and recommendations of Dow Jones, FTSE4Good and other major sustainability indices, as well as the World Business Council for Sustainable Development (WBCSD) and other international sustainability initiatives it takes part in.

This chapter illustrates the sustainability of the bank's local and global operations, especially in terms of internal and external impact. For details on its preparation and on materiality assessment findings, see section 'What our stakeholders tell us'.

External verification

This report has been verified with limited assurance by PricewaterhouseCoopers Auditores, S.L., an independent firm that also audited Banco Santander, S.A.'s financial statements for 2021.

The use by Banco Santander S.A. of any MSCI ESG RESEARCH LLC or its affiliates ("MSCI") data, and the use of MSCI logos, trademarks, service marks or index names herein, do not constitute a sponsorship, endorsement, recommendation, or promotion of Banco Santander S.A. by MSCI. MSCI services and data are the property of MSCI or its information providers, and are provided 'as-is' and without warranty. MSCI names and logos are trademarks or service marks of MSCI.

2021 overview 18

Our approach 23
- What our stakeholders tell us 24
- Our ESG priorities 27
- Governance 29

Doing things the right way 33
- A strong and inclusive culture 34
- Conduct and ethical behaviour 37
- A talented and motivated team 44
- Acting responsibly towards customers 61
- Responsible procurement 68
- Shareholder value 69

Promoting inclusive and sustainable growth 71
- Supporting the green transition 72
- Financial inclusion and empowerment 96
- Sustainable investment 104
- Support to higher education and other local initiatives 107

Key metrics 117

Further information 131
- Non-financial information. Law content index 131
- UNEP FI Principles for Responsible Banking reporting index 136
- Global Reporting Initiative (GRI) content index 144
- Sustainability Accounting Standards Board (SASB) content index 164
- Stakeholder Capitalism Metrics content index 166
- SDGs contribution content index 172

Independent verification report 175

2021 overview

Helping people and businesses prosper

People

EUR 11,216 million
Staff costs[A]

Customers

EUR 972,682 million
loans outstanding (net)

EUR 542,339 million
to households

EUR 323,475 million
to companies

EUR 22,152 million
to government agencies

EUR 86,716 million
to others[B]

Shareholders

40% of ordinary profit
intended for their remuneration[C]

Communities

EUR 152 million
invested in communities

Suppliers

EUR 6,757 million
paid to suppliers[D]

Tax contribution

EUR 7,617 million
Total taxes paid by the group

Building a more responsible bank by embedding ESG

Environmental

→ Embedding a climate strategy to deliver net zero by 2050

2.1% of exposure to sectors with decarbonization targets against total lending on the balance sheet

38% of credit risk exposure with decarbonization targets against SCIB exposure to climate concerning sectors

→ Helping our customers transition to a low-carbon economy

EUR 32.3 bn in green finance mobilized in 2021

EUR 27 bn in sustainable AuM

→ Minimizing our environmental footprint

39% reduction of CO_2 emissions; Carbon neutral by offsetting 118,517tn CO_2 emissions

Social

→ Creating a workplace that attracts and retains diverse talent

54% women in our workforce

98% workforce with a permanent contract; and 9.8% promoted

→ Fostering financial inclusion and empowerment

EUR 571 million credit disbursed to 1 million micro-entrepreneurs

→ Supporting our communities

162k Scholarships and grants through Santander Universities

2.1 million people helped through social action programmes

Governance

→ Promoting our culture, the Santander Way

84% of employees said they felt proud to work for Santander and are motivated to build a bank that is even more Simple, Personal, Fair.

→ Ensuring sound corporate governance and risk management

66.7% independent directors

93% of employees can identify risks in their job every day

→ Acting responsibly towards customers and suppliers

65% of complaints are resolved in less than 15 days, 85% in less than 30 days.

94% of our total services are locally sourced[D]

A. From Group consolidated financial statements.
B. Including financial business activities and customer prepayments.
C. Pay-out of approximately 40% of ordinary profit, equally divided between a cash dividend and a share buyback
D. Data refers exclusively to purchases negotiated by Aquanima, our procurement global entity.

Meeting our public commitments

The 11 public commitments Banco Santander announced in 2019 reflect our responsible banking ambitions and help embed environmental, social and governance (ESG) criteria in operations. They are "SMART" (Specific, Measurable, Achievable, Realistic and Time-bound) to fulfil the UN Sustainable Development Goals and the targets set out in the Paris Agreement on climate change.

In 2021, we met (or exceeded) all our commitments for 2019-2021 and made progress on all our targets. Our new public commitments include initial decarbonization targets for the power industry for 2025 and 2030, which measure emission intensity.

	2018	2019	2020	2021	Target
Top 10 company to work for[A]	4 →	5	6	6 ✓	Top 10 in 6 countries by 2021
Women board members	33% →	40%	40%	40% ✓	40-60% by 2021
Women in senior positions[B] (%)	20% →	22.7%	23.7%	26.3%	→ 30% by 2025
Equal pay gap[C]	3% →	2%	1.5%	1%	→ ~0% by 2025
Financially empowered people[D] (cumulative)	—	2.0mn	4.9mn	7.5mn	— 10mn by 2025
Green finance raised and facilitated[E] (cumulative)(EUR)	—	19bn	33.8bn	65.7 bn	— 120bn by 2025 220bn by 2030
Electricity used from renewable energy sources[F]	43% →	50%	57%	75% ✓	→ 60% by 2021 100% by 2025
Carbon neutral in our own operations[G]		→	✓	✓	→ since 2020
Reduction of unnecessary single-use plastics in corporate buildings and branches[H]		75% →	98%	100% ✓	100% by 2021
Scholarships, internships and entrepreneurship programmes (cumulative)[I]	—	69k	225k	388k ✓	325k by 2021[J]
People helped through our community programmes (cumulative)[K]	—	1.6mn	4.0mn	6.1mn ✓	4mn by 2021

— Cumulative target → From... to...

A. According to Great Place to Work, Top Employer, Merco and other external indices in each country
B. Senior positions make up 1% of the total workforce
C. Equal pay gap based on same jobs, levels and functions
D. Unbanked, underbanked and financially vulnerable individuals who receive tailored finance solutions and become more aware and resilient through financial education.
E. Includes Grupo Santander's contribution to green finance: project finance; syndicated loans; green bonds; capital finance; export finance, advisory services, structuring and other products, to help customers transition to a low-carbon economy. EUR 220bn committed from 2019 to 2030
F. In countries where we can verify electricity from renewable sources at Banco Santander properties
G. In our core geographies (G10)
H. For G10. Does not account for Covid-19 measures that might have involved plastic
I. Students given a scholarship through Santander Universities who will do an internship at an SME or take part in Santander-endorsed entrepreneurship programmes
J.The initial target of 200k beneficiaries was reached in 2020 and therefore the bank committed to offer 125k additional scholarships by 2021
K. Does not include Santander Universities or financial education initiatives

Our progress in 2021

E

- Commitment to net zero emissions by 2050. Founding member of UNEP FI's Net Zero Banking Alliance. First decarbonization targets set.
- SAM joined the Net Zero Asset Managers initiative, becoming the first asset manager in Spain to commit to net-zero emissions by 2050 and halve emissions on 50% of its AUMs.
- New sustainable finance classification system setting the criteria to offer, manage and report sustainable financing.
- Beyond the 32.3bn mobilized by SCIB in green finance, our third green bond raised EUR 1 billion in an eight-year non-preferred senior debt issue that will finance wind and solar power projects.
- Santander Universities launched the Santander X Environmental Challenge to support innovative companies worldwide and promote a low-carbon economy.

S

- We ranked in the Top 3 in NPS in 8 markets, up from 6 in 2020.
- Santander Chile, Santander Colombia and Santander Perú launched new microfinance programmes for entrepreneurs, while we continued to expand Prospera in Brazil and TUIIO in Mexico.
- We have worked to develop a new global health and well-being policy.[A]
- Santander Universities launched the Santander X Global Challenge | Finance For All to find innovative solutions that ensure access to banking products and services.

G

- ESG criteria are included in the short-term variable remuneration scheme that generally applies to Group employees. We also approved the inclusion of ESG criteria in long-term incentives for senior executives.
- ESG course available to all employees and three-level ESG training model adapted to our employees' needs.
- New ESG certification by Aquanima (our global procurement entity).
- ESG disclosure enhanced. In addition to the Global reporting Initiative (GRI) and Sustainability Accounting Standards Board (SASB), this report includes Stakeholder Capitalism Metrics (IBC-WEF). Improved position in key ESG ratings such as DJSI, MSCI, CDP, Shareaction, Sustainalytics, FTSE4Good and BGEI.

A. This policy will be approved in 2022.

Awards and recognition

One of the world's best places to work

For the third consecutive year, Great Place to Work named Banco Santander one of world's 25 best workplaces, out of more than 10,000 organizations worldwide that foster exceptional employee experiences centred on trust and fair treatment. We were the only bank in the ranking.

Best Bank for Financial Inclusion and Best Bank for Sustainable Finance in Latin America

Euromoney named Banco Santander "Best Bank for Financial Inclusion" and "Best Bank for Sustainable Finance in Latin America". It highlighted our efforts to make financial services more accessible and financially empower people and businesses through programmes in Latin America, Europe and the US. It also commended our work to promote digital channels (especially among the elderly) during the pandemic and aid the transition to a low-carbon economy.

Top Employers 2021

Santander received its fifth consecutive Top Employers Europe certification in recognition of its excellent working conditions and contribution to employee development. We received the certificate in three of our core markets in Europe (Spain, Poland and the UK) as well as for our Santander Consumer Finance units in Germany, the Netherlands, Austria, Poland, France and Belgium.

One of the 100 most valuable brands in the world

Our work to help communities prosper in a way that is Simple, Personal and Fair earned us recognition as the biggest bank in the eurozone and sixth globally in Interbrand's 2021 Best Global Brands ranking.

ESG indices and analysts

- Featured in the Dow Jones Sustainability Index for the 21st year in a row, with top marks in financial inclusion, environmental reporting, operational eco-efficiency and social reporting. Santander was also included in the 2022 S&P Sustainability Yearbook, receiving a silver class award for its performance during 2021.
- MSCI increased our rating from BBB (2020) to AA (2021), recognizing our efforts to capitalize on financial access opportunities; our cyber security and privacy plans; and our board's commitment to consider climate matters in our long-term strategy.
- CDP rating category up from B to A-, putting us among leading financial institutions.
- Sustainalytics also recognized our progress, raising our score from 27.1 to 23.9
- We are members of the FTSE4Good Index, and improved from 4.3 in 2020 to 4.5 out of 5 in 2021.
- We increased our score in the Bloomberg Gender-Equality Index (BGEI) from 85 to 90 and were the highest-ranked bank and second highest company.

Member of
Dow Jones Sustainability Indices
Powered by the S&P Global CSA

Bloomberg Gender-Equality Index 2022

Sustainability Award
Silver Class 2022
S&P Global

Local Awards



- Eikon Award in the Sustainability/ Education category for the 2021 Financial Education Campaign
- Top 3 best company to work for and Top 4 best company for women to work for by GPTW



- Outstanding leadership in sustainable finance in Latin America by Global Finance
- ALAS 2021: excellence in information disclosure, Líderes Sustentables 2021.
- Members of DJSI Chile, DJSI MILA and DJSI Emerging Markets.



- Golden CSR Leaf of Polityka for the fifth time for consistent implementation and development of CSR.
- Santander Bank Polska joined the Diversity IN Check, the list of the most inclusive and diversity-friendly companies
- Top Employers Polska 2021 award
- Equal Company Certificate 2021, awarded by Forbes Women magazine



- Top Employers: Ranked first in Spain in 2021
- Santander awarded most innovative entity in digital banking by 'The Banker' for its financial inclusion initiatives. The magazine highlights the agreement between Santander and Spain's public postal service to provide rural areas with basic financial services
- Santander received an "A for Excellence" rating in its Empresa Familiarmente Responsable ("Family-responsible company" or EFR) from Fundación MásFamilia



- Top 10 best Company to work for and Top 10 Best Company to work for the LGBTQI+collective by GPTW
- The American Chamber of Commerce gave us the ECO Award for Brazil's most innovative company in sustainability.
- Melhores do ESG – Exame: Exame magazine recognised Santander as the best ESG Financial Institution
- In a special award for the 10th anniversary of the Época Negócios 360° yearbook, Santander Brasil was named company of the decade in sustainability
- Índice de Sustentabilidade Empresarial: for the 12th consecutive year we are in the Índice de Sustentabilidade Empresarial (ISE) portfolio. Promoted by B3 - Brasil, Bolsa, Balcão



- Social Mobility Employer Index 2021: Top 20 in the index for UK employers who have taken the most action to improve social mobility in the workplace (first bank)
- Our partnership with the Alzheimer's Society received 6 awards for our strategic work, support to the charity and for making Santander be a better bank for people affected by Alzheimer's and dementia



- Best Sustainable Finance Bank for SME in Latin America by Euromoney Magazine
- Best Financial Inclusion Bank and Best Socially Responsible Bank by International Finance
- Outstanding Leader in Sustainable Finance in Latin America by Global Finance Magazine
- Tuiio recognized as an outstanding practice to end poverty in Mexico by Global Compact
- Santander the only bank in Mexico included in the S&P Global Sustainability Yearbook 2021. Member of the Dow Jones Sustainability Index MILA Pacific Alliance Index (DJSI MILA 2021) for the second year in a row
- *Expansión* named Santander México a "Top company for women" for its work to support talented women



- Top Workplaces USA 2021 & 2022: Santander Consumer



- Top 4 best Company for women to work for by GPTW

Our approach

By delivering on our purpose to help people and businesses prosper, we grow as a business while helping address society's challenges.

Our strategy is....

E

Deliver our net zero carbon ambition by 2050 by setting decarbonization targets, helping our customers transition and remaining carbon neutral in our own operations.

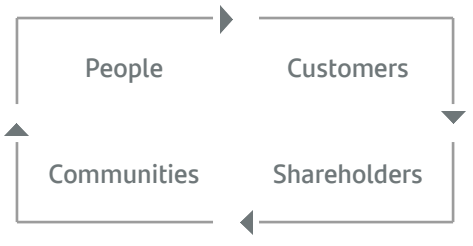
S

Support inclusive growth through financial empowerment; support education, enterprise and employment; and building a diverse, talented workforce.

G

Embed behaviours, processes, policies and governance to ensure we are acting responsibly, listening to our stakeholders, and treating them in a Simple, Personal and Fair way – all based on solid governance and prudent risk management.

By being responsible we build loyalty



I'm loyal to Santander because...

... Santander does things the right way

In our day-to-day business, we make sure we don't just meet our legal and regulatory requirements, but also exceed people's expectations by being Simple, Personal and Fair in all we do.

... Santander promotes inclusive and sustainable growth

We focus on areas where our activity can have a major impact on helping people and businesses prosper.

What our stakeholders tell us

Listening to our stakeholders and creating value

GRI 102-15, 102-21, 102-23, 102-24, 102-25, 102-26, 102-36, 102-37, 102-40, 102-41, 102-42, 102-43 and 102-44

We run surveys and 'speak-up' channels for employees, as well as interactive platforms for customers. We assess externalities to identify risks and opportunities and appraise our impact on the community. We respond to demands from top analysts, investors and indices interested in ESG matters; keep pace with new regulation and best practices worldwide; and take part in consultations with authorities, trade bodies and other organizations that influence policymaking on sustainable development. We're also involved in major local and international initiatives to support inclusive and sustainable growth (see 'Joint initiatives to promote our agenda' in 'Governance and priorities').

For more information, see 'International and local initiatives that Santander supports' in the 'Governance' section of this chapter.

For more information, see 'Economic, Regulatory and Competitive Context' in the 'Economic and Financial Review'.

Key dialogue channels for stakeholders

GRI 102-44

People

- **86%** employees participated in the 2021 Global Engagement Survey
- **4,338** complaints received through ethical channels

Customers

- **+4 millions** of surveys to measure customer satisfaction
- **+45,000** banked individuals surveyed about Santander being Simple, Personal and Fair
- **478,586** complaints received

Shareholders

- **15,260** shareholders surveyed about Santander being Simple, Personal and Fair
- **18,695** shareholders and investors participated in studies and quality surveys
- **139,301** queries handled by email, phone, WhatsApp and online
- **116** meetings with minority shareholders and **942** contacts with institutional investors

Communities

- **997** universities and academic institutions with agreements[A]
- **+1,400** partnerships with social institutions and entities
- **+300** social media profiles **+25** million followers

A. This figure only includes universities that have an agreement with Santander Universities. Adding Universia´s data, the total figure is 1,415 universities and academic institutions in 28 countries

Materiality assessment: Identifying the issues that matter

GRI 102-47, 103-1

Our in-depth materiality review included direct stakeholder input (internal and external interviews and surveys on the bank's ESG priorities), in line with best practice. Following the proposed Corporate Sustainability Reporting Directive (CSRD) and leading ESG reporting standards, we applied the principle of double materiality: (1) financial materiality (how ESG issues impact financial performance); and (2) environmental and social materiality (how ESG action impacts society and the environment).

Basics for 2021 materiality assessment

→ Phase 1
Based on the external landscape, key trends and our own operations, we drew up a preliminary list of 15 ESG topics and placed them into three categories: E, S and G.

→ Phase 2
We ran workshops, surveys and one-to-one interviews to set priorities; and gathered feedback from customers, employees, senior managers, investors and NGOs.

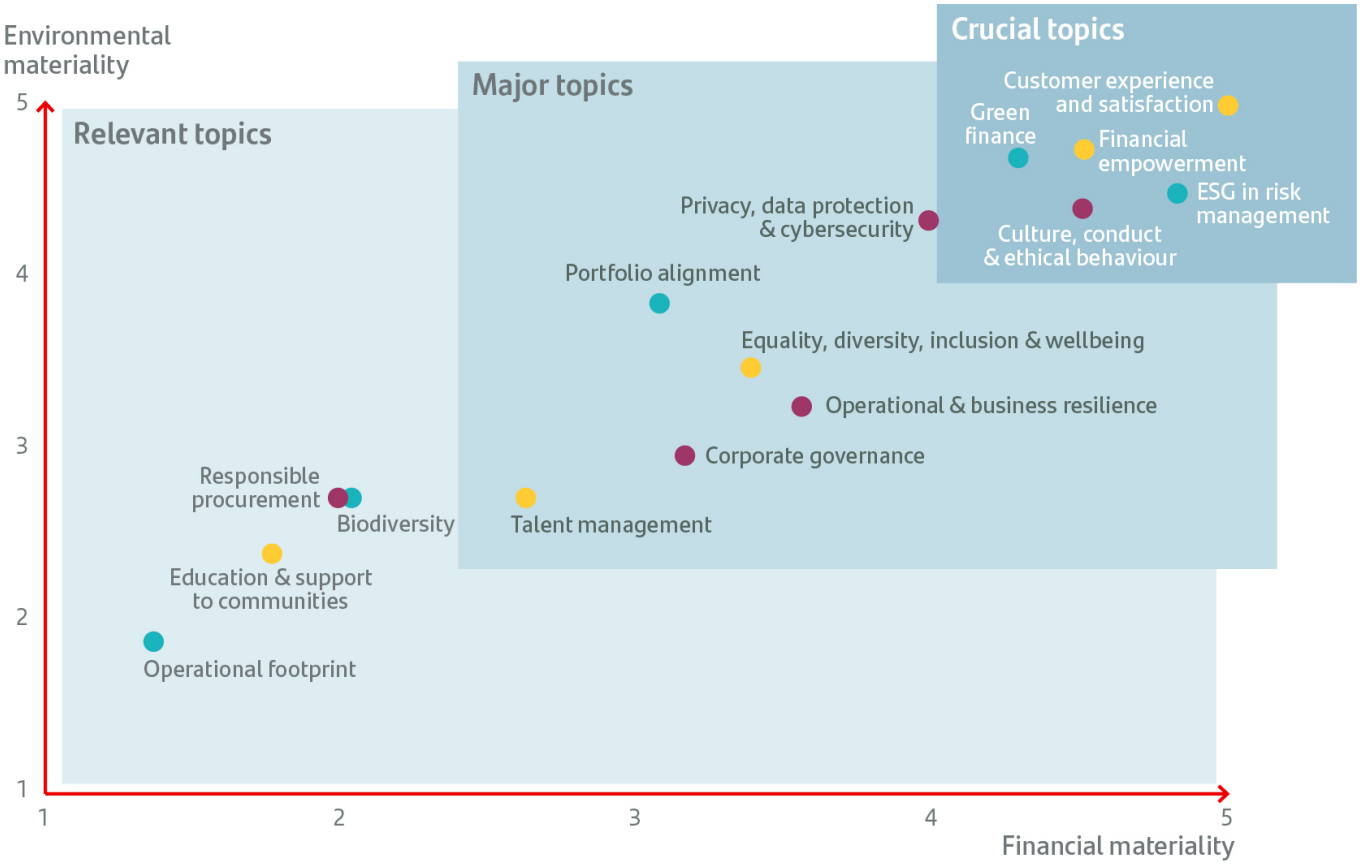
→ Phase 3
We gave topics a score and weighted them to produce a ranking in order of importance to Banco Santander.

Analysis inputs

Global and sector-based	→ Regulators' and international institutions' requirements (such as EU taxonomy) → Sustainability frameworks and standards (such as UN Sustainable Development Goals, UN Principles for Responsible Banking,Task force on Climate-related Financial Disclosures, Global Reporting Initiative, Sustainability Accounting Standards Board,...) → ESG analysts' and indexes' expectations → Banking sector reporting trends (peer banks)

Stakeholder opinion	Customers	9,000 surveys in 9 countries
	Employees	500 surveys in each country and HQ (more than 1,800 responses)
	Senior management	Specific session to discuss materiality in our annual senior management leadership meeting. One-to-one interviews with heads of corporate areas and representatives of businesses and regions.
	Investors	Interviews with major investors
	NGOs	One-to-one interviews with international NGOs

Group material topics matrix[A]



Conclusions and changes since 2020

Environmental

'Green finance' and 'ESG in risk management' are now crucial topics. 'Portfolio alignment with net zero by mid-century' is a major topic. In 2020, 'Climate strategy' had medium importance and 'ESG products & services' low/medium.

Social

'Customer experience' remains highly material. 'Customer financial wellbeing' and 'Financial inclusion and empowerment' are now among the crucial topics. In 2020, 'Customer satisfaction' was also one of three high priority topics.

Governance

'Culture, conduct & ethical behaviour' (crucial topic) and 'Privacy, data protection and cyber security' (major topic) increased in importance. In 2020: 'Compliance and risk management' had medium importance and 'Cybersecurity and data protection' had low importance.

A. Issues such as food waste, light and noise pollution are not material to the Group.

Our ESG priorities

Our materiality assessment identified 15 ESG topics we should focus on.

Crucial topics

Customer experience and satisfaction

Supporting customers and local economies with products and services that meet their needs. Giving them services and products that are Simple, Personal and Fair. Innovating and using digital technologies to maximize access to products and services.

Financial inclusion and empowerment

Designing, developing and delivering products and services that ensure access to the financial system and meet credit needs. Building resilience through financial education.

Green Finance

Supporting our customers in their transition to a low-carbon economy by embedding environmental factors in products and risk analyses, and by supporting the growth of sustainable financial product markets.

ESG in risk management, embedding climate

Ensuring our risk management framework incorporates customers' and operations' environmental (e.g. climate) and social (e.g. human rights) risks, and outlining them in policies and procedures.

Culture, conduct & ethical behaviour

Ensuring exemplary conduct by everybody: being Simple, Personal & Fair in all we do; and embedding Risk Pro, ethical channels and best-in-class policies and controls on employees' internal conduct, transparency towards customers and ethical behaviour.

Major topics

Privacy, data protection and cybersecurity

Managing the risks from collecting, retaining and using personal information.

Portfolio alignment to net zero achieved by mid century

Analysing our portfolios' carbon footprint and aligning them with the Paris Agreement by taking actions to steer them to net zero, applying climate methodologies, and setting targets.

Equality, diversity, inclusion & wellbeing

Ensuring equality, fairness, health, emotional and financial wellbeing and respect among employees, with zero tolerance for harassment and discrimination.

Operational and business resilience

Adapting to a changing environment (including adverse events), maintaining the resilience of the business and building on strategic priorities (One Santander, Digital Consumer Bank and PagoNxt).

Corporate Governance

Guarantee effective corporate governance to continue creating value for shareholders, allocating capital efficiently and ensuring profitable growth in a responsible way that meets our stakeholders' expectations. Introduce ESG standards in variable pay schemes.

Talent management and development

Attracting, engaging and retaining a productive and talented workforce with benefits and development opportunities. Ensuring meritocracy.

Relevant topics

Operational footprint

Reducing direct operational and indirect value chain impacts through energy and water management; the use and recycling of materials; and green building design (incl. initiatives for employees to assess and reduce their footprint).

Responsible procurement

Assessing ESG in our supply chain to manage associated reputational and service-level risks.

Education and support to communities

Leveraging Santander Universities to provide education, employability and entrepreneurship opportunities and to connect startups and SMEs with talent, clients, training and other resources. Supporting community wellbeing and improving the lives of people at risk of exclusion.

Biodiversity

Managing the impact of our financial products and services on ecosystems and biodiversity through whom we lend to, including (but not limited to) natural resource extraction, cultivation and project development.

Our 2021 materiality assessment led to an ambitious action plan for 2022-2025.

Our Goals		Priority Action Plans
E	Deliver our net zero carbon ambition by 2050 by setting decarbonization targets, helping our customers transition and remaining carbon neutral in our own operations	→ Execute our **climate strategy** towards **net zero** by 2050 → Measure and develop our **green transition and sustainable finance** value propositions across units → Embed environmental, social and climate criteria into **risk management**
S	Support inclusive growth through financial empowerment; support for education, enterprise and employment; and building a diverse, talented workforce.	→ Continue to promote a **diverse & inclusive workplace** that fosters **employee wellbeing** → Continue improving **customer experience and satisfaction** → Enhance our **financial empowerment** and inclusion proposition
G	Embed behaviours, processes, policies and governance to ensure we are acting responsibly, listening to our stakeholders, and treating all our stakeholders in a Simple, Personal and Fair way – all based on solid governance and prudent risk management	→ Foster **culture, conduct and ethical behaviour. The Santander Way** behaviours refresh → Engage with **external stakeholders** (ESG analysts, indexes, NGOs,...)

RB Public commitments ahead

	2021 figure	Target	Period
1. Electricity from renewable sources (%)	75%	100%	by 2025
2. Thermal coal-related power & mining phase out	€7bn	0 exposure	by 2030
3. Reduce emission intensity in power generation portfolio[A]	0.23 tCO2e/MWh	0.18 tCO2e/MWh 0.11 tCO2e/MWh	by 2025 by 2030
4. Green Finance raised and facilitated (cumulative)[B]	€65.7 bn	€120 bn €220 bn	2019-2025 2019-2030
5. Sustainable investment (€bn AUM under ESG funds)	€27 bn	€100 bn	by 2025
6. People financially empowered (millions)(cumulative)[B]	7,5 M	10 M	2019-2025
7. Women in senior positions	26.3%	30%	by 2025
8. Equal Pay Gap	1%	0%	by 2025

Maintain commitments achieved:

→ Be carbon neutral in our operations

→ Eliminate use of single-use plastics in our buildings and offices

→ Have a board of directors with 40-60% women members

A. The 2021 figure of 0.23 tCO2e/MWh corresponds to the latest available portfolio data (2019).
B. The 2021 figure is a cumulative figure from 2019.

Governance

GRI 102-14, 102-16, 102-31, 102-34, 103-2, 103-3, FS1, FS2 and FS3

Our principles, frameworks and policies ensure we behave responsibly in all we do. We strengthened our responsible banking governance to continue doing things the right way and promote inclusive and sustainable growth.

Responsible banking corporate framework

Created in 2021, the framework's common principles, roles and responsibilities, key processes and governance to drive us towards a more sustainable business model that delivers on our purpose to help people and businesses prosper. It also reinforces our commitment to Agenda 2030: the UN Sustainable Development Goals (SDGs), the Paris Agreement and the Principles for Responsible Banking. The corporate framework is approved by the Board.

Policies and guidance

The Group's policies and guidance set the standard for all units. We systematically review the scope of policies relating to the integration of ESG criteria to ensure compliance with international best practice. In 2021, the Responsible Banking function was made part of the policy approval process to embed sustainability criteria in all policies.

Core policies that integrate ESG criteria into our business model, to make us a more responsible bank[A]

General code of conduct

Brings together the ethical principles and rules of conduct our employees must follow and is central to our compliance function.

Corporate culture policy[B]

Establishes the guidelines and standards to ensure a consistent group culture.

General sustainability policy

Outlines our sustainability principles and voluntary commitments to generate long-term value for our stakeholders.

Human rights policy

Sets out how we protect human rights, in line with the UN Guiding Principles on Business and Human Rights.

Environmental, social & climate change risk management policy

Details how we identify and manage risks, in oil and gas, energy, mining and metals, and in soft commodities.

Sensitive sectors policy

Provides guidelines for assessing and determining our involvement in industries that pose a reputational risk.

Other policies that support our responsible banking strategy

- Consumer protection policy[C]
- Code of conduct in security markets
- Cybersecurity policy
- Third-party certification policy[D]
- Tax policy[E]
- Conflicts of interest policy
- Financing of political parties policy
- Policy on contributions for social purpose[F]
- Global mobility policy

A. These policies are approved by the board of directors and are available on our corporate website (except the Sensitive sectors policy).
B. Includes Banco Santander's Diversity & Inclusion Principles and the Corporate Volunteering Standard.
C. Includes financial consumer protection principles.
D. Includes principles on the responsible behaviour of suppliers. These principles are publicly available on our corporate website.
E. Our tax strategy and an extract of our Tax policy are available on our corporate website.
F. Updated and available on our corporate website.

Decision-making and oversight bodies

Board of directors

Approves and supervises the implementation of general policies and strategies relating to our corporate culture, values, responsible business practices and sustainability. It also makes sure all the Group's employees are aware of codes of conduct and act ethically, and ensures compliance with the laws, customs and good practices of the industries and countries where we operate.

Responsible banking, sustainability & culture committee ("RBSCC")

(meets at least four times a year)

Supports the board and oversees the Group's responsible banking agenda and strategy.

For more details, see 4.9 'Responsible banking, sustainability and culture committee activities in 2021' in Corporate governance chapter

Responsible banking forum

(meets at least six times a year)

Executes the responsible banking agenda across the Group, drives decision-making on responsible banking issues and ensures the execution of any mandates from the RBSCC, other board committees and the board of directors. It also ensures alignment on key issues, including the review and escalation of reports to the RBSCC.

Implementation bodies

Management meeting

Chaired by the CEO, discusses responsible banking agenda progress, including climate change, with a special focus on TCFD and ESG business opportunities.

In 2021, the meeting was informed four times on the progress of the responsible banking agenda.

Corporate responsible banking unit

Coordinates and drives the responsible banking agenda.

A senior adviser on responsible business practices supports this unit and reports directly to the executive chairman.

Responsible banking network

Our subsidiaries' sustainability and culture units execute responsible banking agendas according to our corporate strategy and policies. They are led by a senior manager, who is part of the group-wide Responsible banking network, which meets every two months.

We issue guiding principles for subsidiaries and global business units to embed our responsible banking agenda across the Group.

The corporate responsible banking unit and local units hold regular bilateral meetings.

Working groups on financial education, training, sustainable finance, microfinance and climate change help agree actions and align efforts.

In 2021, the network held six virtual meetings to discuss progress on the Group´s agenda. 10 bilateral meetings focused on each units' ESG agenda. The network also ran the third Responsible Banking workshop, which representatives from all businesses and geographies attended over three days (one day for each initial: E, S and G).

Core topics addressed in 2021

In 2021, we addressed five ESG core topics: Climate change and green finance; diversity and inclusion; our culture, "The Santander Way"; Santander's materiality assessment; and policies related to responsible banking.

Helping society tackle global challenges: 2030 agenda

Our activity and investments contribute to several United Nations' Sustainable Development Goals and support the Paris Agreement.

We analysed our agenda's contribution to the SDGs and determined the most relevant goals to Banco Santander's activity, commitments and strategy.

For more details, see the ´Banco Santander and the SDGs´ brochure on our corporate website.



The SDGs on which Banco Santander has the greatest impact



Our skilled and committed team enables us to respond to customers' needs; help entrepreneurs create businesses and jobs; and strengthen local economies.



We tackle climate change by reducing our own carbon footprint and environmental impact, while helping our customers transition to a sustainable economy.



We promote transparency, the fight against corruption and robust institutions for sustainable development.
We have policies and codes of conduct that regulate our activity and behaviour and steer our commitments towards a more responsible banking system.

Other SDGs on which Banco Santander also has an impact



We want to reduce poverty and boost the welfare and economy of the countries we operate in. Our financial inclusion products and services and community investment programmes empower millions each year.



Our pioneering Santander Universities programme helps universities and students prosper, promoting education, entrepreneurship and employment. Also, Santander Scholarships is one of the world's largest private education grant funds.



We promote an inclusive and diverse workplace, ensuring equal opportunity as a strategic priority. We also run initiatives to drive diversity.



We're the global leader in renewable energy financing, and finance energy efficiency projects; low-emission, electric and hybrid vehicles; and other cleaner transport solutions.



Our products and services give society's most vulnerable better access to financial services and we teach them the concepts and skills they need to manage their finances effectively.



We finance sustainable infrastructure and promote access to affordable housing to guarantee basic services and inclusive economic growth.



We are firmly committed to reducing our environmental footprint, implementing energy efficiency plans and promoting the use of renewable energies, as well as offsetting the consumption of our internal operations.



We participate in prominent local and international initiatives and working groups.

For more details on how Banco Santander supported the UN Sustainable Development Goals in 2021, see the 'SDGs contribution content index' at the end of this chapter

Partnerships to promote our agenda

GRI 102-12 and FS5

We drive our responsible banking agenda through a number of local and international initiatives and working groups, including:

UNEP Finance initiative

We are a founding signatory to the United Nations Principles for Responsible Banking. In 2021, we continued participating in Phase III of the UNEP FI project on the TCFD's recommendations for banks.

United Nations Global Compact

We've been part of the Global Compact network since 2002 and member signatory of the United Nations Global Compact's gender equality programme since 2020.

Glasgow Financial Alliance for Net Zero, Net Zero Banking Alliance and Net Zero Asset Management

In support of our Net Zero ambition, we joined the Glasgow Financial Alliance for Net Zero, Net Zero Asset Management and were co-founders to the Net Zero Banking Alliance. Within GFANZ, we co-led the Net Zero Public Policy and their call to action launched in October.

World Business Council for Sustainable Development (WBCSD)

Our Group Executive Chair, Ana Botín, completed her tenure on the WBCSD's executive committee. In 2021, we participated in the Banking for Impact on Climate in Agriculture (B4ICA).

Banking Environment Initiative (BEI)

We continued to participate in the Bank 2030 initiative, aimed at building a roadmap for the banking industry to help society in the transition towards a low-carbon economy.

CEO Partnership for Economic Inclusion

We're part of a private-sector alliance for financial inclusion, led by Queen Máxima of the Netherlands, Special Representative of the United Nations, to promote inclusive financing for development.

Other international and local initiatives that Santander supports

- UN Women's Empowerment Principles
- The Valuable 500
- UN Principles for Responsible Investment
- CDP (Carbon Disclosure Project)
- UN Global Investors for Sustainable Development (GISD) Alliance
- Green Recovery Alliance of the European Union
- Equator Principles
- Consultative Group of the Taskforce on Scaling Voluntary Carbon Markets
- Partnership for Carbon Accounting Financials (PCAF)
- International Wildlife Trade Financial Taskforce
- Round Table on Responsible Soy
- Working group on Sustainable Livestock
- Climate Leadership Council
- The Wolfsberg Group

Doing things the right way

To meet the new business environment, we're focusing on...

Our strong and inclusive culture: The Santander Way	A strong corporate culture is critical to succeeding in today's competitive, fast-moving environment.
Conduct and ethical behaviour	We conduct our business in compliance with the highest standards of conduct and ethical behaviour.
A talented and engaged team	The more prepared and motivated our workforce is, the stronger its commitment to helping people and businesses prosper will be. Our team reflects the diversity of the communities where we operate.
Acting responsibly towards customers	We develop our products and services responsibly, and aspire to deliver excellent customer service.
Responsible procurement	Our procurement processes apply ethical, social and environmental criteria to ensure we operate in a sustainable way.
Shareholder value	We have clear and robust governance that manages risks and opportunities prudently and helps us devise long-term strategies to safeguard the interests of our shareholders and broader society.

A strong and inclusive culture: The Santander Way

Corporate culture: Values and behaviours

GRI 102-16

The Santander Way is our purpose, our aim and how we do business. It's the bedrock for building a more responsible bank. By fulfilling our purpose of helping people and businesses prosper, our business grows and creates value for everyone.

To live The Santander Way and be Simple, Personal and Fair in everything we do, we have eight corporate behaviours[A] embedded in every stage of the employee lifecycle, from recruitment and training to performance reviews and compensation. In addition, our principles on diversity and inclusion strengthen our relations with our broad base of stakeholders, making sure we are fully inclusive.

The Santander Way

Our purpose

To help people and businesses prosper.

Our aim

To be the best open financial services platform by acting responsibly and earning the lasting loyalty of our people, customers, shareholders and communities.

Our "how"

Our values

Simple | Personal | Fair

Corporate behaviours[A]

- Show respect
- Truly listen
- Talk straight
- Keep promises
- Actively collaborate
- Bring passion
- Support people
- Embrace change

risk pro
Everyone's business

Leadership commitments

- Being open and inclusive
- Inspiring and executing transformation
- Encouraging the team to prosper
- Leading by example

A. In 2021, we updated our corporate behaviours, which we'll implement across the Group during 2022.

Cultural transformation: an ongoing journey

GRI FS5

Since 2015, we've strived to ensure everything we do for our customers, employees, shareholders and communities is Simple, Personal and Fair. The standards we uphold across Santander are a clear indication of our ambition.

Guided by clear governance, our talented and engaged workforce enabled us to make great strides in strengthening our culture and values.

In 2021, employee commitment was 4 pp above the industry average at 80% (-2 pp from 2019 but up +10 pp from 2014). 78% of employees recommended working at Santander (-3 pp from 2019 and +7 pp from 2014). 88% feel their work has clear purpose (+1 pp from 2019),10 pp above the industry average.[A]

A.Figures from the 2021 Global Engagement Survey. In 2020, the unusual circumstances caused by covid-19 led us to run a pulse survey with a sample of employees

Culture plan 2021[B]

	Objectives	Achievements
Diversity and inclusion →	To foster a workplace where our people can be themselves and reflect the diverse society we live in	• We instituted global minimum parental leave of 14 weeks for one parent and 4 weeks for the other. • 26.3% of senior positions are held by women, up 2.6pp on 2020. Furthermore, 40% of members of the board of directors are women. • We revised cultural diversity standards to get detailed insights into demographics and personal aspects. • We carried out a gender pay gap analysis to draw up action plans in each subsidiary. • We held global events for International Women's Day, International LGBT+ Pride Day and the International Day of Persons with Disabilities, which leaders and employees from many regions participated in. • Santander featured as the world's highest-scoring bank in the 2022 Bloomberg Gender-Equality Index and was ranked among the 25 best companies to work for by Great Place to Work.
Speaking up →	To make active listening our most effective tool	• We implemented the policy on *Canal Abierto*, our ethical channel, in the Group's core geographies.
Acting responsibly towards our customers →	To provide our customers with the best service and leading the banking industry in customer satisfaction. Enhancing our responsible business practices and our service model for vulnerable customers	• We strengthened our "customer-obsession" culture and reviewed our pricing techniques to check if they were cost-effective, resilient to risk and useful. • We continued to implement our model for managing vulnerable customers across the Group. We created working groups to share best practices. • We instituted special indicators for the entire Group to monitor conduct risks with customers as part of our Excellence plan for recoveries. • We enhanced our process for validating ESG products.
Responsible procurement →	To strengthen our commitment by continuing to review our suppliers based on ESG standards	• We conducted an ESG review of the top 200 high-risk suppliers in our geographies and developed special plans to work with each one and aid its ESG transition. • We approved the plan to broaden our review pool to 1,000 suppliers. • We began to adopt ESG standards in sourcing products and services.

B. For more details on diversity and inclusion and speaking up, see section 'A talented and engaged team'. Further information on the Simple, Personal and Fair approach towards customers and suppliers can be found under the 'Acting responsibly towards customers' and 'Responsible procurement' sections respectively.

Risk Pro: our risk culture

SASB FN-CF-230a.2, FN-CF-230a.3

The Group's risk culture is called Risk Pro (known as "I AM RISK" in the UK and the US). It's a core element of both our corporate culture, The Santander Way, and our purpose to help people and businesses prosper. Risk Pro makes risk management "Everyone's business" (the initiative's motto). It's the responsibility not just of the Risk and Compliance and conduct functions but of all employees as well. The risks Santander employees must manage everyday can relate to finance, operations, conduct, compliance, cyber security, reputational, fraud, financial crime and climate. It's everyone's responsibility to stay alert and know how to recognize, control and report them. Our performance review system, MyContribution, assigns Santander employees a common risk objective, which is 10% of their review.

Promoting and enhancing our risk culture

Our risk culture is embedded in all stages of the employee cycle (hiring and onboarding, career development, daily tasks, reward and recognition). Constant communication, leading by example, support from senior management and speaking up are key to assimilating Risk Pro within the Group.

In 2021, all subsidiaries made progress with implementing the Target Operating Model for risk culture. Created in 2020, it draws on best practices to strengthen our risk culture. In November, we celebrated Risk Pro Month at the Corporate Centre; we also had our first global Risk Pro Week with the participation of the top management and our main geographies and global businesses to raise employees' awareness of the importance of risk management in their day-to-day.

We also ran training activities to develop the required skills of our employees on strong risk culture behaviours. The Group launched Dojo, a new learning platform that will significantly boost employees' understanding about risks.

To better assess the strength of our risk culture across the Group, we also revised questions on the risk profile assessment (RPA) and the Global Engagement survey as well as the indicators on the Risk Pro dashboard to enhance them.

Aside from our globally distributed e-magazine, *Risk and C&C* e-zine, we set up a Risk Pro community on Santander Now and opened many risk-themed channels (such as Supplier risk management and Credit Planet) to boost awareness of the importance of risk management.



For more details on environmental and social risks, see section 10. Climate and environmental risk in the 'Risk Management and compliance' chapter.

For more details on our prevention of corruption, bribery, money laundering and terrorism financing, see section 7.2. 'Compliance and conduct risk management' in the 'Risk management and compliance' chapter.

For more details on MyContribution model see 'Performance review and remuneration' in 'A talented and motivated team' section.

Active listening

GRI 102-17

Speaking up and truly listening are integral to our corporate culture. Our ethical channel, *Canal Abierto*, is the main tool in our active listening strategy for all our stakeholders. It is available in our core geographies and enables us to learn about potential financial and accounting mistakes, or violations of our corporate behaviours, internal regulation or the law, which our employees, customers, shareholders and member of the community can report to us anonymously and confidentially. It's accessible online or by phone, in several languages and available 24 hours a day, seven days a week.

In addition to *Canal Abierto*, the Group practices active listening through its customer assistance and complaints channels, employee and supplier surveys and other tools. Active listening is effective in our cultural transformation, where ethics, honesty and responsibility should always characterize everything we do.

More details on our employee active listening in 'A talented and motivated team' section.

More details on our customer active listening in 'Acting responsible towards customers' section.

More details on our supplier active listening in 'Responsible Procurement' section.

Conduct and ethical behaviour

General code of conduct

The General code of conduct (GCC) sets out the ethical principles and values all Santander employees must demonstrate. They include equal opportunity, diversity and non-discrimination, respect for people and collective rights, work-life balance, and social and environmental responsibility. The Compliance and conduct function is in charge of administering the code and promoting a culture of ethics and compliance within the organization. The Internal audit function regularly reviews compliance with the GCC's rules and procedures. Furthermore, it acts independently to verify that the code and its locally-adapted versions are appropriate and effective.

Training

Every year, all our employees undertake mandatory training on the GCC.

In 2021, we launched a new course called "Your conduct matters". Employees can brush up on the conduct rules they must follow in their day-to-day and learn why their conduct matters in helping the Group avoid criminal liability; managing conflicts of interest; and receiving courtesies from third parties.

We also have "Corporate defense", a programme to prevent criminal risks to the Group. Every year, each Compliance unit conducts a risk assessment on whether the actions employees take on the Group's behalf are unethical or infringe internal or external regulation and become a liability to the Group. It considers inherent risks and the unit's control environment with recommendations or action plans for specific areas for improvement.

We also launched a programme in our core units about competition. It is based on international standards and best practices recommended by competition authorities.

Key initiatives

To strengthen and promote our ethics and compliance culture, we ran these initiatives:

- #yourconductmatters: Employee awareness campaigns via email, Intranet and other means to boost understanding of the General code of conduct and its implementing regulation.
- Answering employees' queries on ethics and rules in the GCC.
- Analysing and managing conflicts of interest between employees or directors and the Group, and giving recommendations to avoid them.
- Handling complaints received through our ethical channel, *Canal Abierto,* enhancing processes based on lessons learned.
- Setting common principles and guidelines on receiving courtesies or invitations from third parties, including the obligation to register them. No courtesy should be worth more than 150 euros.

Procurement management policy

Santander's Procurement management policy sets out the principles and lines of action employees who procure goods and services and negotiate with suppliers must follow. It requires, at all times, transparent, objective and balanced decision-making, avoidance of conflicts of interest; and protection of confidential information.

For more details see section 7.2. 'Compliance and conduct risk management' in the 'Risk management and compliance' chapter

Code of Conduct in Securities Markets

Santander's Code of Conduct in Securities Markets (CCMV) is our main policy on market abuse risk management and control. It sets out the standards board members, directors and employees must abide by when handling sensitive information or trading in securities markets on their own behalf. It outlines the necessary controls and transparency to safeguard the interests of the Group's investors as well as market integrity.

The last updated version that the board of directors approved in June 2020 includes the minimum market abuse risk standards our units trading in securities markets must consider.

Our core units have tools to help detect potential market abuse and ensure the consistent management of those risks across the Group.

According to CCMV guidelines, those subject to it receive regular training on market abuse. Furthermore, once a year they verify their understanding of key obligations and the penalties that Santander and its employees could face if they fail to fulfil them.

Financial Crime Compliance (FCC)

GRI 103-1, 103-2, 103-3 and 205-2
SASB FN-AC-510a.1, FN-CB-510a.1, FN-IB-510a.1

FCC on vulnerable customers

The new Financial Crime Compliance Customer Lifecycle Due Diligence Procedure, approved in late 2020 and transposed across the Group in 2021, includes a section on vulnerable customers. The procedure reinforces the Group's commitment to "reducing the stigma associated with the provision of financial services to vulnerable customers" and provides a compliance framework for Santander business units to follow in meeting this commitment while mitigating financial crime risk responsibly.

FCC on anti-bribery and corruption

In 2021, the board of directors approved a more extensive FCC Corporate Framework. Its scope of financial crime risk includes bribery and corruption. It sets out essential details of the Group's anti-bribery and corruption ("ABC") programme, including required processes and controls to manage bribery and corruption risk with third parties, sponsorships, charitable and political donations, joint ventures and principal investments, travel, gifts and courtesies, marketing, employment, and work experience.

FCC on training

As part of the Group's strategic FCC transformation plan, we redesigned the required computer-based introductory training module. It features case studies on compliance challenges regarding product innovation and international sanctions; lessons on environmental crime, human trafficking and child exploitation online, drug trafficking, and terrorist financing.

Also, as part of the more extensive FCC Corporate Framework, we launched an upskilling initiative for the corporate FCC function, with several in-depth, face-to-face (virtual) training sessions with external and internal experts in bribery and corruption, tax evasion, complex ownership structures and payments infrastructure and other areas.

Our courses have a self-assessment to ensure understanding of key financial crime risks and policy requirements. In 2021, 164,547 employees were trained.

For more details on financial crime compliance, see section 7.2. 'Compliance and conduct risk management' in the 'Risk management and compliance' chapter

Environmental and social risk management

GRI 102-11, 413-2, FS10 and FS11

We embed environmental and social standards in risk management to support sustainable and inclusive growth, uphold human rights, preserve the environment and aid the transition to a low-carbon economy.

Our Environmental, social and climate change risk management policy sets out the standards for investing in, and providing financial products and services to, companies and customers who engage in sensitive activities in the oil and gas, power generation, mining and metals, and soft commodities industries (especially retail customers involved in farming and ranching in the Amazon). We review customers in credit risk, insurance, advisory, equity and asset management transactions (especially in the corporate and investment banking (SCIB) segment).

We analyse customers subject to the policy with a detailed questionnaire that their assigned banker completes before a team of analysts conducts an overall assessment of their environmental and social (E&S) risks (which we update every year). We also analyse one-off, project-related transactions in accordance with the Equator Principles and such international regulations as the IFC Performance Standards. Following our environmental and social due diligence of projects, we set out corrective measures based on their risk rating.

We apply our Environmental, social and climate change risk management policy in conjunction with our Human rights policy. In addition, the Social and environmental risks and Compliance departments carry out extra due diligence on cases with red flags. In 2021, we ran extra due diligence on customers in an industry and region with human rights concerns (namely forced labour).

The findings, which provide further input for decision-making, are submitted to risk approval committees.

In 2021, we began to consider social and environmental components in our credit quality analyses of customers in the SCIB segment.

We created a multidisciplinary team to help enhance the identification, remediation and mitigation of social and environmental risks (including human rights), analyse customer engagement throughout their relationship with us, spot deficiencies and implement action plans.

Moreover, the Group follows the precautionary principle, analysing and managing key environmental risks throughout the value chain as well as considering the direct impact on the assets where we operate and the indirect impact stemming from our activity.

For more details on environmental and social risk management and climate risks, see 'Risk management and compliance' chapter of this report.

Our environmental, social and climate change risk management, human rights and sustainability policies are available on our corporate website www.santander.com.

Equator Principles

We have applied the Equator Principles to all project-related transactions (especially project finance) since 2009 and promote them through the Equator Principles Association working groups to make sure every project we're involved in meets the expected sustainability standards.

In 2021, we analysed 63 projects that fall within the scope of the Equator Principles (see table with the categorization of projects according to the Equator Principles in the 'Key metrics' section of this chapter).

Tackling environmental crime

The principle of nature conservation extends to all the Group's units. The Financial crime compliance function understands the importance of recognizing that "behind every environmental crime there is a financial network", not only because of the large sources of revenue that organized crime draw from these activities, but because crimes like illegal deforestation have a significant impact on carbon sequestration. Industries we consider "restricted" due to exposure to environmental crime risk include (but are not limited to) logging, pulp and paper mills, palm plantations, commercial fishing, trapping and transport of live animals and waste management. Given their "restricted" status, Santander entities that provide services to companies in those industries must respond to their elevated financial crime risk by implementing enhanced controls. Furthermore, our customer screening tools include specific terms on environmental crimes to help us flag issues and conduct assessments, and our global and in-person senior management training also includes environmental crime case studies and trends.

We engage in several public-private partnerships as part of our commitment to detect, disrupt and deter environmental crime. In 2021, our Financial crime compliance function was the chair of the United Nations Office on Drugs and Crime's (UNODC) Private Sector Dialogue on Disruption of Financial Crimes Related to Forestry Crimes, which brought together financial institutions, authorities, investigative law enforcement units and supranational governmental bodies to discuss intelligence sharing, typologies and policy strategies on disrupting the financial crime networks behind illegal deforestation. The inter-governmental Financial Action Task Force (the FATF – the "global money laundering and terrorist financing watchdog") also asked the function to represent the private sector in an awareness-raising, global webcast on environmental crime. Santander also remains an active member of the United for Wildlife's Financial Taskforce against illegal wildlife trade.

Santander and the Brazilian Amazon

GRI 304-3

Santander is committed to protecting the Amazon rainforest, while helping promote sustainable development and practices.

Deforestation in the Brazilian Amazon has been taking place over several decades: logging, mining, property speculation, lack of clear land titles and large infrastructure projects in the region have all played a role.

Given the growing concerns about climate change and biodiversity conservation; our global policy on environmental, social and climate change risk management; and our commitment to the Equator Principles, we take additional care when lending to Brazilian clients with operations in the Amazon:

◦ All loan requests by farmers and ranchers to Santander Brasil are checked for embargoes issued by the government because of illegal deforestation. In the first quarter of 2022, we will have the capability to check, on a daily basis, whether there was deforestation on the farms and ranches to which we had granted loans. This daily verification will last for the duration of each loan, which will also be screened to make sure the properties do not overlap with indigenous peoples' officially-recognized land.

◦ Clients' practices in Brazil are reviewed regularly. We conduct annual ESG reviews of more than 2,000 customers, including beef processors, soy traders and logging companies.

◦ Looking ahead, we expect beef processing clients in the Amazon to have a fully traceable supply chain that is deforestation-free by 2025, including indirect suppliers of cattle, as a prerequisite for granting credit.



Find more information about our "Santander and the Brazilian Amazon", on our corporate website www.santander.com

Human rights protection

GRI 412-2

Santander commits to respecting and upholding the human rights of our employees, customers, partners and communities when doing business. As a financial institution, we operate according to our internal framework on human rights as well as the international standards we are subject to.

Our board-approved Human rights policy, based on the highest international standards (especially the 2011 United Nations Guiding Principles on Business and Human Rights), sets out our responsibilities in terms of commitment, due diligence, access to remedy and claim. Our Human rights policy is consistent with our General code of conduct, Consumer protection policy, Corporate culture policy and Environmental, social and climate change risk management policy. It sets out Santander's standards and commitments to uphold and defend these human rights:

- Zero tolerance towards employee, customer and supplier discrimination, forced labour and child exploitation.
- Freedom of association, collective bargaining, health and satisfactory employment conditions.
- Support to communities in collaboration with government agencies, civil associations and other organizations to ensure a clean, healthy environment and help stamp out corruption.

In 2021, we launched an introductory course on sustainability and ESG for all Santander employees that highlights the importance of human rights. In addition, we embed ESG criteria in all our processes and activities and make sure our policies uphold human rights.



Our human rights policy is available on our corporate website www.santander.com.

Principles of action in tax matters

GRI 103-1, 103-2, 103-3, 207-1, 207-2, 207-3

Santander pays its fair share of taxes in the jurisdictions where we operate. Our board-approved tax strategy (available online) sets out the principles that apply to the entire organization.

All the group's entities must comply with its tax risk management and control system in accordance with the internal control model.

Since 2010, we've abided by the Code of Good Tax Practices in Spain and by the Code of Practice on Taxation for Banks in the United Kingdom. Furthermore, we've participated in cooperative compliance initiatives led by various tax authorities. Since 2015, we've voluntarily submitted the annual Tax Transparency Report to Spain's Tax Authority.



For more details on Grupo Santander's tax strategy, visit our corporate website www.santander.com.

Core principles of Santander's tax strategy

- Satisfy our tax obligations based on a reasonable interpretation of tax laws, grounded on their spirit and intention.
- Respect the rules on transfer pricing and pay taxes in each jurisdiction in accordance with our functions, assumed risks and profits.
- Not give customers tax advice or planning strategies when marketing and selling financial products and services.
- Communicate Santander's total tax contribution clearly, distinguishing between taxes borne by the Group and by third parties for each jurisdiction.
- Not create or acquire entities registered in offshore jurisdictions without board of directors' approval; and adequately monitor and gradually reduce the group's operations in such territories.[A]
- Maintain a good working relationship with tax authorities based on the principles of transparency and mutual trust to avoid disputes and minimize litigation.

A. By the end of 2021, we had one subsidiary and three branches in offshore jurisdictions, having liquidated a subsidiary in Isle of Man. See detailed information on offshore entities in note 3 c) to the consolidated financial statements.

Tax contribution

To contribute to the communities in our geographies, we pay all taxes borne directly by the Group (taxes paid by the Group[B]) and collect others' taxes originating from our business operations (taxes from third parties[C]).

In 2021, our tax contribution totalled EUR 16,178 million, including EUR 7,617 million in taxes directly paid by the Group.

For every 100 euros in total income, EUR 34 are taxed, including:

- EUR 16 in taxes paid directly by Santander.
- EUR 18 in taxes collected from third parties;

The taxes recorded in our annual income statement mainly stem from corporation tax accrued during the accounting period (EUR 4,894 million in 2021, which represents an effective rate of 33.6%, or, deducting the extraordinary results, EUR 5,076 million, which represents an effective rate of 33.3%[D]). They also include non-recoverable VAT, employers' social security contributions and other charges, including those that are exclusively levied on banks and financial transactions (such as in Spain, the UK, Poland, Portugal, Brazil and Argentina). These taxes are recorded as they are generated, irrespective of when payment is made.

The taxes Santander pays directly (see table below) are included in the cash flow statement. The tax rate when comparing the corporate income tax paid (EUR 4,012 million) with the Group's pretax profit is 27.6%. Additionally, total taxes paid directly by the Group amounts to 52% of the profit before tax.

The taxes we accrue and the amounts we pay do not usually match because the laws in some countries dictate a different payment date than when income was generated or an operation was taxed.

We pay taxes in the jurisdictions where we earn a profit. Thus, the profits obtained, and the taxes accrued and paid, correspond to the countries where we operate.

For more details on the country by country report requested on GRI 207-4, see 'Key Metrics' in this chapter.

B. Including net corporation tax payments, VAT and other non-recoverable indirect taxes, employer's social security contributions and other withholding taxes, as well as other charges and tariffs.
C. Including net payments for salary withholdings and employees' social security contributions, recoverable VAT, tax deducted at source on capital, non-resident taxes and others.
D. See notes 27 and 51c of the consolidated annual accounts.

Tax disclosure by jurisdiction

EUR million

	2021				
Jurisdiction	Corporate income tax[E]	Other taxes paid	Total taxes paid by the Group[F]	Third-party taxes	Total contribution
Spain	399	1,308	1,707	1,341	3,048
UK	525	458	983	475	1,458
Portugal	17	202	219	281	500
Poland	206	198	404	134	538
Germany	204	53	257	175	432
Rest of Europe	329	259	588	54	642
Total Europe	**1,680**	**2,478**	**4,158**	**2,460**	**6,618**
Brazil	1,385	363	1,748	1,712	3,460
Mexico	207	248	455	699	1,154
Chile	180	66	246	274	520
Argentina	115	272	387	2,626	3,013
Uruguay	27	76	103	27	130
Rest of Latin America	32	6	38	8	46
Total Latin America	**1,946**	**1,031**	**2,977**	**5,346**	**8,323**
United States	376	94	470	749	1,219
Other	10	2	12	6	18
TOTAL	**4,012**	**3,605**	**7,617**	**8,561**	**16,178**

E. The Group's income taxes for the year 2020 amounted to EUR 2,946 million
F. Total own taxes paid for all these concepts amounted to EUR 7.6bn, broken down as EUR 4,012 mn in Corporate Income Tax, EUR 1,048 mn in non-recoverable VAT and other sales taxes, EUR 1,380 mn in employer-paid payroll taxes, EUR 142 mn in property taxes, EUR 304 mn in bank levies and EUR 731 mn in other taxes.

Ethical channels

GRI 205-3 and 406-1

Canal Abierto is our global ethical, anonymous and/or confidential, channel for reporting misconduct. It protects whistleblowers by expressly prohibiting reprisals or any negative consequence against them. Every unit in the Group administers its own ethical channel in its local language according to the common standards of the corporate *Canal Abierto*.

Minimum standards include:

- subsidiary CEOs' endorsement of the ethical channel;
- employees' awareness of the importance of using the channel;
- reporting to the Group about management, action and improvement plans;
- guarantee of easy platform access and anonymity (if desired);
- use of external platforms to receive reports according to best practice;
- mechanisms in place to manage conflicts of interest in internal investigations of reported cases; and
- internal audits of the channel.

These standards are included in our *Canal Abierto* policy, which we approved in 2020 and implemented in our core markets in 2021.

Canal Abierto is mainly set up to receive reports from employees; however, it's open in some subsidiaries to third parties (e.g. suppliers, customers, investors and other interest groups), who cannot use it to submit complaints or queries.

All incidents reported through Canal Abierto are handled appropriately, even if they are found to be unsubstantiated. *Canal Abierto* and its common standards help create an environment where employees can feel free to speak up and report what is not up to par so appropriate action can be taken to handle it. Thus, the implementation of *Canal Abierto* standards and the many actions taken correlate with the better Speak Up results from the Global engagement survey.

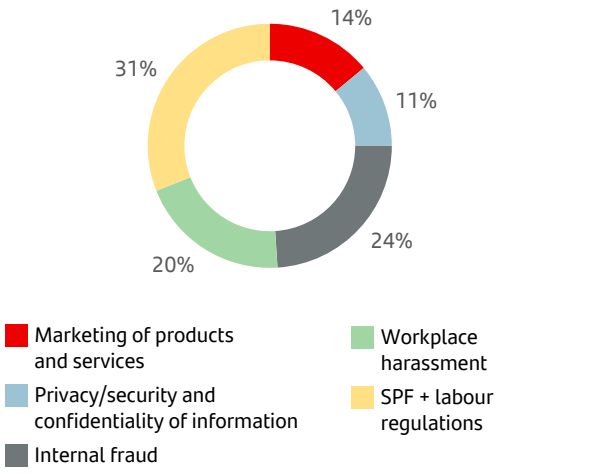
In 2021, we received 4,338 reports on the Group's channels. Of the 3,628 that had been well founded to merit investigation, 1,196 led to disciplinary action and 312 resulted in dismissal. The average processing time was 42 days.

By category, the main concerns were related to corporate values (SPF) and behaviours and to labour regulations, followed by internal fraud, workplace harassment and marketing of products and services.

In 2021, 79 equal opportunity and non-discrimination complaints were received in the Group, 8 of which resulted in disciplinary action, including 3 dismissals.

We received reports of five alleged cases of corruption in the year. Following a subsidiary-wide investigation, the allegations were deemed unfounded, resulting in no disciplinary or other actions.

TYPES OF ISSUES RECEIVED



	2021	2020
Issues received	4,338	4,390
Issues deemed well-founded for investigation	3,628	3,787
Disciplinary actions	1,196	1,083
which led to dismissal	312	315

Relations with political parties

Santander is committed to principles of transparency, honesty and impartiality in its interactions with political parties and other entities with public and social purposes that are also political in nature.

Since 2016, our board executive committee-approved policy on financing political parties (available on our corporate website) has applied to all our subsidiaries worldwide. It prohibits making monetary or in-kind election donations and contributions. In commercial relationships, Santander prohibits full or partial debt forgiveness for political parties and their affiliates. Even though they can negotiate the terms of debt, the interest rate can never be below market rate. Furthermore, the policy applies to political parties' electoral candidates to the extent local laws provide.

Santander did not make any donations or contributions to political parties in 2021.

A talented and motivated team

We want to be an employer of choice because of our purpose, culture and responsible way of achieving great results. Our strategy is based on three pillars.

Promoting a diverse and inclusive workplace that fosters employee wellbeing

Focusing on the employee is pivotal to our cultural transformation and our strategy

Ensuring we have the right talent and skills

Attracting and retaining the best talent and encouraging our people to learn and develop enables us to provide a better service

Providing work-life balance and job efficiency solutions

Delivering the best work experience boosts our efficiency and productivity

Our goal

Treating our employees responsibly builds stronger teams willing to go the extra mile for our customers and guarantees the returns our shareholders expect. That way, we can invest more in our communities while making our people proud to be part of Santander in a virtuous circle of loyalty that drives our success.

In 2019, we set out to be among the top 10 companies to work for in 6 of our geographies by 2021.[A]

A. According to a leading external source in each country (Great Place to Work, Top Employer, Merco, etc).

Achievement in 2021

Top 10

company in 6 geographies[B]

B. Spain, Argentina, Uruguay, Mexico, Brazil and Chile, using the latest publications.

A diverse and inclusive workplace

We focus on creating a diverse and inclusive workplace that promotes employee experience and well-being. We listen to their concerns and measure our performance through engagement surveys and external ratings.

Santander, a great company to work for

Santander ranked for the third consecutive year among the world's 25 Best Workplaces by Great Place To Work (GPTW). The bank stood out from over 10,000 companies in 92 countries that foster exceptional employee experiences centred on trust and fair treatment. Santander, coming in at number 24, is the only bank in the ranking.

GPTW recognized Santander as the best company to work for in Chile and ranked us in the top 3 in Argentina and top 6 in Uruguay. Santander Argentina was ranked among the top companies for women, while Santander Brasil was named the best employer for the LGBT+ community.

Santander also received the Top Employers Europe 2021 certification for the fifth consecutive year. It acknowledges excellence in the working conditions the bank provides for its employees and its contribution to their personal and professional development. Only four banks in the world, including Santander, have been awarded the European certificate.

Santander received the certificate in three of its main markets in Europe (Spain, Poland and the UK) and its Santander Consumer Finance units in Germany, the Netherlands, Austria, Poland and Belgium. It also obtained this distinction in Chile.

Diversity and Inclusion

GRI 103-1, 102-35, 102-38, 102-39, 103-2, 103-3, 405-1, 405-2
SASB FN-AC-330a.1, FN-IB-330a.1

In line with the diversity, equity and inclusion (DE&I) strategy we defined in 2020, we continue to cultivate a workplace where our people can be themselves and reflect the diverse society we live in.

Our structure enables us to manage diversity properly, ensure compliance with policies on this matter and promote these initiatives:

- **Global executive DE&I working group**, which brings together senior positions from all our geographies regularly to review results, propose initiatives and drive internal change.
- **Global DE&I team**, which draws up global initiatives, coordinates the teams involved and acts as liaison for the subsidiaries and businesses.
- **Local DE&I teams** in each subsidiary and business, which are responsible for implementing strategic plans and initiatives locally as well as sharing best practice.

Through them, we followed these strategic pillars in 2021:

- **Involving our leaders**: Their commitment to openness, inclusion and diversity will help strengthen a diverse and inclusive culture. In 2021, our directors received DE&I global mandatory training and 31% connected to webinars that delved deeper into those topics.
- **Raising awareness**: Promoting diversity through global standards and actions, such as flexiworking, parental leave, training, employee networks and celebrating international days.
- **Promoting equality**: Special focus on increasing the number of women in senior positions and on development programmes.

54%
of employees are women
+0.7 pp vs 2020

26.3%
of senior positions are held by women[A], +2,6 pp vs 2020

38.6
Average age of the workforce, -0.6 pp vs 2020

1.9%
of employees have a disability[B], +0,01 pp vs. 2020

Data at year end.
A. Senior positions are 1% of total headcount
B. Data from Mexico not included as it is confidential information.

86%
of employees believe Santander treats employees fairly regardless of their age, family, marital status, gender identity, disability, race, colour, religion or sexual orientation. -1 pp vs 2019.[C]

C. 2021 Global Engagement survey.

Initiatives and achievements in 2021

Gender

- 26.3% of Group senior positions are held by women, up 2.6 pp from 2020. For this, we focused on our talented women pipeline with a large group destined for future promotion.
- We introduced a new *Faro* executive hiring process to ensure a diverse candidate pool and selection panel. 51% of employees promoted to the *Faro* category were women.
- Santander Women Network has around 5,500 members in 10 countries and is rolling out to another seven. In Spain and at the Corporate Centre, the number of men in the network climbed 140%.
- Our succession plans now include "bias champions" to make sure unconscious bias does not affect decision-making.
- 8,600 people in nine countries connected to our International Women's Day event, which they rated 8.8 out of 10.
- We ran women's mentoring and development programmes in almost all our geographies.
- In our Corporate Centre, we launched Liderazgo Responsable (Responsible leadership) to raise executives' awareness of the importance of promoting diversity and inclusion in their teams, among other key aspects. Participants were diverse in terms of gender, length of service, generation and role.
- In Brazil, "Promoting Women's Leadership" helped sharpen women managers' and executives' leadership skills. The programme focused on boosting their careers at Santander, creating a talent pipeline and paving the way to gender equality in senior management. Close to 200 women took part in 2021.
- In Poland, we ran the "IT with a female eye" initiative to encourage women to take on roles in tech.

Cultural diversity

- We published several videos featuring senior managers to highlight cultural diversity in decision-making and business as well as how unconscious bias can impact on our actions and decisions.
- At the Corporate Centre, we ran BeKind, a programme for 300 employees to help make Santander a place where everyone can be themselves and make the most of their potential.
- In the UK, launched the first "Accelerating You: Black Talent Programme" as part of our plan to double the number of Black managers.
- In the US, we continued to run "Through our eyes" events for employees to share experiences and ideas on racial and social injustice.
- Also in the US, we have several employee networks: Bold for Black employees; AAPPI for Asian-American and Pacific Islander employees; and Conexión for Hispanic employees. They all held numerous events in 2021.

LGTB+

- Santander's network for LGTB+ employees, Embrace, has been active in Brazil, Mexico, Argentina, the UK, the US and at the Corporate Centre for several years. In 2021, we rolled it out to Santander Portugal, Santander Polska and to Santander España, which took second prize in the TOP LGTB+ Diversity Company category at the INTRAMA diversity and inclusion awards.

We ran these initiatives in 2021:

- 2,850 employees joined our global Pride Day event, which representatives of the Embrace network from four countries helped organize. We also ran local events in our geographies to celebrate Pride Week.
- At the Corporate Centre, a Guide to leave for pregnancy, birth and child adoption was created for employees.
- During Pride Week, we held events and issued communications in Argentina, Mexico, Spain, Poland, Portugal, UK and the US as well as at SCF, Openbank and the Corporate Centre.

People with disabilities

- → Global mapping to share subsidiaries' best practices for people with disabilities.
- → Recruitment targets for people with disabilities and internship programmes to spot talented people early.
- → Hiring of people with neurodiversity.
- → Volunteering and mentoring for people with disabilities.
- → Scholarships to increase access to education for students with disabilities.
- → Creation of networks for employees with disabilities.
- → Awareness campaigns.
- → Conformance with WCAG 2.0 Level AA accessibility standards for approving Santander websites and apps.



For more details on our D&I initiatives, see the **Diversity and Inclusion report** in our corporate website.

Gender equality

Santander fosters equal opportunity between men and women. While women make up 54% of our workforce, their presence in senior positions is less. We're taking action to have more women at all levels of senior positions.

In 2021 we instituted global minimum parental leave of 14 weeks for one parent and 4 weeks for the other.

We're also taking measures to fight sexual harassment, which our code of conduct addresses explicitly, and have an **equality plan in Spain with rules** to prevent sexual harassment and gender-based disparities.

Equal pay

GRI 102-35

In 2021, we adapted our global equal pay policies to make them neutral and eliminate gender-based disparities. We also amended our policies on remuneration, performance management and succession planning.

Our strategy attaches importance to equal pay between men and women, which we measure in terms of pay gap and equal pay for equal work.

Women members on our board	Women in senior positions[A]	Equal pay gap
Our target:	Our target:	Our target:
40-60%	30%	0%
in 2021	in 2025	in 2025
Our progress:	Our progress:	Our progress:
40%	26.3%	1%

A. Senior positions are 1% of total headcount.

Bloomberg Gender-Equality Index 2022

Grupo Santander features in the Bloomberg Gender-Equality Index and is its highest-scoring bank

Gender pay gap: 32.3%

What it measures:

The gender pay gap measures differences in compensation between women and men in an organization, business, industry or the broader economy, irrespective of the type of work. At Santander, fewer women hold senior and business management roles than men (something we are focused on addressing), while more women work in retail banking and support roles.

We calculate the gender pay gap as the difference in the median remuneration paid to male and female employees, expressed as a percentage of the male remuneration. Our remuneration schemes factor in base salary and variable pay, but not corporate benefits/in-kind compensation or local allowances.

Our progress:

Santander addresses the gender pay gap with a methodology based on best practices and common guidelines for the Group and local units. We maintain rigorous standards for promotions, recruitment, succession planning, implicit bias training and talent pipelines to strengthen diversity, with communications from executives as well as mentoring, networking and other actions aimed at achieving greater balance in the organization. Local units have action plans in place based on their own characteristics and conditions.

The gender pay gap was slightly wider than last year (31.7% in 2020) because of the greater pay difference between new hires and leavers' owing to the general under-representation of women in STEM[A] fields and to our higher ratio of women to men selected to fill non-executive and support roles.

Equal pay gap: 1%

What it measures:

The equal pay gap gauges the difference "equal pay for equal work" for women and men in the same job at the same level. Our comparison does not consider certain factors, such as tenure, years of service, previous experience and background.

Our progress:

Santander set up fair pay programmes to reduce the equal pay gap (our target is 0% in 2025). They include systematic reviews tied to remuneration cycles (merit-based promotions and bonuses), work reorganization and career development plans to recruit, engage and retain diverse talent.

Our equal pay gap, which stood at 1.5% in 2020, declined this year as a result of our strong commitment and wide-ranging action plans across the organization.

We continued to make progress in standardizing the criteria of our approach in all geographies and increasing the headcount of the segment we analysed. We will continue conducting robust reviews and analyses of pay data to detect, understand and act on any gaps.

A. STEM: Science, Technology, Engineer and Mathematics.

People with disabilities

GRI FS14

Our diversity, equality and inclusion strategy sets two objectives for the inclusion of people with disabilities:

- To meet (or exceed) the legal quota for employees with disabilities, raising their 2019 headcount by 1% in countries without a legal quota by 2025[A].
- To comply with local accessibility laws and make sure all new digital products meet the Web Accessibility Initiative's (WAI) WCAG 2.0 Level AA standards.

Santander has networks for employees with disabilities in Argentina, Mexico, Spain, the UK, the US and our Corporate Centre. In 2021, on top of local celebrations in our geographies, we held a global event to mark International Day of Persons with Disabilities, with employees from Argentina, Brazil, Spain, Portugal and the UK. 954 people connected to our global event.

A.This objective exempts countries where it is not legal to collect disability data.

In 2021, despite the organizational changes that the Group has implemented in some geographies, the number of employees with disabilities remained at 1.9%.

Fundación Universia is a core partner in Santander's efforts to include people with disabilities. We work closely to make Banco Santander a more diverse and inclusive bank.

We also collaborate through volunteering in other programs of guidance for people with disabilities: Speaking without frontiers, InMentoring Programme, Digital Mentoring, Families helping families, adapted bicycles.

For more details on our D&I initiatives, see the **Diversity and Inclusion report in our corporate website.**

For more details on Fundación Universia see 'Supporting higher education' or 'Support to higher education and other local initiatives' in this chapter or go to www.fundacionuniversia.net.

2021 Initiatives

In Brazil, #Diversiprática helps university students with disabilities and the Black community through a foundation course for the CPA10 and CPA20 financial market certificates. We also launched an engagement plan that includes a welcome toolkit for employees with disabilities and their managers, as well as mentoring and training programmes.

Santander España devised an onboarding plan for people with disabilities at its branches and other plans for technology-based roles. It helped 30 people with disabilities join us in 2021.

In Argentina, the Inclúyeme ("Include me") programme promotes the employability of people with disabilities and assists companies in implementing social and labor inclusion strategies. Moreover, we hold 10 financial education talks for 200 people. We began using the Háblalo ("Talk about it") app at our branches to remove communication barriers, and undertook basic sign language training.

Santander Portugal renewed its partnership with Associação Salvador. Its "Destination: Employment" project promotes the employability of people with disabilities through guidance and empowerment of candidates, raising awareness among companies and identifying job opportunities. Five people were hired through the project.

The Bank also collaborates with the Portuguese Asperger's Syndrome Association (APSA) to promote the social and professional integration of people with Asperger's syndrome, hiring two people from it.

Employee wellbeing

GRI 102-35, 403-2, 403-3, 403-5, 403-6,403-9

In 2021, we appointed a global head of health and well-being to help draw up a strategy and implement it across our footprint. We also have local teams with around 60-70 members with their own organizational structure and resources that coordinate all our well-being initiatives.

We drafted our Global health and well-being policy, which will be available to the public in 2022. To ensure enforcement of the policy and to fulfil our strategic priorities, we began working on a global guide that will set standards on mental and emotional health, digital balance and other priority areas to be implemented by subsidiaries.

Covid-19

As part of our Covid-19 response, we continued to enforce these prevention measures to make sure our employees stayed healthy:

- Masks, gloves and protective screens handed out to office and branch employees. We imposed strict personal hygiene policies and rearranged work spaces to accommodate social distancing.
- Remote working, especially for our most vulnerable employees in accordance with domestic and international authorities' recommendations. We offer equipment (e.g. office chairs, computer monitors and keyboards) and training (on ergonomics and stress) to make remote working more comfortable.
- Employee testing (153,000 in Spain alone) as part of our monitoring and back-to-the-office procedures.
- Information and training on Covid-19 prevention. Our corporate Intranet and all subsidiary and divisional platforms have a section for Covid-19 updates.
- Corporate monitoring plan in all our geographies in accordance with local authorities' guidelines, including employee health screening through apps, tests and questionnaires. Progress with the plan was reported to global and local executive and management committees.

92%

of employees believe everyone in their work environment is taking responsibility to comply with Covd-19 measures and procedures[A]

A. 2021 Global Engagement Survey

Since the outbreak of the pandemic, we've worked on several public and private initiatives (providing funding, resources and expertise) as a leader in the response to Covid-19. The public vaccination centre we opened at Santander Group City in July, August and September to benefit the Region of Madrid administered 57,575 vaccines with utmost care (NPS=97). The bank and its partners provided all human and material resources to the centre.

Occupational health

GRI 103-1, 103-2, 103-3

On top of the measures we took to protect our employees, our collective bargaining and other industry and bank agreements include provisions on employee health and occupational risk prevention, such as check ups and testing on a regular basis or following prolonged absence.

We also work with employees' legal representatives regularly to revise our occupational risk prevention plans, which we implement through:

- regular workplace assessments of health and safety risks and preventative measures to eliminate or control them;
- considering prevention measures when designing, procuring or acquiring offices, furniture, equipment, products and IT equipment;
- work safety procedures, which the occupational risks prevention team perform alongside other units to spot potential risks to employees' health and to implement prevention measures.
- information and continuous learning for employees;
- embedding occupational risk prevention in all operations that may impact on employees' health and safety.

We have certifications on the security, quality and sustainability of our work environments based on national standards (e.g. Gold-level LEED O+M certification for our corporate offices in the US and ISO 14001 certification in Brazil). In 2021, we started the process to obtain ISO 45001 certification for our corporate centre, the Santander Group City.

2.8%

absenteeism[A,B]

9,519

thousand hours missed due to non-occupational illness and accidents[B]

0.04

Accident rate[C]

A. Days missed due to work-related accidents and non-occupational illness or accidents for every 100 days worked.
B. Santander UK does not count hours not worked due to covid-19 as absences so they will not affect the remuneration objectives set prior to the health crisis.
C. Hours missed due to occupational accidents involving leave for every 100 hours worked. Worked hours are theorical. In-itine accidents are included

For more details on absenteeism data, see the 'Key metrics' section in this chapter.

BeHealthy

We're committed to being one of the world's healthiest companies. Our employees receive health and wellness benefits. We also raise awareness through our **global BeHealthy programme**, which celebrated its fifth year in 2021.

Its four pillars are: know your numbers; eat well; move; and be balanced. Every year, we set health and well-being objectives and priorities with an activities calendar and global strategies for our subsidiaries to implement.

In April, we held BeHealthy Week, with daily, in-person and virtual events that covered the programme's four pillars. The #SantanderBeHealthy campaign, launched by Executive Chair Ana Botín, top executives and our ambassador, Rafa Nadal, generated two million impressions on over 25 corporate accounts and through hundreds of employees.

Health was a key component of Santander Week in September, where all our subsidiaries ran initiatives to remind employees of the importance of health and well-being according to our four BeHealthy programme pillars.

We celebrated Global Mental Health Week in October, with all our subsidiaries and divisions taking part. 1,600 employees joined an online event with Yale University professor Laurie Santos, creator of the online course "The Science of Happiness".

All Group employees can access health-related platforms (like "Gympass" to use gyms) and apps for nutrition, mental health, physical health, exercise, meditation and other services free of charge or at bargain rates.

85%
of employees say Santander is taking appropriate steps to ensure employees stay safe and healthy[A]

A. 2021 Global Engagement Survey



Speak up - Active listening

GRI 406-1
SASB FN-AC-510a.2, FN-CB-510a.2, FN-IB-510a.2

We listen to our employees and encourage them to speak up. We act on their feedback, data and experiences and develop plans that will effect change. The many internal listening actions we take involve global and local employee surveys; performance reviews; exit interviews; incident monitoring; and our ethical channel, *Canal Abierto*.

Our active listening programme covered several topics in 2021, such as financial crime and Covid-19. Furthermore, 86% of our employees took a global engagement survey (GES) about the corporate purpose, the employee net promoter score (eNPS), Covid-19, streamlining processes and cooperation. We received poor marks on streamlining processes, cooperation and ways of working.

Still, it showed employees are committed to our purpose of helping people and businesses prosper; they feel Santander responded effectively to economic and business challenges in the pandemic with the right measures to ensure safety; and they recognize the strength of our risk culture and the flexibility Santander offers them to work remotely.

In 2021, we revised our global engagement survey and decided to conduct it every quarter.

86% of employees agree Santander's response to economic and business challenges has been effective during the pandemic[A]

168,456
employees surveyed, of which 86% responded[A]

A. 2021 Global Engagement Survey

For more details, see 'Ethical channels' in 'Conduct and ethical behaviour' in this chapter.

Volunteering

The corporate volunteering standard in our Corporate culture policy entitles employees to spend a certain number of working hours each month or year volunteering. We also promote several initiatives to enable employees to participate in, and contribute to, social programmes and initiatives that the Group already supports.

We hold two important group-wide volunteering events for employees each year: Santander Week, observed in all our countries at the same time, and International Volunteering Day. Locally, the Group's subsidiaries organize multiple volunteering programmes as part of their community investment commitments.

In 2021, many of our collaborations continued to focus on alleviating the effects of the pandemic on the most vulnerable. We continued to run our usual volunteer programmes, always under the strictest sanitary measures. When we couldn't run them face-to-face, we delivered them virtually.

+28,000
employees participating in community activities

+46,000
hours volunteered

For more details on our social contribution to communities, see the 'Support to higher education and other local initiatives' section in this report.

Volunteering initiatives

In Uruguay, we continued to help clear beaches of plastic during the holiday season in Montevideo. Employees, their children and families were invited to lend a hand.

Finanzas para Mortales had 155 volunteer trainers from the bank; reinforced its digital activity; increased its training content; and broadened the groups to which it provides knowledge in basic finance. In total, it closed 2021 benefiting 75,320 people, 15% more than the previous year).

For the fourth time, employees of the Northern macro-region, in cooperation with the Santander Foundation, organized the "North Helps" run. 2,009 people, including employees, their children and friends, António Simões, the polish management board and the bank's senior management, took part. We raised a total of PLN 68,104.74.

In Chile, volunteers took part in the Santander Presente initiative to coach and mentor more than 120 adults in the process of passing their school-leaving exams.

In Argentina, the circa 300 employees who form part of the Financial Educators Network trained to be volunteers and give lectures on financial education to young people, entrepreneurs, adults, people with disabilities and other groups.

In Mexico, in collaboration with Fideicomiso Por los Niños de México, Todos en Santander, and through HR Virtual Volunteering, more than 5,000 people benefited from educational activities focused on the integral development of children. these activities are managed by the organizations the Fideicomiso supports.

In Portugal, 56 employees participated in the Junior Achievement programme, sharing their knowledge and experience with 997 students from the 1st to the 12th grade on topics such as citizenship, financial literacy and entrepreneurship. In addition, 11 employees participated in the Legal pro bono programme, providing free legal assistance to the non-profit organization Terra dos Sonhos.

Ensuring we have the right talent and skills

Managing our talent lifecycle is critical to our business strategy. To understand future skills gaps and needs, we implemented the **Strategic Workforce Planning (SWP)** tool to help us to re-train and develop employees on a near constant basis.

We also launched **Dojo**, our continuous learning ecosystem available to all employees, and reached almost 100% in our roll-out of Workday.



Talent attraction

GRI 103-1, 103-2, 103-3, 401-1 and 404-1

In 2021, Santander filled 35,000 vacancies worldwide (45% with women). We prioritized the career development of our people, filling over 70% of vacancies with internal candidates.

We digitalized and automated hiring processes through the "Selection" module on Workday in all our geographies (except at our US subsidiary, which will implement it from 2022). Having a single system enabled us to standardize hiring, share best practices and ensure a greater candidate experience. It also meant we could list vacancies in all the countries where we operate on our **Global Job Posting** portal, a new search engine that makes it easier to see the positions available in each country. We promote geographic and in-company relocations as a key means of cultivating talent.

Attracting tech and digital professionals

Our recruitment teams prioritized the attraction of talented tech and digital professionals to help with the transformation of our businesses. In 2021, the Group filled over 8,500 STEM vacancies after running brand awareness campaigns on social media and in forums.

We ran the "Be Tech" programme with our IT and Communications divisions to position Santander as an attractive employer for STEM candidates. Among its stand-out initiatives were:

- "Be Tech Up", where 50 junior employees in digital roles became brand ambassadors through social media to promote the Group's technology projects. The contents they posted helped us gain thousands of followers on such networks as LinkedIn.
- "Women in Tech", which focused on attracting women to technology-based roles. The inaugural Women in Tech summit had over 1,000 participants.

Talent management figures	2021	2020
Total employees (thousand)[A]	197	191
% employees with a permanent contract[A]	97.6	97.9
% employees working full time[A]	94.3	94.9
Employees joining/leaving (turnover)[B]	20.0	12.6
% of workforce promoted	9.8	6.7
Average length of service (years)[A]	11.3	10.2
% coverage of collective agreements[A,C]	70.7	71.6

A. At year end
B. The increase in the external turnover rate is due to the restructuring processes carried out in 2021 in some of the Group's geographies.
C. The figure of % of employees covered by collective bargaining agreements in 2020 has been recalculated, considering SCF employees in the United States not covered by collective bargaining agreements.

For more details, see the 'Key metrics' section in this chapter.

Our partnerships with the world's leading universities and technical schools enabled us to introduce future professionals to our value proposition. They are a key source of the talented young people we find in our scholarship and internship programmes.

We ran webinars, bootcamps, hackathons, training programmes and specialized talks by employees and senior managers at more than 70 universities and schools specializing in tech and digital learning.

Career development

Continuous learning drives our transformation. We encourage employees to take charge of their career development. We provide them with the means to draw up their own personal development plan based on their ambitions. We strive and review all our diversity parameters to promote optimum diversity on our talent programmes.

Our main career development programmes in 2021 were:

- **Talent reviews** to assess employees' potential and support the professional growth of the most promising ones. For Europe, we carried out our "European Talent Review".
- **Succession planning**: Our strategic approach enables us to identify potential successors to key roles and provide them with career development opportunities, ensuring our future sustainability and success.
- **Top Talent,** to promote the development of over 130 managers with high potential. Participants assessed their skills and potential as leaders to come up with a career development plan. We're working on development plans for every *Promontorio* successor (over 230 talented people with high potential).
- **Young Leaders 2**, with185 talented young employees from all our geographies and a diversity rating of 52%. It aims to create a strong talent pool, teach skills needed for the future and promote diversity and inclusion. It will last nine months and take place in the Young Leaders Smart City, a virtual, immersive space where they'll come up against several challenges.
- **Elevate**, is the new global learning ecosystem the Group launched in 2021 for all Faro and Solaruco executives. It is a hybrid executive education experience with first-rate activities led by renowned international experts to promote continuous learning and cooperation towards a common culture that will strengthen Santander's leadership.
- In addition, **other local programs** such as Open Mentoring at the Corporate Centre, Light your skills at Santander Consumer Finance Germany and Futuro in Poland were implemented.

Corporate mobility

Driven diverse experiences are the best way to shore up skills and form diverse teams and multicultural leaders, so we promote geographical and functional re-location across our footprint. Though the pandemic affected international mobility in 2021, we sought to offer viable alternatives.

Our mobility initiatives were:

- **Global Job Posting** offers employees the chance to apply for jobs in other countries, companies and divisions of Santander.
- **Global career strategy.** We're working on a global career strategy to enhance our internal talent development, harness our worldwide presence and meet our businesses' challenges successfully.
- **Mundo Santander** has been one of Santander's flagship talent programmes since 2008. It supports the development of over 2,000 employees who have taken part in strategic assignments in other countries for 3 to 6 months. It promotes the sharing of best practice and the broadening of participants' global outlook. In 2021, we redesigned Mundo Santander so participants could work on international projects virtually. Though the programme will remain virtual in 2022, participants will be able to undertake a project in another country should public health conditions allow.
- We also launched an **awareness campaign to promote employees' international mobility**, with videos of real examples told by the people involved.

Learning and development

GRI 103-1, 103-2, 103-3, 404-2

We value continuous learning so our employees can adapt to an ever-changing environment and help accelerate our transformation.

Our global learning and development policy sets the standards for designing, reviewing, launching, overseeing and enhancing training and development programmes to:

- support our business and cultural transformation in accordance with Santander's governance standards; and,
- foster innovation, knowledge sharing and transfer, and the skills employees need to perform their duties successfully as part of global talent management.

The three pillars of our employee upskilling and reskilling are strategic workforce planning (SWP), our current skill model and the strategic global business and countries needs. We review them every year to recognize common, high-impact skills and design learning solutions for our employees.

We promote our learning solutions on our digital ecosystem, Dojo, through study plans and "roadmaps" for learning. Dojo facilitates informal, interactive and structured ways of learning, combining many formats, settings and tools so every employee can choose what, when, how and how much to learn. It's designed to produce "lifelong learners".

Furthermore, each subsidiary's Learning and Development team pinpoints specific learning needs relating to its geography and designs training courses consistent with Dojo's standards.

After launching in 2020, Dojo had reached 63,700 employees in our main geographies by the end of 2021. It has four academies: Agile, Engineering Excellence, Cloud and Commercial (launched in 2021). It also offers 22 certifications, 26 channels and 24 learning programs launched in 2021covering topics such agile, data, leadership, customer experience, cloud and digital transformation. Today, Dojo covers 252 skills with more than 72,560 learning activities.

Main Group data	2021	2020
Millions euros invested in training	75.1	61.3
Investment per employee (euros)	381.3	320.7
% employees trained[A]	99.0	100.0
Hours of training per employee[A]	30.6	30.9
Employee satisfaction (over 10)	8.5	8.2

A. Calculated considering the staff at the end of each year. The incorporation of both employees and entities to the Group at the end of 2021 fiscal year has a signification impact on the result of this indicator in comparison to 2020.

For more details, see the 'Key metrics' section in this chapter.

Global training

Main initiatives:

→ **The Risk Pro Banking School** promotes a strong, uniform risk culture. It runs the Advanced Executive Risk Programme, Key risks and Risk pro Insights workshops and specialized courses.

→ **The Global Internal Audit School** offers practical solutions designed to adapt to business and regulatory changes.

→ **The Technology and Operations School** continued to enhance its three key areas — Technology, Operations and Cyber security — (updated to key position programmes) and made its core contents available to the entire Group on Dojo (Agile Academies, Engineering Excellence and Cloud, Channels and Badges).

→ **Mandatory global online training** ensures we deliver a high level of service, and helps us comply with financial regulation and avoid penalties from external regulators. It's available across our footprint and part of performance and incentive plans. The topics that courses cover relate to the Group's external and internal regulation and strategy. In 2021, Risk Pro: Everyone's Business, Cyber Heroes and courses on the General code of conduct, corporate defence, conduct risk in the marketing of products and services, financial crime and market abuse were prominent. To complement mandatory global training, each subsidiary has required courses about local law and regulation.

→ In **Responsible banking**, we are working on three training modules we set with global businesses and subsidiaries:

- The first is multidisciplinary and common for all employees. We launched a global, mandatory module to familiarize them with sustainability and its relevance to the Group.
- The second is for all functions involved in our sustainability agenda and consists of an introduction to sustainability/ESG, ESG Talks (to be broadcast live across our footprint), internal certification and special programmes for each business and function.
- The third includes the appropriate certifications for each business according to its needs (e.g. CFA, EFPA, GARP and others).

Some subsidiaries and global businesses provided additional training on climate change, sustainability, sustainable finance, sustainable investment, diversity and inclusion.

In 2021, we also trained our employees on diversity and inclusion, health and safety, customer and supplier relations, the environment and anti-corruption.

Performance review and remuneration

GRI 404-3

Our comprehensive remuneration framework combines fixed and variable schemes based on employees and the company's achievements. Short and long-term variable remuneration reflects what we have accomplished (group-wide quantitative and qualitative targets, as well as individual and team targets) and how (e.g. behaviour, leadership, sustainability, commitment, growth and risk management). We also have pension plans, banking products and services, life insurance, medical insurance and other corporate benefits our employees can choose.

Fixed remuneration schemes reflect local market conditions. To set pay, we strictly abide by the practices, regulations and collective agreements in force in each country and region.

Our remuneration policy for all Group employees forbids differential treatment that is not based on a review of performance and corporate behaviours. It also promotes equal pay between men and women.

To comply with EU regulations on remuneration, we identified 1,018 employees subject to a deferred variable pay policy because their decisions can have a material impact on Banco Santander's capital. 300 employees fewer vs 2020, mainly due to the entry into force of the new CRD V regulation. The policy defers a significant amount of their variable pay (40%-60% depending on their responsibilities) for three to seven years in accordance with internal and local regulations. 50% is delivered in shares and subject to potential reduction ("malus") or recovery ("clawback").

Key initiatives in 2021

- The inclusion of share options as part of variable pay (which was previously paid in shares) and the update of multi-annual target metrics will be put to a vote at the next AGM in 2022. The proposal includes keeping the relative total shareholder return and adding the return on tangible equity and metrics linked to responsible banking commitments.
- Under the succession policy, senior managers must make sure the successor pool is strong and diverse (especially in terms of gender diversity).
- Progress in monitoring the gender pay gap calculation and analysis methodology.
- The remuneration policy added the principle that remuneration must be free of gender-based bias and help eliminate disparities that could result.

For more details on remuneration data, see the 'Key metrics' section of this chapter.

For more details on board remuneration, see section 6 of the 'Corporate governance chapter'.

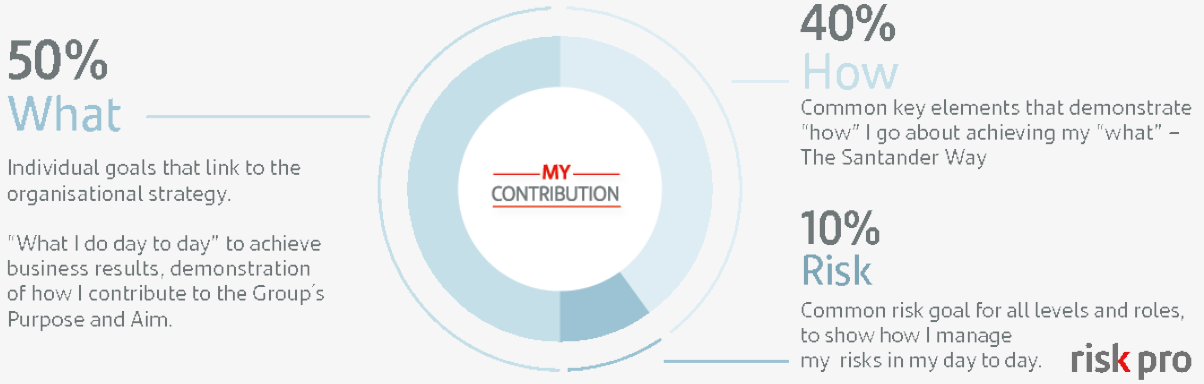
MyContribution

MyContribution is our common performance management model. Performance management is key to enriching our culture and ensuring colleagues perform to the best of their abilities in keeping with their career goals. Our model applies to all employees in 2021.

MyContribution has three components:

- **What**: 50% is based on employees' individual goals set in line with group-wide strategy.
- **How**: 40% is based on how employees deliver on objectives and foster the values of Simple, Personal and Fair, the eight corporate behaviours and the four leadership commitments, which combine to form The Santander Way.
- **Risk**: 10% is based on how employees manage risk in their day-to-day role.

MyContribution is updated regularly. It now highlights our risk culture with a separate category created in 2020 to assess it.



Corporate benefits

GRI 401-2

We offer several benefits to our employees in all geographies. Each subsidiary has programmes that adapt to local circumstances. Benefits range from free services for employees and their families to discounts on products and services.

We focus on well-being to help employees stay in sound physical and mental shape, to support their families and to adapt health cover to new circumstances and needs. In Spain, our *Santander Contigo* programme provides assistance with daily tasks, legal and computer support, and other services. In other geographies, services and financial aid for childcare and support for elderly relatives in their charge are also substantial.

For more details on our initiatives promoting employees' wellbeing, see "Employee wellbeing" in this section

Corporate benefits in Mexico

Santander México offers these benefits to employees:

- Family: Nursery subsidies, scholarships for employees' children, support talks and digital tools.
- Health: Plans for all employees, with permanent access to doctors, dentists, psychologists, social welfare officers and other healthcare professionals.
- Financial products: Reduced interest rates, credit cards without extra fees, mortgages with special rates, favourable lending conditions for car and motorcycle purchases, etc.
- Discounts and insurance: Reduced rates on glasses, at sports facilities and on other products as well as for life and car insurance.

Work-life balance and job efficiency

The way we work

We continue to promote our employees' work-life balance through flexible working, health and well-being programmes and office safety measures.

FlexiWorking

At Santander we promote flexiworking and we believe our diverse organization must adapt to the needs and characteristics of its teams.

We redesigned our global flexiworking framework to address where, when and how much we work:

- **'Where':** Possibility of home/remote working.
- **'When':** Intensive day, flexible start/end and break times and alternative shifts.
- **'How much':** Part-time working, special leave, flexible holidays, job sharing and other measures.

We have empowered our managers with the decision regarding the best flexible working model for their teams. In this way, each area and business unit has implemented new ways of working based on the characteristics and needs of the team and its performance expectations. Since the pandemic is not over, we must remain cautious and flexible.

In 2020, our return to the office depended on the severity of the pandemic developments and local regulations. In 2021, most of our branch teams have now returned, although in many cases we still operate under a hybrid working model. To support our employees who work remotely, we provide material such as office chairs to improve their conditions, as well as training on ergonomics and stress.

We continued to implement tools to drive digitization and collaboration, which helped our employees perform well and manage remote working effectively as well as to maintain their right to disconnect, preventing them from sending emails or holding meetings outside working hours.

Listening to employees, understanding the situation and attending to their needs is essential to identify and facilitate managers to adopt measures that can achieve a balance between work and professional life, while guaranteeing productivity, corporate culture and our attractiveness as an employer.

Agile methodologies

We're implementing agile methodologies and organizational structures in our Technology and Support functions in several countries.

In 2021, we continued to transform and bring more teams from our subsidiaries and global functions into the Agile environment (our subsidiaries in Spain, Mexico and Argentina were key to boosting implementation) for better customer focus, more collaboration between IT and the businesses, faster decision-making and different ways of working that will heighten employees' sense of accountability for the end product.

82%

of employees say Santander is providing the appropriate flexibility they need to be effective and productive.[A]

86%

of our employees believed Santander's response to the pandemic's challenges was effective .[A]

A. 2021 Global Engagement Survey

5 principles of New Ways of Working



→ **The customer comes first**. Customers must always be at the heart of everything we do.



→ **Many ways of working** (where, when and how much). Employees will be assessed on their experience, effectiveness and efficiency.



→ Workspace **is no longer just a workplace**



→ **Testing and learning** through continuous listening



→ **Flexibility, fairness, inclusion and equal opportunity** are guiding principles in decision-making.

Social dialogue and restructuring

In 2021, we continued to guarantee freedom of association and the right to collective bargaining. Our Human rights policy considers forming or joining unions and other representative bodies a basic right of workers in accordance with Article 10 of our General code of conduct. We also ensured respect for freedom of association, trade union activity, collective bargaining and protections for employees' representatives under the laws of each country where we operate. We continued to promote and comply with the International Labour Organization's Fundamental Conventions. We also remained in constant dialogue with employees' legal representatives through bilateral and special committee meetings where all parties discussed reporting, queries and negotiations about work conditions and employee benefits.

Meetings we held in 2021:

- Occupational health and safety committees
- Equality plan follow-up committee
- Santander Employees pension plan control committee
- Training committee
- Other meetings: 2021 engagement survey results; Banco Santander mass redundancy agreement follow-up committee (five meetings as well as regular information exchange); meetings with subsidiaries' business committees
  - Bilateral meetings with trade union representatives

Agreements entered into:

- Capitalization of pension supplements for Banco Popular beneficiaries + extension
- Capitalization of pension supplements for Banco Santander beneficiaries (from October 2020)
- Increase in employer contributions to the Santander Employees pension plan
- Integration of working conditions for Santander España Technology & Operations staff
- Integration of working conditions for Santander Consumer Finance staff
- Implementation of the Grupo Santander Consumer collective bargaining agreement and 2022 salary review
- Santander Global Operations equality plan
- 24th Collective bargaining agreement for the banking industry (members of the industry negotiation committee)

We considered the risk of failing to uphold employees' rights low as our labour relations had proved effective in every country.

Restructuring

In recent years, amid staff reductions in Spain, Portugal, Poland, the UK and other core geographies, we have consistently applied internal and external flexibility measures to support employees' transition to new employment while maintaining dialogue with their trade unions and legal representatives. In Europe, we also abide by the principles of the Joint declaration on workforce restructuring that our management representatives signed in 2016 with the European Works Council.

We take these steps to ensure the best possible outcome:

- → We prioritize voluntary employment termination.
- → We hold informal meetings with workers' legal representatives to find alternatives that will reduce the impact of losing jobs and to uphold their rights before formal proceedings commence.
- → We consider particularly vulnerable employees' personal circumstances (e.g. disabilities, severely ill children, victims of gender-based violence, etc.).
- → We help employees with outplacement either in Santander or in other companies through internal and external flexibility measures.
- → We pay severance above the amount required by law, in keeping with agreements with trade unions.

Restructuring processes we carried out:



In 2021, we began to reduce our workforce on organizational, production-based and economic grounds. Following informal discussions with workers' legal representatives to explain our reasons, we entered into formal negotiations that ended with an agreement with most trade unions (82.99%) All of the measures agreed with the European Works Council to align workforce restructuring with socially responsible practices were in the restructuring agreement. The alternative measures we proposed included geographic and in-company relocations to lower the number of potential lay-offs.

Our workforce reduction gave priority to voluntary employment termination and was considerate of workers' vulnerable circumstances. We reduced the number of terminated contracts substantially (from the initial 5,072 to 3,572) and outplaced 1,500 workers in the Group. In addition to relocating employees geographically, 70% of the lay-offs involved early retirement agreements with either guaranteed temporary pay until full retirement or compensation packages above the amount provided by law, with social security contributions up to 63 years old in order not to interrupt the contribution period of employees over 50 years of age who met length-of-service requirements.

We also hired a specialized relocation agency free of charge to help affected employees (and their relatives) who wanted to find a new job, through advice and training, entrepreneurship initiatives, job searches and other activities.

There have been no class action or law suits filed by trade unions to contest the redundancy programme nor any rulings against Santander.



Within a common movement to most banks in Europe, addressing the change in banking consumers' habits and based on an intense process of digital transformation, Santander Portugal has been reducing the number of branches and digitalizing processes, with the correspondent reduction of its workforce in 2021. Our preferred approach was to reach individual settlements according to Portuguese law. Therefore, the process was conducted in constant contact with trade unions and the legal representative unit and the settlement offers included increased severance benefits, health plans, outplacement programs and early retirement proposals.

We hired an independent legal adviser to review negotiations and contact with the employees. In addition, we also created the Nova Etapa programme to support people in the transition to new personal and professional ventures.

This set of measures made it possible to reach agreements with around 96% of the workers covered by the workforce reduction. Having exhausted all individual agreement negotiations, the collective dismissal process was concluded involving 49 employees, which represent only around 4% of the overall workforce reduction undergone by the Bank.

Acting responsibly towards customers

Our customers are at the centre of everything we do

- Providing the best experience
- Strengthening our customer-obsessed culture
- Introducing consumer protection principles into our practices
- Designing products to meet their needs and aid their sustainable transition
- Protecting privacy and personal data and using them appropriately
- Cyber as a culture driver to protect our customers' information

Customer experience and satisfaction

GRI 102-16 and 102-34

Transforming customer experience

In 2021, we continued to promote our customer experience (CX) strategy to give the best service.

We created local, regional and global initiatives, which our executive committees monitor closely. Supported by our multicultural and multidisciplinary team, we prioritize customer experience enhancement initiatives with the greatest impact on customer satisfaction and potential to scale up. The CX team focused on four areas in 2021:

1. **Strategy:** To unify our vision, we came up with common CX guidelines to enhance customers' journeys and touchpoints, and keep them at the centre of our efforts. We also created a Customer Experience Observatory to monitor trends and learn from successful cases in the banking and other industries.
2. **CX plans:** We helped our subsidiaries devise and execute local plans to improve customer experience. In 2021, we launched initiatives in several geographies. Applying behavioural economics, we ran a range of use cases for new product design, procedures, communications and pricing strategy.
3. **Culture:** We strive to foster a productive environment for our customers that strengthens our "Customer obsession" culture across our footprint. In 2021, we created global and local CX training courses and certifications for our employees.
4. **Community:** Working as one team helps us serve our customers better. In 2021, we continued to streamline our global CX community to bring about synergies and share best practices, knowledge and tools across the Group.

Our Consumer protection function shares best practices across the Group through CuVo (Customer Voice), a monthly global working group formed of all our customer-facing areas. In 2021, we ran these initiatives:

- In Spain, we improved the terms and conditions of the ONE account and launched the "Porque Tú, Porque Te" campaign as part of our quest to be number one for our customers.
- In Europe we have been working on a new unique app that will be launched for all 4 countries: One Europe App. So far it has been launched in Spain and Portugal, and the plan is to launch it in Poland and the UK in 2022.
- In Chile, we separated infrastructure to make sure any issue on a digital channel did not cross over to another. We also enhanced our banking app to give a better digital experience.
- In Argentina, we focused on better customer service through workshops and e-learning courses to promote our "Customer obsession" culture.
- In Uruguay, we migrated all our customers to Supernet, reducing waiting times and incident numbers.
- In Brazil, we launched Dial My App, which connects our remote customer service lines to our app, giving customers who call our contact centre a fully digital experience.

Customer satisfaction

Our strategy sets out to inspire loyalty among our customers. In 2021, we conducted more than four million surveys to monitor their feedback about Santander and find out how we can improve our products and services and, ultimately, their experience.

To measure customer loyalty and satisfaction, Santander uses the NPS, an indicator of our relations with customers. This methodology is based on service, image, and products and pricing, which are the three core areas we constantly work to improve on.[1]

In 2021, we ranked in the top 3 in NPS in 8 of our markets, up from 6 of the previous year. We also improved our position in most countries, most notably in the categories of Personal and Fair (which form part of our values). By region:

- As leaders in NPS in Brazil and Chile and climbing the rankings elsewhere, we're well positioned in South America and continue to set ourselves apart from our peers.
- The closure of branches and changes to contractual terms and conditions make for testing times in Europe's banking industry. In 2021, we ranked second in Spain and broke into the top 3 in the UK and Poland.
- We're setting our action plans on North America. In Mexico, with a declining market, we have maintained our position in 2021 and in the U.S. we have improved our position compared to the previous year.

In 2022, we'll continue working on our Simple, Personal and Fair values and our customer service channels.

In 2021, as fewer customers visited our branches, their changing perceptions and habits meant our digital channels and their impact on the NPS grew.

Top 3

8 of 9 countries[A]

A.Due to its business model, Santander US's objective is distinct and does not account for the metric.

	South America				Europe[B]				North America	
2019	4º	2º	2º	2º	3º	4º	3º	2º	4º	9º
2020	3º	2º	1º	3º	2º	4º	1º	6º	4º	9º
2021	2º	1º	1º	2º	2º	3º	3º	3º	4º	8º

NPS to measure customer satisfaction, audited by Stiga/Deloitte.
Key peers by country: Argentina: Galicia, BBVA, ICBC, HSBC, Banco Macro, Banco de la Nación; Brazil: Itaú, CEF, Bradesco, Banco do Brasil; Chile: BCI, Banco de Chile, Itaú, Scotiabank, Banco Estado; Uruguay: Brou, Itaú, BBVA, Scotiabank; Spain: BBVA, Caixabank, Sabadell, Bankia, Unicaja; Poland: ING, Millenium, MBank, Bank Polski, Bank Pekao, BNP Paribas; Portugal: BPI, Millenium BCP, CGD, Novo Banco; UK: Nationwide, Barclays, Halifax, NatWest, Lloyds, HSBC, TSB, RBS; Mexico: Scotiabank, Banorte, HSBC, Banamex; US: JP Morgan, Bank of America, Capital One, PNC, M&T Bank, TD Bank, Citigroup, Citizens, Wells Fargo.
B. The 2020 figure for Poland was revised during the financial year 2021, the final result being 4th.

We monitor all drivers that have an impact on Santander NPS

SERVICE	
Branch	General service, waiting times, branch assistance, layout
Channels	Mobile, internet, ATM, CDM, contact centre, personal manager
Personal	Personal attention, kindness, employee professionalism
Simple	User-friendliness, speed and agility
Communications	Clear statements, information on offers and deals, coherent information
Problems	Perceived issues
Others	Data protection
IMAGE	Strong and sound, socially responsible, innovative, trustworthy, transparent
PRODUCT & PRICE	Simple product and service proposition, fees and charges, benefits, credit cards

Group NPS by channel[C]

Branch	Contact Centre	Internet	Mobile
64	43	58	69

Internet: Excluding Chile, the UK and Uruguay.
C. Internal NPS (last info available): Obtained from customer surveys issued within 48 hours of their contact with the bank via any channel. Weighted average of active Group customers.

[1]This index is based on customer recommendations, using a scale from 0 to 10. Depending on their score, these are: promoters (9-10); neutral (7-8) or detractors (0 to 6). The NPS is calculated by subtracting the percentage of promoters from the percentage of detractors.

Product governance and consumer protection

Product, service and consumer protection framework

Being responsible means offering our customers products and services that are Simple, Personal and Fair (SPF). Our daily operations must be brilliant, and do more than what the law requires, to give our customers an exceptional experience.

Our Product, service and consumer protection framework sets out the principles that promote a strong SPF relationship with customers and establishes the basics for managing and mitigating conduct risk in design, sales, post-sales and services.

Consumer protection policy and principles

The Compliance and conduct function abides by our Consumer protection policy, which sets out the highest ethical standards we expect our teams to uphold towards customers.

We report on our consumer protection principles in all our geographies to make sure we embed them in our day-to-day. We use our customers' voice and business indicators to spot unsatisfactory customer service, fee-related issues, incidents at ATMs and other areas for improvement, and to come up with plans to address them. We're working on adding artificial intelligence to our reporting for greater insight into how we can better protect our customers.

In order to identify risks that stem from new regulations or problems with products and services, we conduct thematic reviews for the entire Group, assess them and make decisions on how to improve and mitigate the risks identified. In 2021, our review focused on such responsible business practices as pricing techniques and fair value for our customers. We also carried out a more detailed price comparison of Santander Asset Management España's investment funds and pensions against industry figures; we plan to extend that study to our other geographies in 2022.

We followed up on the thematic reviews from 2020 on responsible business practices in account packages, revolving cards and overdrafts. We checked that 26 local plans on transparency, disclosure to customers, sales, fees and credit conditions were consistent with best practice. They will be implemented in 2022.

We ran product governance and customer protection awareness campaigns and workshops in line with our strategic priorities.

Product and services design

GRI 416-1, 417-1 and FS15

Product governance

Santander's governance structure enables it to safeguard customers' interests.

Our product governance forum ensures the products and services that we market meet the needs of identified target segments and are reasonably and clearly priced.

In 2021, we enhanced our ESG product validation and passed nine proposals that impact on this matter.

Consumer protection principles



Treat customers fairly



Complaints handling



Consideration of special customers' circumstances and prevention of over-indebtedness



Data protection



Customer-centric design of products and services



Responsible pricing



Financial education



Transparent communication



Responsible innovation



Safeguarding of assets

Sales processes

Salesforce cultural transformation

Our product and service disclosures throughout the entire customer cycle are transparent and comprehensive. We apply robust quality and conduct control standards to marketing and sales material, brochures and contracts according to Santander's internal regulation.

That's why all our employees undertake a mandatory, annual course on the management of conduct risks in sales and consumer protection. We run special training programmes for our sales teams to arm them with the knowledge and skills that will enable them to sell our products and services properly.

Those programmes and our sales methods ensure we offer products and services that will meet each customer's needs and preferences. That way, we avoid inappropriate practices like product and service bundles that don't add value for customers.

Remuneration schemes (where customer satisfaction and quality bear significant weight) are key to transforming our sales practices and promoting sustainable business. In 2021, at least 40% of our salesforce's variable pay was linked to customer satisfaction and quality measures, an area where we enhanced best practices through continuous monitoring.

We worked on a global project to give branches a conduct and quality rating. While it will impact on employees' pay, they'll have access to metrics for better awareness and management of conduct-related risks.

We broadened the scope of our remuneration reviews and monitoring for teams in charge of loans and credit origination, and collections and recoveries to embed conduct and quality in their culture and objectives.

Vulnerable customers

GRI FS14

In 2021, we worked on an instruction manual about our vulnerable customer and special case management model, and set a roadmap for its roll-out among subsidiaries. This will ensure a consistent, Group-wide approach to identifying and managing vulnerable customers in such high-impact procedures as collections and fraud management. We offered monthly training courses, ran an awareness campaign at the Corporate Centre and shared the manual across our footprint.

Our subsidiaries also made progress with the roll-out of vulnerable customer management:



We used big data to identify potentially vulnerable customers and provide them with a personalized, priority service through our contact centre. This service, which has served 500,000 customers, is rated with an NPS 2.5 times higher than the standard service.



We developed a methodology based on advanced data analytics and algorithms for our collections teams to spot potentially vulnerable retail customers. We took a 1,478 sample of the customers we identified as vulnerable and proactively offered tailor-made solutions to the 293 we had found to be "extremely vulnerable". We also waived account fees for a further 100,000 vulnerable customers.

Openbank also identified 387 vulnerable customers and registered them in the CRM system to offer personalized services.



We continued to roll out our new customer support function. It keeps a record of vulnerable customers' support needs so our employees are aware of their situation. During the year, close to 30,000 new notes were added to our systems.

Post-sales management

Conduct in collections and recoveries

In 2021, we implemented metrics to monitor conduct risks in all our geographies as part of our Recoveries excellence plan. They helped enhance control over the ethical standards we established last year and over customer contact, disclosures and transparency, data protection, vulnerable customers and training for employees who work in these teams.

They consist of:

- quality control for calls to make sure scripts and standards are followed;
- number of customer complaints about the managed portfolio and in relation to the thresholds established in view of historical data and the current situation; and
- the percentage of employees who have completed mandatory training.

Each month, we saw positive metric results, with no areas of concern and a significant decline in complaints within set thresholds. Though results showed good quality control of calls, we have revised scripts and are working with the subsidiaries to enhance them and make sure conduct guidelines are appropriate and holistic.

For more details on product governance, consumer protection and conduct and collection & recovery, see section 7.2. 'Compliance and conduct risk management' in the 'Risk management and compliance' chapter.

Complaints management

GRI 102-34

Handling customer issues and complaints proactively and effectively is a vital component of customer experience and highly valuable to the business.

Our complaints management and root-cause analyses are consistent with the Group's Simple, Personal and Fair strategy and set standards for all geographies to properly handle complaints and offer the best service. We use our findings to enhance our products and services and have an early warning system to identify risks.

In 2021, we continued to focus on resolving complaints at the first point of contact with customers and on opening digital channels like Gent& in Brazil and the complaints section of our app in Chile and Mexico for quicker, alternative access to feedback mechanisms.

We also came up with a root-cause analysis methodology that uses artificial intelligence. It helps us apply customer voice algorithms and get the most out of the structured and unstructured data on our systems. We're testing our initial findings in Brazil and Mexico.

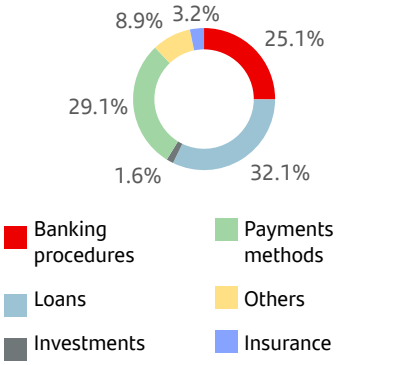
We heightened the monitoring and reporting of customer issues in areas that are considered critical due to the knock-on effects of the pandemic. Having implemented conduct standards during recovery in 2020, we continued to monitor pandemic-related complaints each month. While we saw improvement in most countries, Santander México (the subsidiary with the highest volume of cases) dropped from 40 complaints per 10,000 customers in Q1 2021 to 12 in Q4.

We also track management of fraud-related complaints in all geographies according to special taxonomies. Our local units' customer-centric management includes a "trust payment" of the stolen amount in most fraud cases while they are under investigation. They are informed that it's a temporary refund that Santander will not claim back if the investigation finds in the customer's favour. Cases are falling significantly in Mexico (where fraud accounts for 70% of complaints), thanks to a new task force and the measures we're taking.

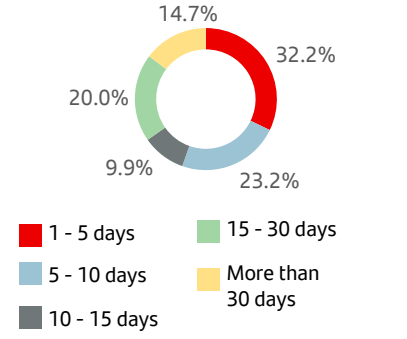
In 2021, the over 300 complaints prevention and mitigation measures we worked on included enhanced ATM features; customer communication and disclosure; Service Level Agreements; and operations to optimize customer experience with digital channels and account closure.

For more details on complaints management, see section 7.2. 'Compliance and conduct risk management' in the `Risk management and compliance' chapter and our Culture report in our corporate website.

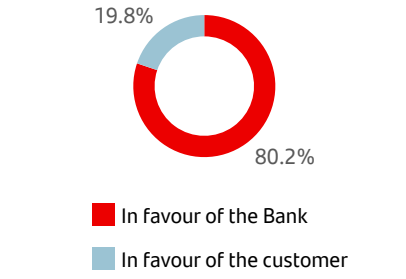
TYPE OF COMPLAINTS[A,B] (%)



AVERAGE RESOLUTION TIME[A,B] (%)



RESOLUTION[A, B] (%)



A. Personal Protection Insurance (PPI) Complaints excluded from the volume, distribution by product and resolution term figures. Regarding the uphold ratio, the UK has been fully excluded.
B. Complaints metric follows the criteria established by the Group (homogeneous in all geographies).

Process enhancement

In H1'21, we launched Gent& for individuals and businesses. It's a chatbot based on artificial intelligence to resolve queries and complaints as well as give customers more autonomy. As of June, it clocked 9.3 million users and over 100 million interactions on our retail customer app, our business app, Way, WhatsApp, WhatsApp business and Portal Santander. It covered 21 services, including electronic credit card bills, bill amounts, expiry dates, credit limits and debt restructuring requests.

In July, we launched the "Txumani" digital card project, which we expect to reduce e-commerce fraud. Complaints about unrecognized transfers fell from 400 to 100 per day. We implemented a new protocol for customers over the age of 80 to prevent them falling victim to scams. After registering their biometric data at a branch, they will be able to make changes to their personal details and use online banking.

Privacy, data protection and cybersecurity

Privacy and data protection

At Santander we are committed to providing our customers with a high degree of trust and security in relation to their personal data. Our standards afford people greater control over their data, ensuring we only use their data strictly necessary and for the specific purposes for which it is collected. That's why we only process personal data that are appropriate, relevant and necessary to the purpose for which they've been collected, throughout the data's entire life cycle and in accordance with the law. We apply all reasonable measures to erase or rectify data that are impertinent, inaccurate or incomplete. We only store personal data for as long as strictly necessary for their legitimate use. Our security measures ensure the unwavering confidentiality, integrity, availability and resilience of our data processing systems and services.

Our compliance programme guarantees robust management of data protection risks. It includes:

- corporate-based **criteria as general lines of action** to meet regulatory requirements.
- **local subsidiaries' responsibility** to abide by the General Data Protection Regulation (GDPR) and local regulation on data protection.
- **a solid governance model** consisting of:
  - corporate and local policies;
  - a data protection officer (DPO) and managers in each unit. We formally disclosed appointees to local authorities;
  - a corporate oversight programme based on management KPIs; annual reviews; and an annual monitoring forum chaired by the Group Chief Compliance Officer, where subsidiaries report on compliance status and other key data protection matters.

Other items that bolster our commitment to personal data protection are:

- a homogeneous monitoring and reporting model among units that includes performance indicators;
- work with third-party service providers that must comply with data protection regulation;
- data protection compliance embedded in the annual internal audit programme;
- data protection management tools to maintain a group-wide register of processing activities (some 6,000), regular KPI reports and security incidents management;
- promotion of corporate initiatives and the exchange of best practices among units, including workshops and online training courses;
- special training on data protection for DPOs and data controllers;
- constant monitoring of regulatory developments to update and consolidate criteria, methodologies and documents; and
- employee training and awareness

Cybersecurity

At Santander we have embedded cyber security in our culture. The objective is to promote behaviours to protect our customers' information and the Group. Our **employee** performance review includes cyber security within its Risk component. In 2021, we give training and advice to our payment operators, information technology (IT) technicians, developers, executives and board members, with an updated mandatory training course on cyber security.

Our campaigns to spread awareness on digital channels help our **customers and society** stay safe online. In 2021, we launched a new cyber security campaign through our corporate sponsorship of Rafael Nadal to reinforce messages of confidence in online banking and good online habits. We continue to spread awareness through special websites, social media campaigns, targeted announcements and online workshops.

We're working with public- and private-sector organizations to promote knowledge sharing and cooperation on cyber security. In 2021, Santander showed leadership and went beyond basic information exchange in the fight against cyber crime:

- We headed the Ransomware Threat Cell working group as part of the World Economic Forum's (WEF) public-private Partnership Against Cybercrime initiative;
- We were co-leaders of the Cyber Experts working group to share cyber intelligence at the European Financial Services Roundtable (EFR);
- We officially joined Europol's NoMoreRansom initiative that offers free resources to ransomware victims; and
- We provided resources and specialist training (e.g. on forensic engineering) to help government agencies and conducted joint operations with the police.

In 2021, we also **updated our Cyber security and IT conduct policy**, which sets out the acceptable uses of Santander's IT equipment and services in order to protect the bank. The policy explains risk areas, misuse and how to avoid, mitigate and manage reputational and commercial risks according to our cyber security rules. It also dictates how the Group and subsidiaries should manage the technology, work implements and information provided to employees in order to prevent legal, reputational or cyber-related incidents.

Cybersecurity is the responsibility of everyone at Santander

For more details on employees' cybersecurity training, see the section 'A talented and motivated team' in this chapter.

For more details on our cybersecurity plan, see section '6.2 Operational risk management' in the 'Risk management and compliance' chapter.

93%	93%	78%	81%
of employees can identify risks in their job every day	of employees see cyber security as a top priority	of employees feel encouraged by managers to report important information, even bad news	of employees say they can report unethical conduct without fear of reprisal

Source: Global engagement survey 2021

Responsible procurement

GRI 102-9, 102-10, 103-1, 103-2, 103-3, 204-1, 308-1, 308-2, 414-1 and 414-2

Being responsible also involves our suppliers

- Third-party certification policy
- Responsible behaviour principles for suppliers
- Risk control
- Whistleblowing channels

Our third-party certification policy provides a common methodology for subsidiaries to select, approve and evaluate their suppliers. Its **responsible conduct principles** set out standards for all Group-certified suppliers in regard to usual service issues (like price and service quality) as well as diversity, inclusion, human rights and sustainability.

Santander has three supplier control and audit processes to uphold the policy and our corporate values.

In 2021, we reaffirmed our commitment to responsible purchasing and set two initiatives in motion to assess our suppliers' compliance with environmental, social and governance (ESG) standards.

- **ESG standards in procurement:** We surveyed the top 200 high-risk suppliers in our geographies (in particular, Spain, Portugal, the UK, Poland, the US, Mexico, Brazil, Argentina and Chile) to spot ESG risks. The survey had 18 questions that addressed such topics as carbon footprint, gender inclusivity, disability, flexible work schemes, minimum wage and good corporate governance practices. It covered 74% of selected providers, as the rest did not provide answers. Of those, we recognized a high number carried potential ESG risks (49%). Thus, we created remediation plans that must be implemented to attain a level of risk the Group can tolerate.

  The main weaknesses we found in the supply chain are the lack of environmental policy, certification (such as the ISO 14001) and greenhouse gas (GHG) reduction targets; in good governance, they were each organization's lack of proof of remuneration policies and missing content in their codes of conduct.

  As a result, in 2022 we will introduce ESG standards into critical supplier hiring. We expect to expand the initiative to our Top 1,000 high-risk suppliers.

- **ESG supplier standards:** We use questionnaires from business tenders to compile additional information on the corporate governance and the social and environmental impact of our suppliers in service categories involving intensive labour (such as travel and energy).

We support the local economy. Santander has 6,976 certified suppliers (-19% from 2020)[A] and 26.9% of all new suppliers in 2021 were certified with the inclusion of environmental and social criteria.

Through Aquanima[B], we delivered 8,401 contracts (-5% compared to 2020) to 4,808 suppliers (+5% compared to 2020). 93.7% are based in the same location where we procure services and account for 95.8% of our total purchasing (-0.7 pp from 2020).

We plan to roll out our **ethical channels** for suppliers in our core markets to our other geographies next year.

In 2021, we tailored our response to suppliers (especially those most vulnerable) to meet their most urgent needs.

To ensure our suppliers' income remained steady during the crisis, we continued to pay them for basic services, extended credit lines to provide them with liquidity, paid invoices early and shortened payment periods (among other measures). In particular, Santander España and Corporate Centre reduced payment periods from 11.2 days in 2020 to 9.7 days in 2021, delivering on the Group's commitment to supporting its suppliers.

We prepared and closely monitored several recommendations based on best practice to make sure measures will be applied consistently across the Group.

Risk control

- → In 2021, we set up our **supplier risk management platform** in our core markets.[B] Designed to rationalize and combine supplier management and critical reporting, it enables us to consolidate certification information for all suppliers.
- → Last year, we expanded our supplier risk assessment team. It reviews our essential suppliers' cyber security, business continuity, physical security, facilities and data protection. In 2022, we will add new topics for evaluation (e.g. ESG, ABC, etc.).
- → We list our core suppliers of goods and services by region according to the risks previously mentioned.
- → We closely monitor and report regularly on our suppliers to senior management and banking regulators (e.g. ECB, PRA and OCC). In 2021, indicators for supplier risk and our ability to identify and mitigate them improved considerably.

A. In 2021, we lowered total volume after revising and consolidating suppliers.
B. Except for Poland, which has its own system.

Shareholder value

GRI 102-23, 102-24, 102-27, 102-28, 102-36 and 102-37

Shareholder engagement

As a responsible bank, we seek to match our interests with our shareholders' expectations, create long-term value and inspire their and broader society's lasting loyalty.

We demonstrate our commitment to transparency for shareholders through constant, fluid communication with them to make sure managers and governing bodies will hear their opinions.

>3.9
million
shareholders
(-81,895 vs 2020)

Shareholder remuneration

GRI102-36, 102-37

Following the European Central Bank's (ECB) announcement that it would lift its recommendation to limit shareholder remuneration until 30 September 2021, the board of directors approved a cash dividend and share buyback worth 1.7 billion euros (40% of first-half underlying profit) as shareholder remuneration from 2021 profits.

The board of directors voted to submit a resolution at the 2022 Annual general meeting to approve a final cash dividend in the gross amount of 5.15 eurocents per share, worth approximately 865 million euros, in addition to a a Second Buyback Programme worth 865 million euros that must be approved by the ECB.

For further details on Santander's shareholder engagement, see sections '1.4 Engagement with our shareholders in 2021' and 3. Shareholder. Engagement and general meeting'in the Corporate Governance chapter.

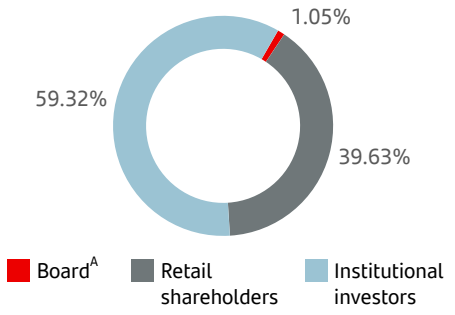
For more details on Santander's shareholder remuneration, see section '3.3 Dividends and shareholder remuneration' in the Corporate Governance chapter.

For more details on the Santander share, see section '2.6 "Stock market information'in the Corporate Governance chapter.

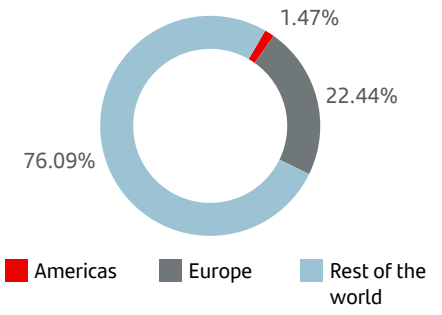
Banco Santander stock

Banco Santander shares trade in Spain, Mexico, Poland, the US (as American depository shares) and the UK (as CREST depository interests).

SHARE CAPITAL OWNERSHIP



GEOGRAPHICAL DISTRIBUTION OF SHARE CAPITAL



For more details, see section 2.1. 'Share capital' in the Corporate Governance chapter.

A. Shares owned or represented by directors. For more details on shares owned and represented by directors, see 'Tenure and equity ownership' in section 4.2 and subsection A.3 in section 9.2 'Statistical information on corporate governance required by the CNMV' of the 'Corporate Governance' chapter.

Communication with shareholders, investors and analysts

GRI FS5

Shareholder and investor relations priorities in 2021:

- **Digital transformation and better shareholder experience. Continued enhancement of online communication and assistance channels**. Streamlining the general meeting proxy and voting platform on the website so shareholders could exercise their rights at the 2021 AGM according to Directive (EU) 2017/828; and holding virtual events to report on the Group's strategy and results.
- **Regular communication** with shareholders, investors, analysts and ratings agencies to earn their trust.
- Reporting on the Group, its shares, and shareholder benefits.
- More personalized shareholder assistance on the channels that best fit their needs, and higher satisfaction based on shareholder surveys.
- **Simple products and exclusive benefits** on santander.com and our shareholder and investor app, plus university scholarships for shareholders and family members with disabilities — 60 grants awarded in 2021 — and other initiatives.
- **A stronger image in the Group's markets**. Our Investor and shareholder relations team was recognized by such prestigious magazines as IR Magazine and Institutional Investor, and by Asociación Española de Expertos en la Relación con Clientes (Spanish association of customer relations experts or "AEERC") and OZ for our efforts to integrate new channels through WhatsApp Business.

We are the first IBEX company to receive AENOR's Good Corporate Governance Index certification, achieving the highest score. It measures such aspects as the board of directors (from different angles); participation at the general shareholders' meeting; transparency, anti-corruption and fraud; sustainability and Environmental, Social and Governance (ESG) criteria.

18,695
responses from shareholders and investors through studies and qualitative surveys

942
engagements with institutional investors (including 85 meetings focused on ESG)

116
events with shareholders

139,301
queries answered via email, telephone, WhatsApp and video conference

>1,000
communications (mainly on digital channels)

For more details, see sections 3.1 'Shareholder engagement' in the Corporate Governance chapter.

ESG indices and analysts

GRI 102-12

For 21 years in a row, Santander has featured in the Dow Jones Sustainability World Index (DJSI World), which comprises 242 companies, including 24 banks. Our score in 2021 was 85 points out of 100, just four points below the highest (13th place among banks). We achieved top marks in materiality, environmental reporting, financial inclusion, social reporting and operational eco-efficiency. Our performance was recognized by S&P Global with an upgrade to Silver Class (from Bronze) in its Sustainability Yearbook (published in 2022).

MSCI also raised Santander's ranking considerably, from BBB to AA.

In 2021, our CDP score improved from B to A-, putting us among the leading groups of financial institutions and above the Financial Services sector average, which was B.

Sustainalytics also improved our rating, raising our score from 27.1 to 23.9 with higher-than-average corporate governance, product governance, resilience, human capital management and data privacy and security.

We retained our "advanced" classification in the Vigeo Index with 61 points, beating the industry average on environmental and corporate governance matters.

We featured in the Bloomberg Gender-Equality Index (BGEI) for the seventh year running. Our score improved significantly from 85.13 points to 90.26, which is above the industry average (72.69). We are the highest-ranked bank in the Index and the second company overall. The bank obtained the maximum score in the disclosure component and in Pro-Women Brand.

We also improved from 4.3 in 2020 to 4.5 points out of 5 on the FTSE4Good Index.

ISS-ESG once again awarded us its prime badge for companies with an ESG performance above the sector-specific "Prime" threshold.

ESG ANALYST RATINGS[A]

Score	2020	Difference	2021	Versus industry average
DJSI	83	▲	85	97th percentile, 13th out of 242 banks
MSCI[B]	BBB	▲	AA	3% AAA 29% AA among 191 banks
Sustainalytics[C]	27.1	▲	23.9	26th percentile, 268th of 1045 banks
Vigeo Eiris (V.E)	62	=	61	11th of 31 diversified banks
ISS-ESG	C	=	C	Decile rank of 1
CDP	B	▲	A-	Among 20% of banks with best score
BGEI	85.13	▲	90.26	1st bank and 2nd overall
Shareaction	57	▲	89	20 points above industry average

A. Source: Latest score available to each analyst in 2021.
B. Read the MSCI disclaimer on page 16.
C. Sustainalytics risk rating: the lower, the better.

Promoting inclusive and sustainable growth

Supporting the green transition	We're fully committed to helping meet the objectives of the Paris Agreement while supporting our customers' transition to a low-carbon economy
Financial inclusion and empowerment	We help people who are at risk of financial exclusion by giving them access to basic financial services, boosting entrepreneurship and employment, and providing them with the skills they need to manage their finances efficiently
Sustainable investment	We embed ESG in our decision-making, offering a sustainable value proposition for customers, and an active ESG engagement
Support for higher education and other local initiatives	We support education and social welfare in the communities where we operate, with a special focus on higher education as the driving force behind society's progress

Supporting the green transition

Tackling climate change is a key objective at Santander. We support the Paris Agreement goals and our ambition is to be net zero carbon emissions by 2050. Our main lines of action are:

GRI FS7, FS8

Aligning our portfolio to meet the Paris Agreement goals

Align portfolios to contribute to limiting temperature increases to 1.5ºC in line with NZBA and NZAMi

Supporting our customers in the green transition

Help our customers transition to a low carbon economy

Reducing our environmental impact

Remain carbon neutral and source electricity from renewable energy by 2025

Risk

Integrate climate considerations into risk management frameworks. Ensure we meet regulatory and supervisory expectations

Target	2018	2019	2020	2021	2025/2030 target
Green finance raised and facilitated[1]		19 bn	33.8 bn	65.7 bn	120 bn by 2025 220 bn by 2030
Thermal coal-related power & mining phase out				7.0 bn	0 by 2030
Emission intensity of power generation portfolio		0.23			0.18 tCO_2e/MWh in 2025 0.11 tCO_2e/MWh in 2030

We set the green finance target to aid our customers' transition to a green economy. We aim to raise or facilitate the mobilization of EUR 120 bn between 2019 and 2025, and EUR 220 bn between 2019 and 2030[1].

Our exposure to sectors with decarbonization targets published in 2021 (power generation and coal) is about 2.1% of total lending on the balance sheet and represents around 38% of SCIB credit risk exposure to SCIB's climate concerning sectors (see 'Metrics and Targets')[2]

[1] In 2021 SCIB's contribution to the green finance target includes: Project Finance (MLA): 4.5bn (based on data available on Dealogic League Tables as of 22 February 2022), Project Finance (financial adviser): 9bn, Green bonds (DCM): 7.6bn, Project bonds: 0.3bn; Export Finance (ECAs): 0.1bn; M&A: 8bn; Equity Capital Markets: 2.9bn. For a total of 32.3bn. Information obtained from public sources, such as Dealogic, Inframation news, TXF or Mergermarket league tables. All roles undertaken by Banco Santander in the same project are accounted for. Other sustainable finance components, such as financial inclusion and entrepreneurship, are excluded. During the 2021 financial year, an internal audit identified a duplicate project in the TXF table for Export Finance and Dealogic for Project Finance (MLA), thereby reducing the cumulative figure at year-end 2020 by EUR 371 million.

[2] "Exposure to sectors with decarbonization targets" metric measured in terms of drawn amounts, as of June 2021. "Concerning sectors exposure in the SCIB segment" measured in credit risk exposure, in line with the Climate materiality assessment, as of June 2021.

Our approach

In February 2021, the Group's board of directors approved the ambition to be net-zero in carbon emissions by 2050. This applies to the Group's operations (which have been carbon neutral since 2020) and emissions from our lending, advisory and investment services.

We're working to align our climate relevant portfolios with the Paris Agreement goals and set decarbonization targets for the climate-material sectors in our portfolio. We are committed to:

i. Ending financial services to power generation customers by 2030 if over 10% of their revenues depend on coal;

ii. Cutting our exposure to thermal coal mining to zero by 2030.

iii. Reducing the emissions intensity of our power generation portfolio from 0.23tCO_2e/MWh in 2019 to 0.18tCO_2e/MWh by 2025 and to 0.11tCO_2e/MWh by 2030

In April 2021, we became a founding member of the Net Zero Banking Alliance (under the United Nations Environment Programme Finance Initiative, NZBA), committing to:

i. transition operational and attributable greenhouse gas (GHG) emissions from lending and investment portfolios towards pathways to net-zero by mid-century;

ii. set intermediate targets for priority GHG-emitting sectors for 2030 (or sooner); and

iii. prioritize client engagement with products and services that facilitate the necessary transition in the real economy.

We are working on our decarbonization action plans, defining and implementing the risk and business levers needed to deliver on our portfolio net zero targets.

Santander's climate change project is one of our strategic projects. Progress is reviewed every quarter at the Responsible Banking Forum and at least twice a year by the Responsible Banking, Sustainability and Culture Committee. Also, at a senior management level, the strategy committee and the management meeting, chaired by the CEO, also conduct a progress check several times a year.

Santander Asset Management (SAM) joined the global Net Zero Asset Managers initiative (NZAMi) in March 2021 as part of its commitment to fighting climate change. To deliver on this commitment, SAM set an interim target to halve net emissions for 50% of its AUM in scope [3] by 2030. It is also participating in investors' climate initiatives as a tool for driving change, delivering on its engagement plan, defining a sectoral strategy to reduce pollution, shifting portfolio construction gradually towards net zero, developing climate investment solutions and maintaining leadership in climate stewardship and advocacy in its core markets.

Disclosing our approach is key to helping markets and other stakeholders assess how we embed climate in our processes and policies and report on our climate-related performance. We use the **Task force on Climate-related Financial Disclosures (TCFD)** as reference. Our **Climate finance report 2020-June 2021** included information about, and expanded on, TCFD.

See our latest update on the TCFD's four-pillar framework (Strategy, Governance, Risk management and Metrics & Targets) below.

More details on our Climate Report 2020-June 2021 available on our corporate website

See more details of the SAM strategy at "Our net zero strategy" in the Sustainable Investment section.

Our strategy

At Santander, we want to play our part in supporting our customers and the global economy to be net zero by 2050.

We are offering our customers decarbonization solutions to help them fulfil their climate goals. We are aligning our portfolios with the Paris Agreement Goals and keeping our operations carbon-neutral. Integrating climate within our risk management is key to delivering our plan.

We have a four-pronged climate strategy and public commitments to:

1) align our portfolio with the Paris Agreement Goals and set sector-portfolio alignment targets in line with the NZBA and with NZAMi: to ensure projected carbon emissions will help limit warming to a 1.5ºC rise above pre-industrial levels.

2) help customers transition to a low-carbon economy, with the commitment to raise EUR 120bn in green finance between 2019 and 2025 and EUR 220bn by 2030; offer our customers guidance, advice and specific business solutions; and enable them to invest in a wide-ranging ESG proposition according to their sustainability preferences.

3) reduce our impact on the environment by remaining carbon neutral and sourcing all our electricity from renewable energy by 2025.

4) embed climate in risk management; understand and manage the sources of climate change risks in our portfolios.

Santander Asset Management operates in 10 countries and aims to achieve net zero greenhouse gas emissions with its assets under management by 2050, and it was the first asset manager in Spain and Latam (excluding Brazil) to join the NZAMi. This is consistent with Santander's push for leadership in sustainability and the Group commitment to be net zero in carbon emissions by 2050.

[3] Assets in scope are assets with a defined Net Zero methodology, which currently amount to 54% of total AUM. For c.50% of those, SAM has carbon metrics available today. This objective might be reviewed upwards depending on data availability.

2021 highlights

- To help deliver on our green finance target, we raised or facilitated EUR 32.3bn (EUR 65.7bn since 2019) and harnessed climate finance opportunities through several initiatives. (For more details see "Supporting our customers in the green transition" section.)
  - The volume of greenfield renewable energy projects we have financed or advised represents enough installed capacity to power 9.2 million homes in a year and avoids 251 million tons of CO_2 emissions[A] during the useful life of those projects.
  - As well as our existing Green Book products, we developed the sustainable finance classification system (SFCS), which enables us to identify lending towards economic activities that contribute to climate change mitigation and adaptation and to track these volumes consistently across the Group.
  - We issued our third EUR 1 billion green bond to finance and refinance renewable wind and solar power.
- We're expanding our range of ESG products in Wealth Management. As of December 2021, we had over €27bn AuM, €11bn in Santander Asset Management and €16bn from third party funds in Private Banking.
- We reduced and offset CO_2 emissions from our own operations, after becoming carbon neutral in 2020. Furthermore, 75% of our electricity comes from renewable energy sources. (For more details, see 'Environmental Footprint').
- Climate change risks and opportunities assessments are part of our financial planning (three-year time horizons) and strategic processes (five years). In 2021, our financial planning considered our decarbonization targets as well as the green finance target and the volume of AuMs under sustainable funds. This enabled us to measure three-year projections as a key component to support the delivery of our commitments.
- Santander's employee pension funds manager recognize the magnitude of the challenges that climate and energy transition pose to governments, companies and civil society. The pension funds manager are also aware of their impact on the ability to comply with their fiduciary duty to provide long-term risk-adjusted returns to their members. They initiated the necessary actions to consider employee pension plans' alignment to net zero, showing their full support for Santander's vision and its commitment to sustainability and climate change.
- We continue to fight deforestation and its damage to climate and biodiversity (especially in the Amazon). Protecting the Amazon rainforest is critical to tackle climate change (for more details, see our webpage on "Santander and the Brazilian Amazon")
- We consider biodiversity a material topic (see our materiality assessment). Further progress in the sector is needed. Santander participated in the Taskforce for Nature related Financial Disclosures and a proof of concept soy pilot coordinated by Global Canopy and UNEP FI.
- Santander UK was a founding member of the UK National Parks 'Net Zero with Nature' project. It seeks to attract funding to scale up peatland and woodland restoration across the UK. The project will generate verified high quality carbon credits and biodiversity units.

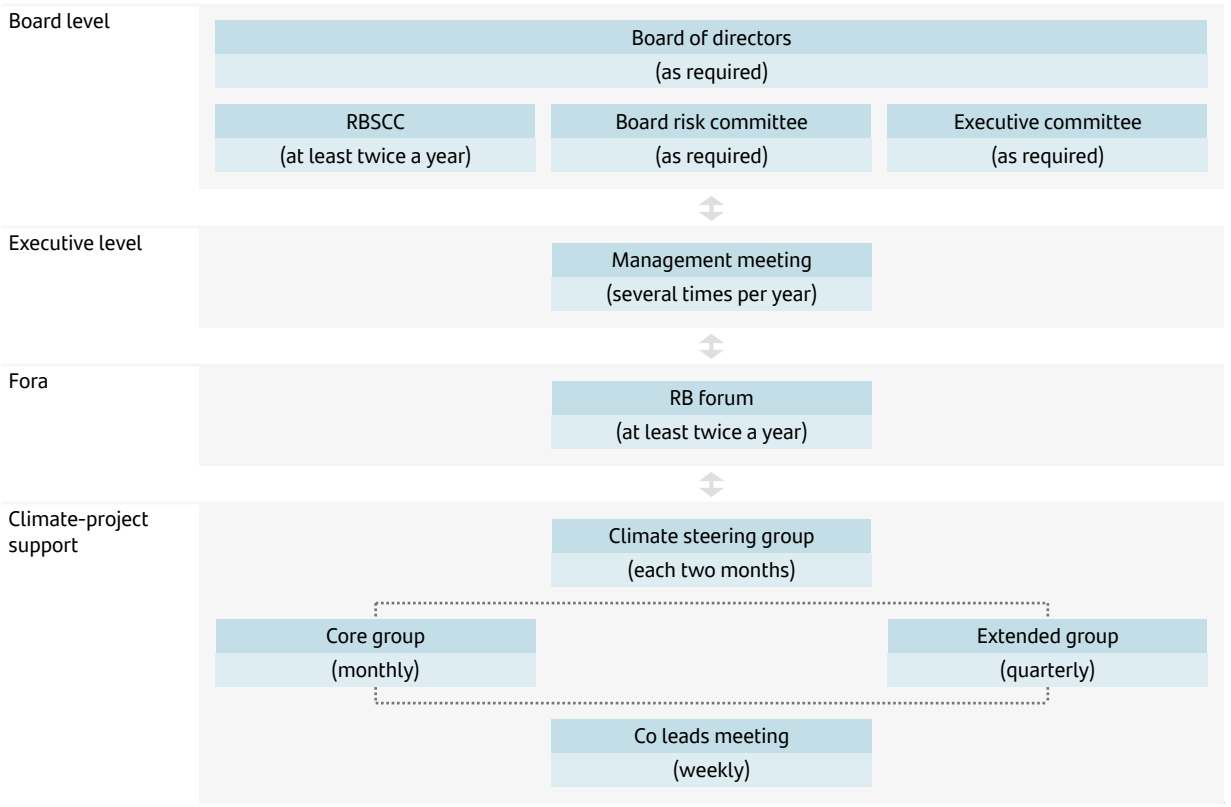
A. Emissions to be avoided over the lifetime of projects, which we have financed or advised on in 2021. Emission factors from the International Energy Agency (source updated in 2021 with 2019 data) have been used. The estimated share attributed to Santander is 66.7 million tonnes of CO_2.

For more details on the Brazilian Amazon, see section 'Environmental and Social risk management', and "Santander and the Brazilian Amazon"in our corporate website

Governance

GRI 201-2, FS1, FS2, FS3

Governance bodies of Banco Santander involved in climate change management and frequency on which climate change is presented (in brackets)



- The internal audit function conducted the first review of the climate change project in 2021. It proposed new control measures to reinforce governance.
- **The responsible banking, sustainability and culture committee** (RBSCC) reviews and challenges climate change strategy and other environmental considerations. It's an advisory body that assists the board with overseeing the climate change-related components of the responsible banking strategy. It contributes to more informed board decisions and enhanced strategic focus based on the related risks and opportunities.

  In 2021, the RBSCC held four meetings, including three on climate change (at least two meetings covering climate are required). The committee discussed climate change project updates; climate-related financial risks and opportunities; roadmaps to fulfil TCFD and ECB expectations; discussions to approve the net zero ambition and fulfilment of the bank's net zero commitments; Santander's sustainable finance proposition to help our customers' transition to a low-carbon economy; plans for business lines; and progress on our carbon footprint and green finance commitments.
- To streamline our governance, we created the Responsible banking forum (RB Forum). It executes the responsible banking agenda across the Group, drives decision-making on responsible banking issues and ensures the execution of any mandates from the RBSCC, other board committees and the board of directors. It also ensures alignment on key issues, as well as the review and escalation of reports to the RBSCC.

  The RB Forum meets at least six times per year. It reviews climate change and net zero strategy before discussion at the RBSCC. In 2021, the RB Forum met four times and addressed such climate-related topics as net zero strategy, sustainable finance and carbon offsetting.
- The Group management meeting, chaired by the CEO, receives progress reports on the responsible banking agenda and on climate change several times a year.
- Specialist working groups cascade Santander's climate change agenda. It includes such matters as TCFD implementation, supervisors' expectations, climate commitments and governance, throughout the Group. The climate project and working group, co-led by SCIB, Risk and Responsible Banking with members from several functions and geographies, meets weekly to monitor and drive progress with the climate change project roadmap; monthly with the corporate areas involved to ensure headway; and quarterly with all subsidiaries and areas.
- A climate steering group meets every two months. Its members are the Group chief credit officer, the global head of Enterprise-wide risk management, the chief of staff to the global head of Santander Corporate and Investment Banking, the global head of Responsible banking, the head of the chair's office, the director of group strategy and the senior adviser on responsible business practices to the executive chair; and receives feedback from executive directors as part of the RB Forum.

- Santander has several working groups that meet regularly to drive the climate change agenda: Santander Spain's climate change project, coordinating all local climate initiatives; Santander UK's climate leadership group, supporting the UK's senior leaders ambition to be a leader in climate matters; the public policy sustainability working group, advising on climate, regulatory developments and the Group's positioning in policy debates; the footprint working group, in charge of how we measure and reduce our internal carbon footprint; and the sustainable bond working group, overseeing the issuance of sustainable bonds.
- In 2021, the short-term variable pay that generally applies to Group employees took into account the progress made in towards ESG objectives (e.g. green finance and climate change goals).
- For 2022, the board proposed (resolution at the 2022 AGM) the inclusion of ESG metrics in the long-term incentives of senior executives. They include green finance and decarbonization targets consistent with our commitments: namely setting targets for ten sectors before 2024 to fulfil NZBA requirements; and aligning our Power Generation portfolio gradually to ensure delivery on our mid-term target for 2025.

For more details on the RBSCC, see section 4.9 'Responsible banking, sustainability and culture committee' in the Corporate governance chapter.

For more details on our policies and governance, see the 'Governance' section of this chapter.

For more details on the RB Forum, see our Climate Report 2020-June 2021 available at our corporate website.

Our General sustainability policy is available on our corporate website www.santander.com

Management and staff training

GRI FS4

In January 2022, the board of directors completed a third climate change training programme. It included modules on the Paris Agreement, net zero, portfolio alignment and climate risk management. In 2021, the Santander UK board and senior executives took part in exercises on climate risk and stress tests. Santander España's board and senior executives received climate change training.

We launched "Climate Dialogues" for senior managers to discuss critical climate-related topics in four sessions with renowned experts Alzbeta Klen (IFC Director and Global Head of Climate business), Andy Marsh (President and CEO of Plug Power Inc.), Hakan Samuelsson (President and Chief Executive of Volvo Cars) and David Antonioli (Verra CEO).

In March, we held a CDP-sponsored workshop on climate change for risk analysts. Over 182 attendees talked about the physical and transition risks of climate change. A follow-up CDP webinar on climate change (held in April with around 80 attendees) delved deeper into the TCFD's reporting standards and recommendations.

In December, the chairs of the responsible banking, sustainability and culture committee from the group's geographies attended a special session on climate change and net zero.

Risk management

GRI 102-15, 102-29, 102-30, 201-2

- We continue to make progress with **embedding climate and environmental risks in our key risk management processes**. In 2021, we developed a quantitative metric for our risk appetite statement.
- We made significant progress with the credit granting process and with developing a more restrictive risk policy on sensitive sectors and activities that could damage our reputation. All SCIB corporate customers (groups) now have a climate assessment as part of the **internal credit ratings**.
- In 2021, we adapted our **risk appetite** to include specific limits regarding our exposure to coal customers. This will ensure the fulfilment of the decarbonization targets for coal-mining and coal-related power generation customers as well as aiding climate risk management. (see 'Metrics and targets')
- In early 2022, the new version of the **Environmental, social and climate change risk management policy** was approved with new restrictions that will help us decarbonize our portfolios and reduce climate-related risk, including new criteria which prohibits financing and advising on new oil upstream clients, except for transactions for the specific financing of renewable energy, and direct financing of oil upstream greenfield projects.
- We launched initiatives to meet regulatory requirements, such as the CBES in the UK and the SSM **stress tests** for 2022. Furthermore, senior managers were more involved in overseeing risks associated with climate change.
  - Santander's Economic research department analyses the impact of climate change based on the published scenarios from the Network for Greening the Financial System, the 2021 Biennial Exploratory Scenario and other external sources.
  - We introduced a climate change rationale into Santander's baseline scenario to assess macroeconomic impacts on our portfolios. We also developed alternative scenarios to measure the impact other climate assumptions have on economic variables. Our climate scenarios model impacts on different economic sectors.
  - We align climate scenario development with supervisory expectations as reflected in the ECB guide on climate-related and environmental risks published in November 2020.
- We conduct regular **materiality assessments** to identify the most climate material portfolios. They cover more than 80% of our balance sheet and include assessments of residual value, strategic, market and liquidity risks.
  - Our Risk taxonomy and heat maps, based on TCFD and UNEP FI programmes, form the basis of a qualitative classification of portfolios and their potential exposure to climate risks. The internal climate change risk taxonomy recognizes sectors that are directly exposed to physical and transition climate risks.
  - We use materiality assessment findings as inputs to monitor, measure and report on financial impacts and to develop new metrics for risk management, credit policies and business strategy.
- We are developing **internal tools and models** to assess climate-related risks and impacts in our portfolios:
  - KLIMA tool: To manage climate-related risks at corporate and unit level, considering transition and physical risks, taxonomy and heatmaps for different sectors and geographies. It is a key element to manage climate-related risk in the short, medium and long term following climate scenarios.
  - Advanced models: Santander performs internal climate scenario analysis and stress tests using a platform acquired from an external vendor, which follows a UNEP FI methodology supplemented with external information and scenario expansion. The platform is complemented by the materiality assessment exercises and heatmaps related to physical and transition risk.

MATERIALITY ASSESSMENT - CLIMATE RISK ANALYSIS AND HEAT MAPPING OF PORTFOLIOS

September 2021 - Billions euros

	TR	PR	SCIB	Other segments
Power (conventional)			25	2
of which power generation clients with > 10% of revenues coming from coal			4	0
Power (Renewables - Project Finance)			12	0
Oil & Gas			19	0
Mining & metals			9	2
of which Coal Mining			4	0
Transport			27	94
Real Estate			6	361
Agriculture			3	4
Construction			20	7
Manufacturing			33	14
Water supply			3	1
Climate sectors			**157**	**484**
Other sectors			59	161
Total portfolio			**216**	**646**

Low | Moderately low | Medium | High | Very high

TR: Transition Risk. PR: Physical Risk
SCIB : REC (on and off balance sheet lending + guarantees + derivatives PFE),
Other segments : Drawn amount
Other sectors= SCIB and Corporate NACES outside of risk taxonomy perimeter // Individuals and SCF: Cards and Other Consumer
Other segments include Individuals, SCF, Corporates and Institutions.

For more details on our risk management approach and progress, see section 10 'Climate and Environmental risk' of the Risk management and compliance chapter.

For more details on our Climate Report 2020-June2021, see our corporate website.

Metrics and targets

Santander aims to achieve net zero carbon emissions within its own operations and customers' financed emissions by 2050, focusing initially on the most material sectors to climate risk like power generation, and oil and gas. We've been publishing the PACTA analysis of our power generation portfolio since 2019.

In April, Santander became a founding member of the Net Zero Banking Alliance (NZBA). We committed to set and disclose decarbonization targets for the most GHG intensive sectors. In 2022, we will engage with NZBA working groups to help set specific guidance and further develop NZBA guidelines.

We disclose performance data on scope 1, 2 and 3 emissions (see 'Environmental footprint'), along with other climate relevant metrics (e.g. energy consumption). We also report on our renewables and carbon neutrality targets.

We have been carbon neutral in our own operations since 2020 by reducing and offsetting own emissions and increasing the use of renewable energy.

Regarding our scope 3 emissions (category 15 related to financing), we began to disclose the financed emissions from our customers in 2021, following the Partnership for Carbon Accounting Financials (PCAF, which we became a member of in September 2021) standard. This means we can assess the GHG emissions linked to our portfolios and devise alignment strategies.
We are setting alignment strategies and practical decarbonization targets using emissions data from our customers, which need to be accurate enough to monitor real progress. We are working on improving these data through external databases and model developments using information from our customers.

As we set and publish future decarbonization targets, we will disclose financed emissions progressively starting with the most concerning sectors, in line with the roadmap described below.

Beyond portfolio alignment, we are also working to obtain financed emissions for our balance sheet, albeit with lower-quality emissions-related data to support also different disclosure requirements.

Below we provide information about our third PACTA exercise and more details about decarbonization targets as part of our TCFD disclosures.

Portfolio Alignment

Santander publicly supports the Paris Agreement on climate change. We joined the UN Collective Commitment to Climate Action (CCCA) when it was launched in September 2019. We announced our ambition to be net zero in carbon emissions by 2050 in our 2020 Annual Report. We were founding members of the NZBA in April 2021 to help us progress in our net zero ambition.

The most carbon-intensive sectors for Santander, as identified in the climate materiality assessment, are power generation, oil and gas, transport and mining and metals. We analysed how our customers in those sectors are positioned in terms of current and expected emissions from their activities to align with the Net Zero pathway towards 2050.

Progress on the Collective Commitment to Climate Action

To fulfil UNEP FI Net Zero Banking Alliance (NZBA) commitments, we need to set and publish sector-specific, scenario- based targets to align our portfolio with the Paris Agreement goals.

We follow NZBA guidelines and recommendations and consider our climate materiality assessment to prioritize the most carbon intensive sectors where data and methodologies are available.

Our methodology relies on financial information from our customers (total equity, total debt, total assets, company valuation, etc.), as well as emissions and production data. Where no public emissions data exist, we estimate emissions based on a proxy (average emissions by industry, country, etc.). Once we have an idea of our customers' total emissions, we can apply our attribution factor in line with the PCAF approach to determine the emissions Santander financed.

Roadmap for delivery on Net Zero

The ambition for many sectors to have net zero emissions by 2050 depends on several exogenous factors. Data and methodologies need to be more widely available and reliable before we can accurately measure emissions and set decarbonization targets.

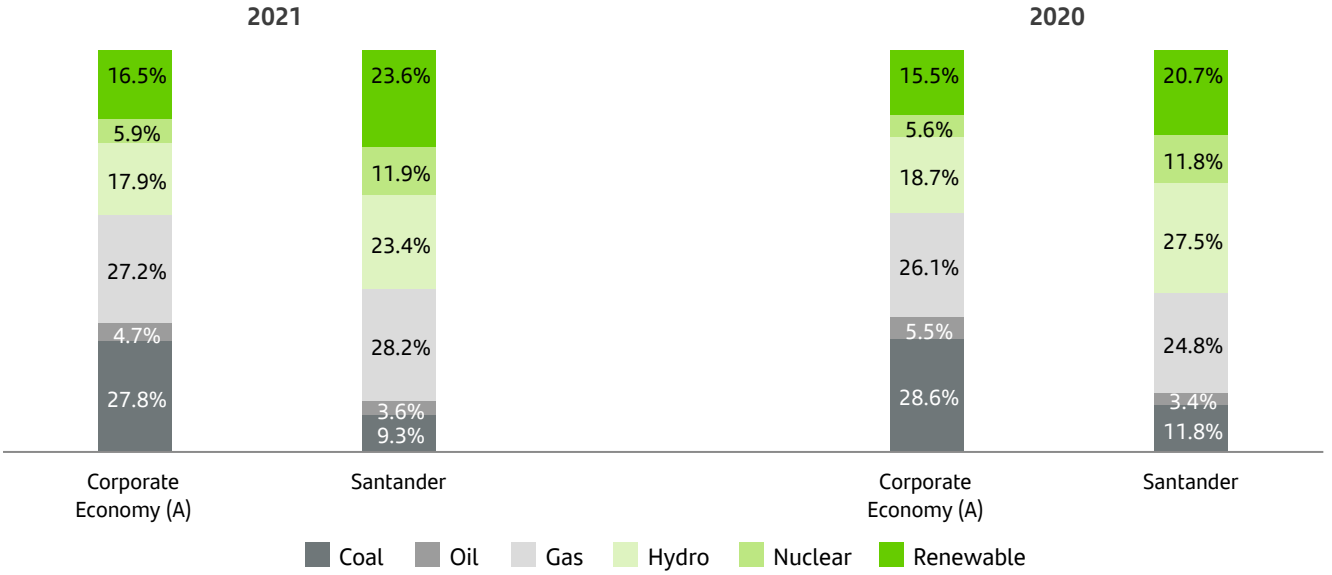
For the most concerning sectors identified in the materiality assessment (power, oil and gas, mining and metals, and transport), we've been measuring the GHG emissions from our customers' activities and Santander's share of emissions, per PCAF guidelines. Those sectors are considered to have more GHG emissions directly or indirectly linked to their activities and value chains as well as the most potential to reduce emissions and help achieve the Paris Agreement goals.

We plan to set decarbonization targets based on emissions metrics for: oil and gas, mining and metals (coal-related) and aviation within our transport portfolio by September 2022 or earlier in line with our NZBA commitment. Those decarbonization targets must be compatible with helping our customers transition to a greener economy.

Subject to the availability of data and methodology, we will set decarbonization targets for mortgages, commercial real estate, auto manufacturing, auto lending, cement, agriculture and some sub-sectors before the end of March 2024.

Power generation: focus on SCIB corporate customers

Production capacity across technologies (%). June 2021



A. Corporate Economy: The aggregate/combined production of all assets in the Asset Resolution's database, which captures approximately 70% of total world CO_2 emissions (CO_2 is the largest greenhouse gas (GHG) contributor to human induced climate change). Considering the inclusion of other GHG (such as nitrous oxide and methane – relevant in agriculture), the database captures approximately 60% of total GHG emissions. Based on data from the 2018 World Energy Outlook from the International Energy Agency.

Power generation

We're committed to aligning our power generation portfolio with the Paris Agreement by 2030.

We're ending financial services to power generation clients by 2030 if over 10% of their revenue depends on thermal coal.

Power generation is responsible for a significant part of the anthropogenic greenhouse gas (GHG) emissions causing global temperatures to rise. The power sector relies on technological alternatives that produce varying levels of emissions: coal, oil and gas-fired power plants produce significantly high emissions as opposed to renewable energy sources (wind and solar). Therefore, the technology mix of our power generation clients – and of our portfolio – is significant.

As of June 2021, our SCIB power generation portfolio total exposure including corporates and project finance was around EUR 34.7 billion. Our project finance portfolio in renewables accounted for EUR 11 billion.

As explained above, the technology mix of our power generation corporate clients is key to track our progress on reducing emissions. We conducted a PACTA exercise, as we had done last year, to calculate the technology mix of our SCIB corporate clients in the power generation sector (as shown in the graph above). The percentage of production capacity of renewables financed by Santander grew 2.92 percentage points and coal fell 2.46 points. Gas technology increased 3.36 points, offsetting the -4.09 p.p. reduction in coal and hydro technology, which was mainly due to intense droughts in Brazil.

We estimated the current and future emissions of our power generation portfolio and proposed the first GHG decarbonization targets for 2025 and 2030.

In setting our targets, we considered the expected trajectory of our portfolio and how it compares with the latest recognized scenario to achieve net zero emissions by 2050: "International Energy Agency (IEA) – Net Zero Emissions". We based the pathway on the SDA and the convergence ambition approach. The SDA assumes global convergence of key sector' emissions intensity by 2050.

Based on 2019 portfolio data, the **emissions intensity of our power generation portfolio stands at 0.23 tCO_2e/MWh. Our commitment is to reduce it to 0.18 tCO_2e/MWh by 2025, and to 0.11 tCO_2e/MWh by 2030**, in line with the Paris Agreement.

Gas will play a relevant role in the transition of power generation in many countries, enabling them to avoid using more polluting production alternatives (such as coal-fired power plants) while deploying renewables capacities in line with their Nationally Determined Contributions (NDCs). That's why we're drawing up internal guidance for acceptable gas power generation projects to work with, aimed at reducing the GHG of our portfolios. Our approach aims to support a fair transition in those countries and including the general energy market situation of that country; energy mix pathway (based on NDCs); to lower average emissions of the energy-mix in the geography so it replaces production assets with higher emission levels; the use of advanced, low-emissions technology; and, in developed economies, preparedness to transition in the future (Hydrogen readiness; carbon capture modules; etc).

Coal

In February 2021, in our 2020 Annual Report we committed to **cutting our worldwide exposure to thermal coal mining to zero by 2030**.

To meet the coal targets, in 2021 we did the following:

- **Customer engagement**: In 2021 we engaged with our customers impacted by the two coal decarbonization targets to analyse and assess their coal exit-plans.

  There are only 7 coal-mining customers (representing €4bn in risk exposure) and only 18 power generation customers with more than 10% revenues coming from thermal coal (representing €3bn in risk exposure, with an average weighted revenue from coal of 34.8%).

  In our engagement we are offering them help to transition and decarbonize. The majority of the customers we engaged with have transition plans and are receiving our support to close, transform or divest the coal mines or coal-fired power plants.

- **Risk Appetite**: We set new limits to monitor and manage our exposure to customers impacted by our coal commitments. These limits will ensure we meet the two coal decarbonization targets by 2030, although the exposure to these customers may not have a linear decreasing trend as we work with them to help them decarbonize.

- **Environmental, social and climate change risk policy**: We outlined new criteria regarding thermal coal to ensure the decarbonization of our portfolios (for more details, see the 'Risk management' section).

- **Long-term incentives**: We added the power generation portfolio decarbonization target (% of emissions intensity reduction for power generation) to the remuneration scheme for Santander's most senior executives (for more details, see the 'Remuneration' section).

Oil and gas

The oil and gas sector represents a significant amount of the GHG emissions produced worldwide, and needs a clear transition pathway to decarbonize. Many economic activities (power generation, transport, manufacturing, etc.) are still heavily dependent on oil and gas.

The risk limits for SCIB oil and gas customers have been adjusted to consider their climate change transition plans. As a result, a tiering has been established and risk management limits have been modified accordingly, while a strict monitoring of transition plans' execution is being implemented. Further actions and levers are being explored within the current work to set alignment targets for this sector.

In early 2022, we updated the ESCC risk policy to include new restrictions that will help us decarbonize our oil and gas portfolio, which prohibits financing and advising on new oil upstream clients, except for transactions for the specific financing of renewable energy, and direct financing of oil upstream greenfield projects.

Mortgages and Real estate

This sector is material to Santander's exposure. Residential and commercial buildings generate a significant amount of GHG emissions, given their overall energy consumption in this sector adds up to a significant amount of GHG emissions. Accounting for the emissions associated to the collaterals and assets that Santander finances requires extensive data collection (energy efficiency labels, property surface area in sqm, etc.).

To fulfil our net zero ambition within this sector, we're progressing with the most material portfolios to assess the emissions baseline with enough data quality to set decarbonization pathways, strategies and effective commercial plans. We're working on our mortgage portfolios in the UK and Spain, which respectively comprise over 63% and 16% of the Group's mortgage exposure.

To measure the energy efficiency of mortgage collaterals, we have been working on gathering energy performance certifications (EPC): **EPCs are not comparable across geographies[4], as it is a measurement scale defined locally, and depends among other things on local policy and weather conditions**. Therefore, each letter label corresponds to different levels of emissions per surface area per geography or EPC standard. In many geographies there is a significant lack of EPCs, and EPC data should be estimated with real data and supplemented with estimation models.

The first breakdown of the energy efficiency labels (EPCs) of UK mortgage collaterals, according to the UK's local EPC scale, is ("A" being the best performance, and "G" the worst): "B" for 13%,"C" for 23%, "D" for 42%, "E" for 17%, "F" for 4%, "G" for 1%.

At Santander España, the estimations of the portfolio EPC distribution, according to the Spain's EPCs local scale, is: "A" for 1% ,"B" for 2%,"C" for 4%, "D" for 14%, "E" for 63%, "F" for 8%, "G" for 8%.

Both in the UK and Spain the breakdown of EPCs in our mortgage portfolio are broadly aligned with each geography EPCs' profile.

Transport

The automotive sector is material to the bank's exposure and emissions. SCF's Consumer business division is working on assessing the carbon footprint of our **auto-loan** portfolios. In H2'21, SCF UK began measuring 'green assets' financed within the portfolio and created a CO_2 emissions financed dashboard that identifies the green assets financed. We're helping **auto-manufacturers** invest in new technologies to produce more efficient vehicles and reduce the average $grCO_2/km$ of the ones they produce. We'll also set an alignment target as part of our NZBA commitment and will be analysed along with auto lending as the two are related. (Please see the agreement signed with Ferrari below)

Aviation is also a relevant sub-sector that accounts for a significant amount of emissions within the transport sector. We're assessing transition plans and carbon footprint to set decarbonization targets by September 2022.

[4] According to PCAF databases, as an example, the "D" EPC rating in England has an estimated emissions intensity of 0.03045 $tCO_2/m2$, while the "E" EPC rating in Spain has an estimated emissions intensity of 0.023739 $tCO_2/m2$.

Metals

Metals manufacturing, which produces a significant amount of GHG emissions should be decarbonize replacing some of the current technologies used for combustion and electricity.

We have been assessing our **steel and iron** portfolio to understand its level of emissions and decarbonization plans. It is on the right track towards net zero. As indicated in our target roadmap published in our Climate finance report, we will be publishing our target for that sector no later than September 2022.

Though we have few customers and a very little exposure to **aluminium**. We'll keep working with our customers in that sub-sector to help them decarbonize their operations.

Agriculture

Agriculture is a key sector on the path to net zero; however, it is also one of the most challenging in terms of data and alignment methodologies. We participate alongside other major banks in the Banking for Impact on Climate in Agriculture (B4ICA) initiative coordinated by WBCSD in partnership with UNEP FI and PCAF.

NZBA and GFANZ engagement and the collective commitment to climate action

We remain engaged with the **UNEP FI on climate**. Since 2018, we have participated in TCFD recommendations pilots I & II, making headway with an internal methodology to assess climate change-related impacts on our credit risk exposures. As part of the Collective Commitment to Climate Action and the Net Zero Banking Alliance, we participate in working groups aimed at strengthening the initiative and further developing other initiatives.

We're also in the Glasgow Financial Alliance for Net Zero (GFANZ), which is the umbrella organization for the finance industry from the 2021 COP in Glasgow and beyond. Our Group Executive Chair is a member of the Principals Group that sets the strategic direction for GFANZ.

Supporting our customers in the green transition

SASB FN-IB-410a.2, FN-IB-410a.3

As one of the world's largest banks we have a responsibility and an opportunity to support the green transition and encourage more people and businesses to go green. Enhancing our sustainable finance proposition across all our divisions and regions is critical to meet our climate ambition. To help us achieve this, we developed in 2021 the Sustainable Finance Classification System (SFCS), an internal guide that enables us to recognize sustainable finance activities and measure them consistently throughout the Group.

Corporate and Investment Banking

Building on our strong track record of renewable energy finance and advisory services, SCIB aims to introduce ESG and sustainability into all sectors and products in response to increasing demand from corporates and investors and in pursuit of Santander's own commitments. Our ambition is to become the leading financial platform for energy transition-enabling technologies by supporting our clients in achieving their sustainability objectives and transitioning towards more responsible, social and environmentally sustainable business models.

In 2021, SCIB appointed a Global Head of ESG. The team is focused on three main areas:

- ESG solutions, covering ESG analytics, sustainable capital markets/ financing and ESG product development
- Corporate Finance
- ESG Factories, to partner with the Group's businesses to develop specific solutions for other segments.

Financing renewable energies

For the last 10 years, we've been leading the banking industry in renewable energy finance. We are among the top 3 banks in terms of number of deals and the top 5 in deal value globally.

The greenfield renewable energy projects that we have financed or advised in 2021 have a total installed capacity of 13,604 MW, and prevent the emission of 251 million tons of CO_2 [A]. We also helped expand, improve and maintain renewable energy brownfield projects that have a total installed capacity of 1,776 MW (more details in the graphs below).

Our renewable energy greenfield and brownfield portfolio totalled more than EUR 12.9 billion by the end of the year. Spread over 326 transactions, it accounts for approximately half of our project finance portfolio.

Santander Corporate & Investment Banking (SCIB) aims to be a leading bank in providing sustainable finance and ESG solutions.

GLOBAL RENEWABLE ENERGY PROJECT FINANCE VOLUME BY MLA - FY 2021[A]

Rank	Mandated Arranger	Vol. (USDm)	Nº.	%share
1	Bank 1	6,421	82	6.6
2	Bank 2	5,534	68	5.7
3	Banco Santander	5,280	129	5.4
4	Bank 3	4,228	64	4.3
5	Peer 1[B]	3,504	63	3.6
6	Bank 4	3,084	40	3.1
7	Bank 5	3,071	40	3.1
8	Bank 6	3,003	40	3.1
9	Peer 2	2,796	53	2.8
10	Bank 7	2,703	30	2.8

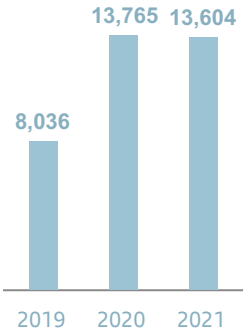
A. In the lead arranger category of Dealogic and Bloomberg New Energy Finance league tables for project finance
B. Peers are BBVA, BNP Paribas, Citi, HSBC, ING, Itaú, Scotia Bank and UniCredit, which are similar in size to Santander.

The generation capacity of the renewable energy projects we have financed or advised in 2021 amounts to the yearly consumption of 9.2 million households.[B]

A. Emissions prevented over the projects' useful lifespans, we have financed or advised, in 2021 based on: emissions factors figures from the International Energy Agency (updated in 2021 with data from 2019). 66.7 million tons of CO_2 is the estimated part allocated to Santander.
B. Based on final electricity consumption data published by the International Energy Agency (updated in 2021 with data from 2019).

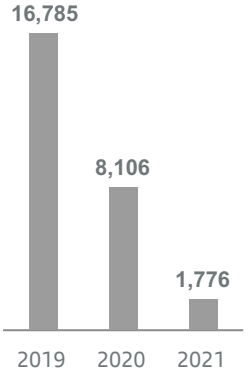
GREENFIELD FINANCE[5]

(MW financed)[C]



BROWNFIELD FINANCE[6]

(MW financed)[C]



BREAKDOWN OF FINANCED MW BY TYPE OF RENEWABLE ENERGY

	2019	2020	2021
Wind energy	77% 35%	77% 46%	58% 26%
Solar energy	22% 54%	18% 33%	39% 64%
Others[D]	1% 11%	5% 21%	3% 10%

Greenfield Brownfield

BREAKDOWN OF GREENFIELD AND BROWNFIELD FINANCE BY COUNTRY IN 2021[E]

USA	Spain	Brazil	United Kingdom	Germany	Poland	Italy	Mexico
5,400 MW 61 MW	3,212 MW 1,225 MW	2,119 MW	1,286 MW 156 MW	900 MW	267 MW	264 MW	318 MW

Greenfield Brownfield

C. Of the megawatts attributable to Banco Santander in 2021, 33% were from greenfield finance and 36% were from brownfield finance.
D. Includes hydropower in 2019, solar and wind energy in 2020 and battery energy storage, mix solar-biomass and energy from waste in 2021
E. Other greenfield finance: Chile (81 MW), Portugal (53 MW) and France (24 MW). Other brownfield finance: Portugal (18 MW)

Renewable energy projects financed and advised in 2021

Santander was the sole financial advisor and green loan coordinator in a landmark transaction to finance Vineyard Wind I, an 800 MW offshore wind project off the coast of Massachusetts and the first large scale offshore wind farm in the US.

Santander was mandated lead arranger in the financing of Dogger Bank C, a 1.2 GW wind farm being built off the coast of Yorkshire. It is the largest offshore wind project financing to date, and is due to be the largest offshore wind farm globally. Each phase will produce enough electricity to supply 5% of the UK's energy demand.

Santander advised on the financing of enfinium Ltd, a waste to energy (WtE) firm which is a leading operator in the sector, with an annual waste capacity of 2.3 million tonnes and gross capacity of 265MW.

Santander was mandated lead arranger in the financing for the Darwin Project, a 900MW offshore wind farm, to be built in the German North Sea, close to the Netherlands and some 72km from mainland Germany. It is the first offshore wind transaction with private PPAs in Germany and continental Europe.

Santander acted as Financial Advisor for the company, leading also the structuring and bookrunning of the institutional tranche in the refinancing of Project Ares, a portfolio of two concentrated solar power plants with a total installed capacity of 99.8 MW owned by Celeo.

Santander acted as Mandated Lead Arranger of Provence Grand Large's first floating offshore wind farm being financed by commercial banks globally. The 24 MW project is located in France and is supported by three key entities with track record in the French offshore wind market.

Santander was mandated lead arranger and hedge provider in the financing of the Alpino Project, to build and operate two ground-mounted solar PV projects in Lazio with a combined capacity of 118MW. The project will be a key milestone in the Italian renewable space, since it will be one of the first corporate PPA-backed projects in the country.

[5] New projects to be built.
[6] Projects already existing and producing electricity at the financing date.

M&A advisory in renewable energy

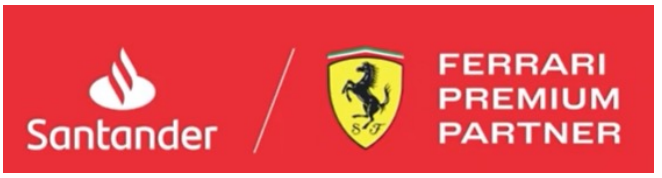
We supported Grupo Enel in the restructuring of its Latin American business, including advisory on two landmark transactions: first, the merger of Enel Green Power Latam with Enel Americas, the largest listed pan-American utility company; and second, the integration of Enel Green Power Central America into Enel Colombia, Enel's joint-venture with Grupo Energia de Bogotá for the business in Colombia and Central America.

Partnering with clients on their transition

In the first ESG corporate finance advisory role in Hydrogen, Santander acted as sole financial advisor to Plug Power, a US-based global leader in fuel cell systems and hydrogen related services, in the launch of a 50-50 joint venture with Groupe Renault. The resulting company, "Hyvia" will lead the way towards a complete ecosystem of fuel cell powered light-commercial vehicles, green hydrogen and refuelling stations across Europe. Santander also acted as exclusive financial advisor to Plug Power in its partnership with Acciona, a Spain-based global renewable energy operator, to create a leading green hydrogen platform in Spain and Portugal.

We advised the French start-up Verkor on the creation of a strategic partnership with Renault Group. Renault Group and Verkor will co-develop and manufacture low-carbon and high-performance battery cells to foster the emergence of a competitive, sovereign and sustainable battery supply chain in Europe.

As part of Santander's new alliance with Scuderia Ferrari, we aim to offer Formula 1's most successful team a wide range of advice and support to help them become carbon neutral by 2030.



Developing new solutions

We have developed new sustainable products, such as our sustainability-linked supply chain finance offering and our sustainability-linked swaps offering.

In recent years, we have created various frameworks to develop our ESG product offering such as:

- Sustainable Guarantees Framework, with second party opinion from Vigeo Eiris (2019)
- Social Loans Framework in Argentina, with second party opinion from Sustainalytics (2020)
- Sustainable Finance Classification System, reviewed by Sustainalytics (2021)

Landmark deals in 2021

First large scale EV charging network transaction in Europe

Santander was mandated lead arranger and hedge provider, leading the first project finance for a large-scale electric vehicle (EV) charging network in Europe, due to be powered entirely by green energy and installed across select Carrefour hypermarkets in France by 2023.

First sustainability linked bond in Mexico

Santander was the Sustainability Co-ordinator for Coca-Cola FEMSA in the first sustainability-linked bond in the local debt market in Mexico.

First social project bond in Latin America

Santander was the sole structuring agent for Latin America's first social project bond issuance, which is linked to the Puerta de Hierro-Cruz del Viso roadway project in Colombia.

First UK retailer to offer sustainability-linked supply chain finance

Santander partnered with Tesco PLC to offer sustainability-linked Supply Chain Finance (SCF) to their supplier base. Tesco suppliers will be offered preferential financing rates via Santander's market leading SCF platform which incentivizes suppliers to make to positive changes to their business while tracking performance and creating a culture of continuous improvement.



Sustainability coordinator for one of the largest sustainability-linked facilities

Santander acted as Joint Sustainability Coordinator in one of the largest ever sustainability-linked revolving credit facilities (RCF) for Anheuser-Busch InBev and the first of its kind among publicly listed companies in the alcohol beverage industry.



Retail and commercial banking

As one of the top retail and commercial banks, we have the responsibility to support the development of inclusive and sustainable societies.

Building on our existing Green and Social Book offering of ESG-oriented products (launched in 2019), we continue to reinforce our sustainable finance proposition with dedicated purpose lending and sustainability-linked loans.

Focusing on green finance, our products and services are designed around five key verticals adapted to the specific needs of our customers in all geographies.

Green solutions for our individual, SME and corporate customers

	What do we finance?	What do our customers need?
Green buildings	Purchase, construction and renovation of energy-efficient buildings. Renewable power system installation and refurbishments that use 30% less energy.	Developer loans, private solar panel installation, smart meters, energy-efficient lighting, mortgages with an A or B energy rating.
Clean mobility	Clean transport and infrastructure.	Leasing of electric and hybrid vehicles (<50 g CO_2 per passenger-km) and financing of charging stations and bicycle lanes.
Renewables	Renewable energy production and transportation. Energy storage.	Financing of solar panels, wind farms and battery and storage battery production.
Agro	Sustainable and protected agriculture. Land and forest conservation. Sustainable farming.	Financing of greenhouses, reduced irrigation systems, efficient machinery, reforestation and reduced fertilizer use.
Circular economy	Activities to adapt to, or mitigate, climate change; preserve biodiversity; and boost the circular economy.	Financing of water, waste and soil treatment; greater energy efficiency; lower emissions; and conservation.

Sustainability is part of what we do

As part of our commitment to renewable energy, in 2021 we invested in the El Escudo wind farm project in Cantabria, Spain. The licence for the 105MW farm, which will be the region's biggest renewable energy initiative, is expected for 2022. It will also provide the region with the means to execute a rural development plan, drive energy transition to reduce CO_2 emissions by 45,000 tons per year and generate enough energy to power 95,000 homes.

In 2021, we became sustainable finance leaders in our markets thanks to several new partnerships, products and projects. In particular:

UK

Santander mortgages: The first mortgage provider to launch EnergyFact, a free, practical report that gives customers guidance on energy efficiency at home

Green deposit: For businesses with revenue of at least £6.5 million

First global SFCS pilot: CCB, Mortgage and SCUK teams are using the SFCS to track green finance and set medium-term green finance targets

Poland

Wide range of leasing products for individuals and businesses: Zero-emission and hybrid vehicles, solar panels, and energy efficient machinery

Eco-cards: 860,722 issued, making up 42.4% of all cards.

Eco loan: We refund customer fees on eco-friendly purchases

Sustainable debt: the first sustainable debt securities in Poland of PLN 750 million, where the funds are used to finance or refinance green or social assets

Portugal

Personal renewable energy loans: Financing for renewable energy solutions, with a low spread of 2% and loan arrangement fee exemptions

Green mortgages: Housing loans with a spread reduction for properties with an A and A+ energy rating

Auto solutions: Car leasing campaigns with reduced spread for electric and hybrid vehicles.

IFRRU 2020: Loans for full building refurbishment at the most competitive cost in the market

Spain

Leading the way in SFCS implementation: Pilot in retail banking that helped set the path for implementing the SCFS in other markets

Agreement with Uber: Strategic agreement to expand electrical commercial transport

Agreement with the Moves III Plan and Wallbox: Wide range of sustainable vehicles and installation of subsidized charging stations

Plan Renove Agri: Financing for new vehicles for the Agri segment to reduce CO_2 emissions by up to 25%

POWEN agreement: Turnkey installation of private solar equipment

Green renovation loans: Product with special terms and conditions to finance energy savings and renovations for efficiency

NextGenEU Platform: search tool for grants and subsidies under the NextGenEU funds and advisory to apply for them, in collaboration with KPMG and LocalEurope.

SCF Europe

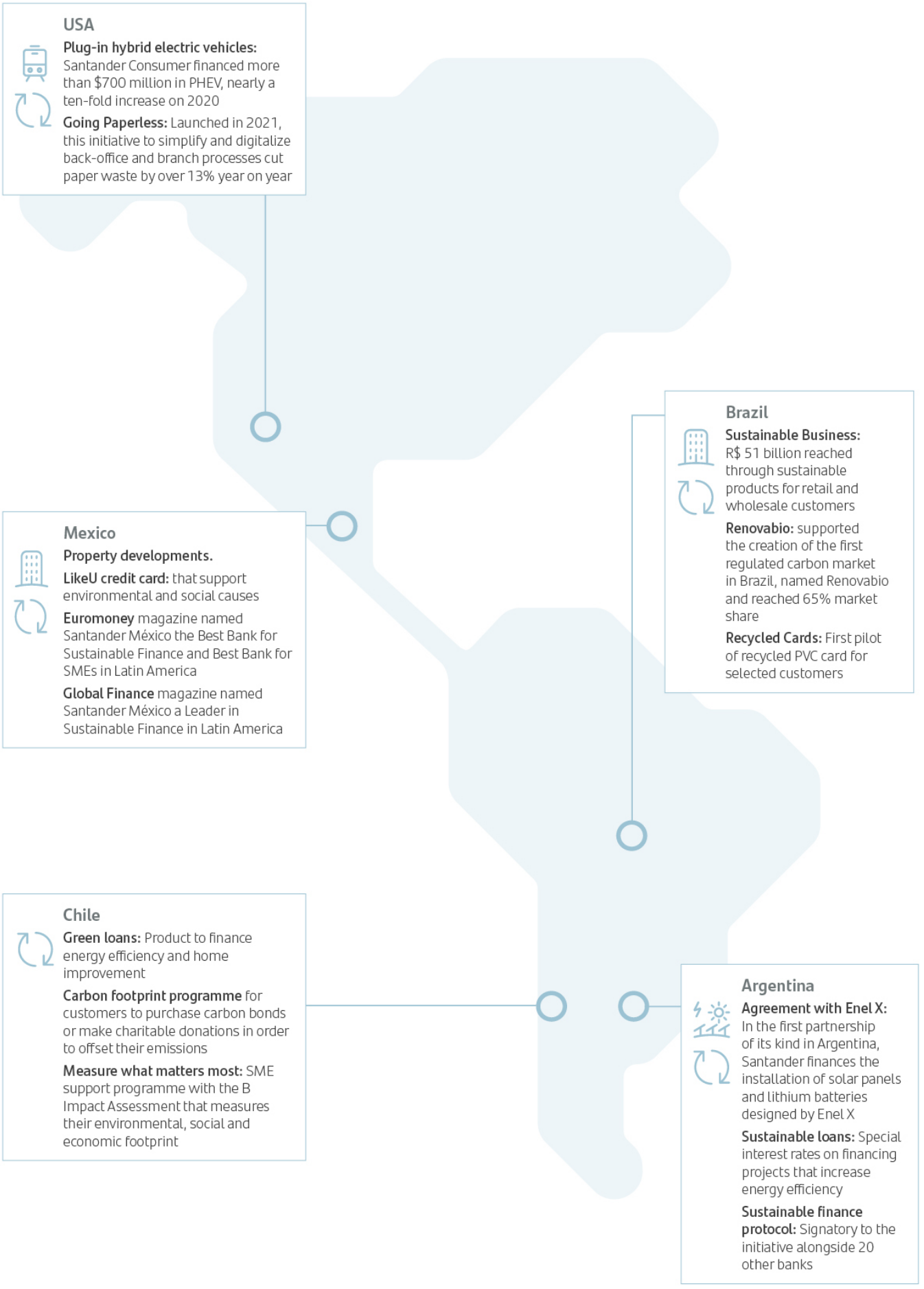
Surge in clean car volumes:: €3.4bn in EV (260% YoY and 9.2% green share) and €4.2bn in hybrid vehicle financing[1]

Switch to LPG engines: Partnership with Repsol to finance LGP engine installation

Financing of charging stations: New proposition to finance charging stations for our customers who own electric vehicles

Solar panels, "pellet" heating systems and boilers: Financing low consumption, eco-friendly systems to aid customers' energy transition

1. Not split for vehicles with emissions of less than 50 gr/CO2 yet. Platform to measure emissions under development

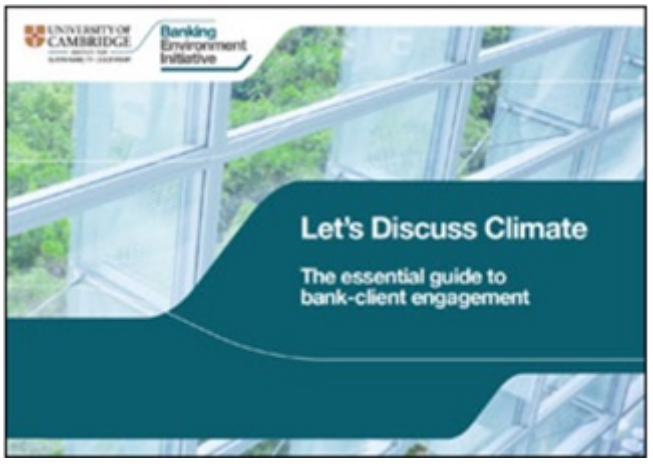

USA
Plug-in hybrid electric vehicles: Santander Consumer financed more than $700 million in PHEV, nearly a ten-fold increase on 2020
Going Paperless: Launched in 2021, this initiative to simplify and digitalize back-office and branch processes cut paper waste by over 13% year on year
Brazil
Sustainable Business: R$ 51 billion reached through sustainable products for retail and wholesale customers
Renovabio: supported the creation of the first regulated carbon market in Brazil, named Renovabio and reached 65% market share
Recycled Cards: First pilot of recycled PVC card for selected customers
Mexico
Property developments.
LikeU credit card: that support environmental and social causes
Euromoney magazine named Santander México the Best Bank for Sustainable Finance and Best Bank for SMEs in Latin America
Global Finance magazine named Santander México a Leader in Sustainable Finance in Latin America
Chile
Green loans: Product to finance energy efficiency and home improvement
Carbon footprint programme for customers to purchase carbon bonds or make charitable donations in order to offset their emissions
Measure what matters most: SME support programme with the B Impact Assessment that measures their environmental, social and economic footprint
Argentina
Agreement with Enel X: In the first partnership of its kind in Argentina, Santander finances the installation of solar panels and lithium batteries designed by Enel X
Sustainable loans: Special interest rates on financing projects that increase energy efficiency
Sustainable finance protocol: Signatory to the initiative alongside 20 other banks

Other initiatives

Banking Environment Initiative (BEI)

SCIB deepened its engagement with clients in key sustainability topics such as sustainability strategy and ESG ratings.

Our collaboration with The University of Cambridge Institute for Sustainability Leadership's (CISL) Banking Environment Initiative on a new guide to bank-client engagement aims to address the need for a market-wide transformation of how banks and corporate clients interact. *Let's Discuss Climate: The essential guide to bank-client engagement* focuses on the customer service model to enable bankers to have meaningful conversations with large corporate clients about their decarbonization plans and associated financing needs.



Carbon markets and nature-based solutions

Santander announced a new and exciting partnership with UK National Parks to support their "Net Zero with Nature" initiative. Together with SCIB, Santander UK is helping fund the restoration of 220 hectares of damaged peatland in Scotland's Cairngorms National Park. Furthermore, with global impact firm Palladium, Santander will explore the role it can play in the carbon and biodiversity credit market.



National Parks UK

Other partnerships

Santander also hosted conferences on the topic of carbon markets, such as "The Future of the Carbon Market in Brazil" and "The Role of Voluntary Carbon Markets" (co-hosted by Verra), to discuss the challenges and opportunities for businesses.

Green Engine

REPSOL Fundación Sylvestris

In 2021, we joined a pioneering project promoted by Repsol Foundation along with Sylvestris Group to drive CO_2 offsetting through reforestation. We will finance the creation of three forests that will cover more than 300 hectares. Thanks to its contribution, Santander will be able to offset the emission of 82,000 tons of CO_2; contribute to protecting biodiversity and the fight against climate change; and support rural development and job creation.

Sustainable finance classification system (SFCS)

Sustainable finance is key to meeting our ambition to be net zero by 2050. That's why we developed our Sustainable finance classification system (SFCS), an internal guide that outlines harmonized criteria to consider an asset green, social or sustainable in all the Group's units and businesses. The SFCS, reviewed by Sustainalytics, draws on such international industry guidelines, standards and principles as the EU Taxonomy, ICMA, LMA Principles, UNEP FI framework and Climate Bond Standards.

It also ensures a consistent approach to sustainable finance across Santander that will enable us to track activities, support product development, mitigate the risk of greenwashing and reinforce our transparency and commitment to promote and increase our green, social and sustainability-linked activity.

International industry guidelines, standards and principles that the SFCS draws upon

EU taxonomy	ICMA Green/ Social Bond Principles	LMA Green Loan Principles	LMA Sustainability Linked Loan Principles	ICMA Sustainability Linked Bond Principles	Febraban taxonomy (Brazil)	UNEP FI framework	Climate Bond Standards

Eligible products

Dedicated purpose	Sustainability linked financing
→ Transaction proceeds go **towards eligible green or social projects** → Eligibility criteria: **Specific activities and thresholds**, based on industry principles and guidelines (ICMA, LMA, Climate Bond Standards) and the EU Taxonomy	→ **Sustainability-linked transactions** designed to incentivize customers to set and work towards ambitious ESG targets → Transaction structured according to pre-determined **sustainability performance targets** (KPIs and/or ESG ratings) → Alignment with recognized **industry principles and guidelines** (ICMA and LMA)

Added value

- Green and social finance standards aligned with international standards
- Green alternatives to the most in-demand traditional products
- Ability to meet growing demand for ESG products and services
- New product development

Information about Article 8 of the EU Taxonomy Regulation

In 2020, the European Parliament adopted the Taxonomy Regulation. It identifies activities deemed sustainable. It states that companies subject to the Non-Financial Reporting Directive (NFRD), including financial corporations, must disclose how operations align with the Taxonomy. The primary indicator of alignment is the green asset ratio (GAR), which companies must publish from 2024. It shows the extent to which financed activities meet the Taxonomy's technical standards.[7] It's the ratio of an entity's Taxonomy aligned assets to balance sheet assets (excluding exposure to sovereigns, central banks and the trading portfolio).

The ratio numerator comprises exposure to these four portfolios:

1. Financial corporations.

2. Non-financial corporations.

3. Households.

4. Local governments.

From 2022, companies must make their eligibility ratio public before calculating and publishing the GAR in 2024. The eligibility ratio is calculated like the GAR. The only difference is that the eligibility ratio numerator covers activities included in the Taxonomy but doesn't determine if they meet the technical criteria that it establishes to consider an activity "green" (environmentally sustainable).

The European Commission has two approaches to calculate the eligibility ratio: mandatory reporting based on information that is publicly disclosed by counterparties; and voluntary reporting, which is an estimate based on proxies when no information about eligibility has been made public by counterparties.

Taking into account its definition, the eligibility ratio has the following limitations:

- Because the numerator and denominator consider different portfolios, it is not possible to reach 100% eligibility. The numerator covers minor exposure because it doesn't include certain portfolios the denominator does.

- The EU Taxonomy does not currently cover every activity that companies perform and banks finance. Therefore, financed activities that it does not assess (e.g. activities under one of the four other environmental objectives in the future) will only be included in the ratio's denominator. Furthermore, activities not included in the Taxonomy are not necessarily deemed harmful to the environment or unsustainable. They are not included because of the Taxonomy's current scope.

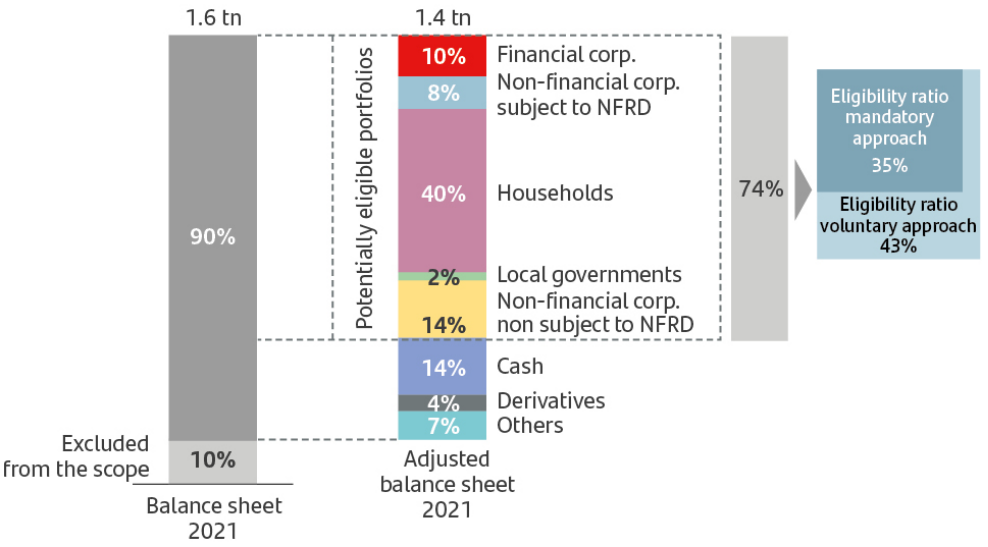
This report provides a ratio calculated exclusively on the household portfolio (which includes home equity loans, building renovation loans and auto loans), plus a voluntary ratio with proxies about the remaining portfolios: financial corporations, non-financial corporations and local governments. We consider proxies to meet, in the best possible way, the requirements of the Disclosures Delegated Act published in December and the FAQs the European Commission published on 20 December 2021 and 2 February 2022, and make interpreting them easier. We will broaden the scope of mandatory reporting as more data from our counterparties becomes available.

As of this report's publication date, no public information is available about our customers' eligibility ratios.[8] We supplemented the mandatory approach with a voluntary approach to offer the most complete eligibility ratio estimation possible.

[7] For now, the EU Taxonomy covers only two environmental objectives (climate change mitigation and climate change adaptation). However, in order to quality as substantially contributing to these two objectives, the activity must cause no significant harm to the remaining four environmental objectives pending to be developed by the EU Taxonomy (sustainable use and protection of water and marine resources; transition to a circular economy; pollution prevention and control; and protection and restoration of biodiversity and ecosystems). Additionally, minimum social safeguards criteria must be met-

[8] The requirement to disclose the ratio of Taxonomy-based eligible and non-eligible economic activities will take effect for financial and non-financial corporations at the same time. Therefore, as of this report's publication date, we do not have information from non-financial corporations

How did we calculate our proportion of eligible activities?[9]



Santander's eligibility ratio is 35% according to mandatory reporting and 43% according to voluntary reporting; however, our balance sheet's potential eligibility ratio is 74%.

Numerator

To meet regulatory requirements, we calculated two numerators:

Mandatory reporting: includes information on the household loan portfolio (residential property loans, building renovation loans and vehicle loans).

Voluntary reporting: supplements the initial calculation with Santander's exposures to local governments and to financial and non-financial corporations. It includes non-financial corporations that are subject to, or exempt from, the Non-Financial Information Disclosure Directive, in line with the considerations of the Platform on Sustainable Finance[10] on voluntary reporting.

In voluntary reporting, we apply these proxies to exposures:

- **Financial corporations**: We only consider 5% of our global exposure, based on the European Central Bank's Investments in EU taxonomy-eligible activities, EU-taxonomy-aligned activities and activities exposed to transition risk study.
- **Non-financial corporations**: We consider eligible 33% of our exposure to non-financial corporations subject to the Non-Financial Reporting Directive (NFRD) and 23% to those not subject to it. We came up with this proxy based on counterparty data in our internal records.

Denominator

Pursuant to the Disclosures Delegated Act, we calculated the eligibility ratio for 90% of the balance sheet. The 10% excluded comprises exposure to sovereign debt, central banks and the trading book.

Eligibility ratios

As explained above, the mandatory ratio, which is the household exposures in the numerator divided by the denominator, as required by the Disclosures Delegated Act, is 35%.

The voluntary ratio, which includes exposures to financial and non-financial corporations and to local governments to supplement that mandatory quotient, is 43%. In addition, exposure to the four numerator counterparties (e.g. financial corporations, non-financial corporations, households and local governments) was 74% of the balance sheet (over the previously mentioned 90%).

[9] Article 10.3 (d) of the Disclosures Delegated Act: To meet EU Taxonomy disclosure obligations, we reviewed our activities according to Article 10 of Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 (the "Disclosures Delegated Act"). The information we disclosed within the scope of prudential consolidation in accordance with Title II, Chapter 2, Section 2 of Regulation (EU) 575/2013 comprises the full balance sheet for the 2021 fiscal year.

[10] The platform takes the place of the Technical Expert Group (TEG) on Sustainable Finance. Under Art. 20 of the Taxonomy Regulation, it will advise the EC on implementing technical selection criteria, revising the Taxonomy Regulation, drafting sustainable finance policy and dealing with social and other sustainability objectives. It will also perform monitoring tasks.

Our exposures reported under the Disclosures Delegated Act

Eligible activities under Article 10, 3 (a) of the Disclosures Delegated Act

	Proportion of eligible economic activities		Proportion of non-eligible economic activities		Coverage
Lending[11]	%[12]	EUR bn	%[13]	EUR bn	%[14]
Mandatory approach	35%	495.70	65 %	920.50	
Voluntary approach	43 %	613.40	57 %	802.90	90 %
Potentially eligible portfolios	74 %	1,050.90	26 %	365.30	

Other exposures to report under Articles 10.3 (b) and (c) of the Disclosures Delegated Act

	Proportion of exposure to total assets	
Counterparty	%	EUR bn
Exposure to central governments, central banks and supranational issuers	7 %	103.3
Exposure to derivatives	4 %	59.1
Exposure to companies exempt from disclosing non-financial information pursuant to Article 19 bis and 29 bis of Directive 2013/34/EU	14 %	200.2
Trading portfolio	4 %	62.6
Interbank lending	1 %	9.8

How do our financial strategy, product design and relations with customers and counterparties comply with Regulation (EU) 2020/852?

Our objectives are consistent with the EU Taxonomy. Our sustainable finance proposition to support our customers' transition considers the standards and enhancements of the EU Taxonomy. See 'Supporting the green transition'.

For more information on how do our financial strategy, product design and relations with customers and counterparties comply with the EU Taxonomy, please see section 'Supporting the green transition'.

[11] We identified relevant counterparties according to the breakdown of financial assets by instrument and industry of the Financial Reporting (FINREP) counterparties we use in other reports.
[12] Of the total assets included in the ratio calculation.
[13] Of the total assets included in the ratio calculation.
[14] Of the total assets of balance sheet.

Environmental footprint

GRI 103-1, 103-2, 103-3

Santander's group-wide strategy is to reduce the ecological impact of our operations to protect and conserve our environment in line with our principles.

To ensure we correctly recognize and deal with our impact, our internal environmental management stands on these three pillars:

- Reducing and offsetting CO_2 emissions.
- Reducing and managing waste responsibly.
- Raising employees' and other stakeholders' awareness of environmental issues.

We've been measuring our environmental footprint (energy consumption, waste and emissions) since 2001. Since then, our strict energy efficiency and sustainability initiatives aims to ensure we have the lowest possible impact on the environment. Upon completing our Year-to-year plan (the 2015-2017 Plan and the 2019-2021 Plan)[15] :

- we reduced electricity consumption by 26%;
- we reduced CO_2 emissions by 88%; and
- we reduced paper consumption by 78%.

This significant drop in emissions was mainly due to our substantially lower electricity use and energy from renewable sources[15].

2021 saw the end of the 2019-2021 Energy efficiency and sustainability plan Santander had executed, with projects to improve energy consumption; use raw materials in buildings; optimize space; and raise employees' awareness of the importance of reducing our environmental footprint inside and outside the office. That plan alone reduced our electricity consumption 4% and our atmospheric emissions by 2%.

We're working on our 2022-2025 energy efficiency and sustainability plan. Some of its +90 measures are:

- using more renewable energy (mainly solar) through self-consumption installations and long-term purchase agreements under which Santander is the end consumer;
- purchasing renewable electricity in every country where it's possible to certify its origin[16];
- installing the latest temperature control and highlighting technology at our branches and office buildings;
- optimizing our use of space;
- creating more parking spaces at our buildings for electric and plug-in hybrid vehicles, and subsidizing electricity costs for our employees;
- using ISO 14001 as the basis for our environmental policies and objectives to reduce consumption, waste and emissions;
- obtaining LEED or BREEAM certification for our buildings; and
- raising awareness among employees in our 10 core markets (where we can confirm our electricity comes from renewable sources).

All of those measures are consistent with Santander's public commitment to be carbon neutral from 2020 by investing in emissions offsetting projects and by sourcing 100% of its electricity from renewable energy.

Carbon neutral

In 2021, Santander set an ambitious goal to achieve carbon neutrality in all our internal operations. After, we offset the rest of emissions we were not able to cut, and each subsidiary was responsible to pay its share of emissions. In 2021, we selected four projects that obtained enough carbon credits to offset the Scope 1, 2 and 3 emissions we could not previously reduce through other means.

They cover renewable energy and reforestation, and are certified under some of the industry's most well-known standards. The Group brought together its core subsidiaries and several areas to demonstrate its strong commitment to reducing its ecological footprint and fighting climate change.

Use of energy from renewable sources

75% of the energy our buildings consume comes from renewable sources; in Germany, Spain, Mexico, Portugal and the UK, that figure is 100%. We continue working on achieving 100% group-wide by 2025.

By buying green energy, we reduced emissions from electricity consumption by 56% and total emissions by 37%.

Carbon offset projects

Reforestation in Galicia

35-year project in Borela (Pontevedra), Spain to reforest 78.34 hectares of land with native species.

Proyecto Oaxaca III

120 MW wind farm in Juchitán de Zaragoza, Oaxaca on the Isthmus of Tehuanetepec in Mexico.

Hydroelectric power production

10,656 MWh hydroelectric power plant to reduce greenhouse gases from fossil fuel electricity production in Nova Marilândia, Mato Grosso in Brazil's mid-west.

Forest conservation in the Madre de Dios region

Project to prevent deforestation and protect degradation in areas in the Tambopata National Reserve and Bahuaja-Sonene National Park in Peru's Madre de Dios region.

[15] The Covid-19 pandemic caused most of our environmental footprint indicators to plummet, as low building occupancy and travel cancellations pared down energy consumption and emissions.
[16] In countries where electricity from renewable sources can be verified.

Implementation and certification of Environmental Management Systems

An environmental management system can make sure a building's ecological impact is being handled properly. Santander aims to get the main buildings that it occupies in its core markets ISO 14001-certified.[17]

Santander also has these certifications:

- LEED PLATINUM for three buildings in Poland: Atrium I, Warszawa Atrium II and Business Garden Poznan.
- LEED GOLD for 10 buildings in Germany (Santander Platz and An der Welle 5), Brazil (Torre Santander and the Campinas data processing centres), Spain (Tripark, Abelias, Luca de Tena and the Santander North data centre) and Poland (Robotnicza, 11 Street).
- Zero Waste for the Santander Group City and for the first time, in the headquarters of Santander España.

Other buildings are also being reviewed for similar certifications.

Other initiatives[18]

In 2020, we began to remodel our Pereda and Hernán Cortés buildings in the city of Santander. Both buildings' design achieved BREEAM certification.

We installed 150 additional electric car charging stations at our corporate centre, the Santander Group City in Boadilla del Monte (Madrid, Spain), bringing our total to 340. In Portugal, UK, and the US some of our buildings also have electric car charging stations.

Furthermore, some buildings in Chile and Brazil began to generate their own renewable power directly. We also distributed 2,544,161 Eco-cards (made out of materials such as PVC and PLA[19]) in 16 geographies, and expect to issue more in the next few years.

Single-use plastics

As part of our public responsible banking commitments, we also set out to remove all unnecessary single-use plastic from offices and buildings in our core markets in 2021. By the end of the year, we had achieved that aim and are now guaranteeing that the materials used in the Group's dining areas, vending machines and delivery service are environmentally friendly.

Climate awareness

Santander organizes local and global awareness campaigns to impress on employees the importance of reducing consumption and waste. Each subsidiary posts news and topics of interest relating to the environment and the Group's environmental initiatives on their internal portals.

For the twelfth year running, we took part in the Earth Hour, switching off the lights at our most emblematic buildings.

2021 Environmental footprint[15 20]

GRI 301-1, 301-2, 302-1, 303-3, 303-5, 305-1, 305-2, 305-3, 306-2, 306-3

	Diff. 2020-2021 (%)
1,808,668 m^3 water consumed from the supply system	−12.4%
903 million kWh total electricity	−1.9%
75% renewable energy	
7,345 T total paper consumption	−18.1%
82% recycled or certified paper	
6,323,866 KG paper and card waste	6.7%
3,714,227 GJ total internal energy consumption	−1.2%

		Diff. 2020-2021 (%)
	118,517 tonnes CO_2 equivalent total emissions (market based)	−39.0%
Scope 1	25,672 tonnes CO_2 equivalent direct emissions	
Scope 2	57,425 T CO_2 indirect emissions from electricity (market based)	
	269,615 tonnes CO_2 equivalent indirect emissions from electricity (location based)	
Scope 3	35,420 tonnes CO_2 equivalent indirect emissions from employee travel	

[17] We have ISO 14001-certified buildings in Argentina, Brazil, Chile, Spain, Mexico and the UK.
[18] Light and noise pollution, however, are not considered significant given the nature of Banco Santander's business.
[19] PLA: Polylactic acid is a biodegradable polymer extracted from lactic acid.
[20] A two-year environmental footprint table, showing employee consumption and emissions is available under the Key metrics section in this chapter.

Financial inclusion and empowerment

Santander Finance for All is our initiative to support financial inclusion and empowerment. We financially empower people in three ways:

Access

We help people access and use basic financial services through simple payment platforms and cash-in/cash-out services in remote and small communities.

860k
people financially empowered in 2021

Finance

We provide tailored finance to individuals and SMEs with lower access to credit or which are in financial distress.

1.1 mn
people financially empowered in 2021

Resilience

We help people gain financial knowledge, making economic concepts more understandable and enabling them to make better financial decisions.

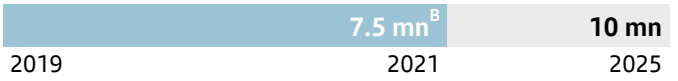
1.3 mn
people financially empowered in 2021

Our goal

We believe we can help more people prosper and enjoy the benefits of growth by empowering them financially, giving them access to tailored financial products and services, and improving their financial resilience through education. We aim to financially empower 10 million people between 2019 and 2025.[A]

Progress

Financially empowered people



Since 2019, we have financially empowered: 2.2 mn people through access initiatives; 2.5 mn people through finance initiatives; and 2.8 mn people through resilience initiatives.

A. To assess our contribution to financial inclusion, we use a methodology with principles, definitions and criteria for counting people who have been financially empowered through our initiatives, products and services.
B. Cumulative since 2019.

In Latin America, we focus on giving people access to the financial system. In mature markets, we seek to ensure that no one needs to leave it.

In the regions where we operate, we target unbanked and underserved individuals and SMEs who have higher barriers in accessing credit, have limited financial knowledge or are in financial distress.

Euromoney named Santander "Best Bank for Financial Inclusion" and "Best Bank for Sustainable Finance in Latin America".

Access

GRI FS7 and FS14

We aim to make sure everyone can access the basic financial products and services they need, and know how to use them.

Promoting digital access

We help people access the banking system through digital platforms so they can make payments; use basic, tailored financial services; take greater control of their finances; and make faster and more secure transactions.

860k
people financially empowered in 2021 through initiatives that promote access to the financial system.

Superdigital: Banking without a bank

Superdigital is Santander's flagship mobile platform for financial inclusion in Brazil, Mexico and Chile. It enables the unbanked and underserved to make cash deposits, withdrawals and payments.

With smartphone ownership growing and network coverage improving in Latin America, it helps communities through basic, user-friendly products and offers a unique banking experience supported by our own technology.

Superdigital enables people without a bank account to:

- make online transactions;
- split bills with others;
- get automated alerts about their finances.

Superdigital aims to serve 5 million customers by 2023 in Latin America.
So far, it has financially empowered 245k people. [21]

Getnet: Accelerating commerce for merchants and their connected ecosystem

Getnet is a global acquiring franchise developed to create opportunities for merchants worldwide. It improves the simplicity, speed, and safety of payments for merchants.

The service is currently present in Brazil, Mexico, Chile, Argentina, Uruguay and Europe, and supports 875k SMEs as of 2021. Additionally, long-tail customers, operating in large part in the informal sector, had an average TPV (Total Payment Volume) growth of 20% YoY.

Getnet has developed pioneering contactless payments solutions for Spain and Mexico public transport network, essential for those with lower income. And with many stores still closed, our Pay by Link solution allows small retailers to continue their day-to-day activities uninterrupted.

Getnet actively collaborates with Prospera, Santander's microfinance proposal in Brazil. It gives microentrepreneurs access to credit, and gives them financial inclusion solutions. This partnership has resulted in 22k active clients. They have increased their TPV by 14%, moving local economies.

Cuenta Life

In 2021, we developed the "Life cycle" to customize our offer to support people financially at different stages of life.

Our clients, having contracted Life products, are part of the Meritolife program, which has a special focus on education, actively encouraging good financial behaviour by rewarding people's efforts.

So far, this initiative has enabled more than 900k people get access to the financial system.

Empowering the base of the pyramid

Santander Mexico's banking services financially empower the elderly and retirees. They tailor products and services to their needs, including consumer credit with custom insurance, fraud monitoring, and a separate credit admission policy and sales channel.

This has enabled Santander to empower 3,221 elderly persons and retirees with income of less than MXN 11,000 a month (EUR 440).

[21] Only Superdigital customers with a reported income below the country's minimum wage are considered financially empowered.

Promoting access to the financial system

GRI FS13

We offer financial support to special groups so customers will not only have access to basic products, but also know how to use them.

Also, our agreements with private and state-run entities widen our footprint to ensure underserved communities can get cash anywhere.

Branches in underbanked and remote regions

Financial inclusion branches and remote agents

Products designed for local communities help unbanked people access the financial system, providing inclusion and growth opportunities.
Financial inclusion branches have already empowered more than 30k people.

Branches in sparsely populated regions

830 agent offices, 518 branches and ATMs provide access to finance and fight social exclusion in communities with under 10k inhabitants.

Branches in low income, small or isolated regions

We have 54 branches in low income, small or isolated communities. They benefit over 105k people, especially in Madeira and the Azores Islands. where 19 branches facilitate access to financial services to over 39k people.

Support to our senior customers

Alzheimer's Society

We encouraged customers with dementia to inform us of their diagnosis through a partnership with Alzheimer's Society. After that, we customized our services for these customers with products adapted to vulnerable customers, such as the Carers Card.

This campaign has enabled us to help 6,654 customers so far.

Define Project

Thanks to an agreement with Universidad de Alicante and co-financed by the European Union, Santander helped the elderly increase their digital finance literacy to use online tools and avoid erroneous transactions and fraud.

Here & Now

In order to support elderly customers (+65), especially those unfamiliar with digital channels, we launched the "Here & Now" service.

In 2021, more than 85k customers were helped in the programme's second run.

Partnerships to reach underserved communities

Correos Cash

Customers can withdraw and deposit cash at 4,675 post offices and rural help desks in Spain. Likewise, postmen and postwomen can deliver cash to all houses in Spain.

Through this partnership, we've helped 2.483 people.

Partnered retailers

Santander's partnerships with retailers enable customers to make basic transactions at more than 22,086 convenience stores, such as 7 Eleven and Oxxo.

Finance

GRI 413-1 and FS7; SASB FN-CB-240a.1, FN-CB-240a.3, FN-CB-240a.4,

We seek to provide tailored finance to people with less access to credit. We offer solutions to unbanked and underserved groups.

Finance for SMEs and entrepreneurs

We aim to foster social mobility by helping low-income and underbanked entrepreneurs set up and grow their businesses.

Santander Microfinance

Our microfinance programmes provide finance to unbanked and underbanked entrepreneurs in eight counties. In 2021, we launched new programmes in Colombia, Peru and Chile.

The programmes include tailor-made micro-loans that help micro-entrepreneurs meet their working capital needs, as well as savings products, current accounts, cards and micro-insurance. A large part of our lending goes to women, who are less likely to have access to financial services in developing countries

Our microfinance programmes benefit from a hybrid model of in-person and online agents, with disbursements in less than 24h and paperless, and the support of commercial agents, which enhances customer experience. Every programme is highly regarded, as it is reflected in the program's NPS, above 80.

1 million
microentrepreneurs supported in 2021

EUR 571 million
total credit disbursed to micro-entrepreneurs in 2021

EUR 323 million in outstanding credit at the end of 2021

72%
of microentrepreneurs supported in 2021 are women

Our micro-finance programmes in Latin America

MEXICO
Launch: 2017

EUR 86 million disbursed in 2021

264k microentrepreneurs supported.

PERU
Launch: 2021

EUR 3.2 million disbursed in 2021.

10k microentrepreneurs supported.

ARGENTINA
Launch: 2018

EUR 98k disbursed in 2021.

173 microentrepreneurs supported.

CHILE
Launch: 2021

Recent launch. 100% based on digital channels.

Tailors credit to customers' financial habits.



EL SALVADOR
Launch: 2006

EUR 70 million disbursed in 2021.*

54k microentrepreneurs supported.*

COLOMBIA
Launch: 2021

EUR 3.3 million disbursed in 2021.

5.4k microentrepreneurs supported.

BRAZIL
Launch: 2002

EUR 473 million disbursed in 2021.

744k microentrepreneurs

URUGUAY
Launch: 2019

EUR 4.4 million disbursed in 2021.

6.7k microentrepreneurs

*These initiatives don't contribute towards our microfinance group results.

Sílvio Neves

Sílvio Neves, from Icoaraci in Belém, Pará state (Brazil), has been an artisan for 45 years. His products include traditional ceramic vases, which cost between BRL 10 and 350. He makes them in a wooden shed, where he couldn't install a kiln to finish production.

"I used to have to travel far to get access to a kiln, but then I managed to get a loan", says Sílvio. "With the loan from *Prospera*, he replaced the wooden shed with stone and installed the kiln."

The loan came in 2021, when a micro-finance agent knocked on his door offering financing. With other professionals from the Icoaraci Artisans Association, BRL 20,000 was raised, and half of the amount went to Silvio to remodel his space.

"I had tried to get loans before, but the rates were too high. Now I have one I can repay."

Luz Mary

Luz Mary is a single mother of three in Zipaquira, Colombia. She describes herself as a tireless fighter, and a forward-looking, optimistic person. She owns livestock and needed financing to cure her cattle of illness. She turned to *Prospera* to get a line of credit and continue her business.

When Luz Mary talks about *Prospera,* she tells of the trust and friendship between her and the people who work there. She says "I can only say thank you to Banco Santander for checking on me and being this supportive, and thank you, life, for letting me meet such charming people."

Virginia Álvarez Castillo

Virginia lives in Valle del Chalco, Estado de México. When demand fell as the pandemic broke out, she had to give up selling shoes from a catalogue.

Thanks to Tuiio, she became a seamstress and started making and selling masks at MXN 15 each, helping her overcome the economic hardship the Covid crisis had caused.

Furthermore, Virginia's new job enabled her to deal with a greater loss: her parents. Now, she dreams of having a bigger business. About Tuiio, she says: "If it were a person, I would say to them "Thanks, friend. Thank you for supporting me when I needed it most".

Feliciana José Albino

Feliciana is an indigenous woman who lives the Agua Zarca region in Pueblo Nuevo, Mexico. Thanks to Tuiio's financial education tool, she is able to bring help with savings to her community in their native language, Mazahua.

Other local initiatives to support SMEs and entrepreneurs

Small business loans

To continue to support small business customers impacted by the Covid-19 pandemic, Santander granted more than 7,900 Paycheck Protection Programme loans to small businesses in 2021, saving over 58k jobs.

EUR 90 million were lent to small businesses operating in low- to moderate-income communities across the bank's footprint.

Loans to SMEs at their risk limit

They include such alternatives to support SMEs as "Fondo Smart" and "Préstamos ICO".

They have enabled Santander to support 185k SMEs since 2019.

Financing low-income households' basic needs

We offer products and services that enable low-income households to access housing and meet other basic financial needs.

Affordable housing programmes

As part of Santander US's Inclusive Communities plan, housing and home improvement programmes support people through low-interest mortgages and paid mortgage insurance for low-income homebuyers.

This initiative has enabled Santander to help more than 130k people since 2019.

Social housing fund

Banco Santander gave 1,100 homes to the "Fondo Social de Viviendas", including 1,008 to rent to low-income individuals.

In addition, Banco Santander has 573 homes to rent at affordable rates. A total of 1,581 rental agreements are signed with lower income customers.

Special programmes for SMEs and individuals in financial distress

Supporting customers in arrears

Helping vulnerable customers get out of arrears with self-service tools and direct colleague support.

This initiative enabled Santander UK to support 103k customers in financial distress in 2021.

IRIS solutions to manage impairments

We review customers who are struggling financially and lend them a hand to support them in meeting their payment obligations.

Since 2019, we have renegotiated the debt of 30k customers and given payment holidays to 51k customers.

Agreement with multilateral organizations

Santander signed agreements in Brazil, Spain, Poland and Portugal with the EIB, EIF and IFC to offer lines of credit with advantageous conditions that help mitigate the effects of the pandemic.

During 2021, those bodies continued the COVID-19 relief initiatives they started in 2020.

TRESMARES CAPITAL

Promoting Tresmares Capital - an independent alternative financing platform for SMEs

Tresmares takes ESG criteria into account in its investment decisions, both in the private equity and in the direct lending division. It seeks to foster growth in SMEs with a positive ESG footprint, and to increase ESG awareness and consciousness in management teams.

To date, Tresmares has invested more than EUR 600 million in Spanish SMEs in such sectors as education, preventive healthcare, sustainable agriculture and recycling solutions, and hopes to continue promoting significant changes in the Spanish economy.

mourocapital

Further collaboration: investing in fintechs

Mouro Capital, the successor to Santander Innoventures, helps startups grow with business models that target people at risk of financial exclusion.

Through Mouro, we allocated EUR 340 million to the fund to invest in 42 fintech companies. We remain committed to deploying capital in such a fast growing space.

Mouro Capital is a responsible investor, incorporating ESG in its investment, and an active signatory of the UN PRI and UN Global Compact, promoting sustainability and diversity initiatives within the VC space.

Some financial inclusion initiatives we've supported are ePesos and Payjoy.

In our commitment to helping people and businesses prosper and to continue to support our fintech partners, we look for new partners to strengthen and expand our lines of action. Some of the new initiatives we've supported are:

Decent: Low-cost health insurance for self-employed individuals only operating in the US.

Upgrade: A US-based mainstream credit platform that's developing a more responsible credit product to help customers get out of persistent cycles of debt.

For more details, see 'Meeting the needs of everyone in society' in this chapter.

Promoting financial education

GRI FS7 y FS16

Our goal is to promote better financial health and market stability by making financial concepts easier to understand and helping people make better choices. Financial education is one of the 10 principles of our consumer protection policy.

We use apps and other digital channels to make financial education more accessible and maximize the impact of our initiatives by promoting:

→ basic financial concepts
→ better use of products and services
→ better management of personal finance
→ the use digital banking
→ responsible consumption and fraud prevention
→ entrepreneurship/training for SMEs
→ sustainable finance
→ behavioural economics

We strengthened our financial education proposition and created common principles for the Group that are consistent with the Organisation for Economic Co-operation and Development (OECD) . As they apply to all initiatives, they guarantee the transparency and quality of our programmes and promote accessible, interactive education and sound decision-making.

79
Initiatives supported in 2021

1.3 million
People financially empowered from financial education initiatives in 2021

2021 Highlights

Global financial education site

It offers content about financial education events. On top of that, it holds information on all of our financial education initiatives.

Financial Literacy for All (FL4ALL)

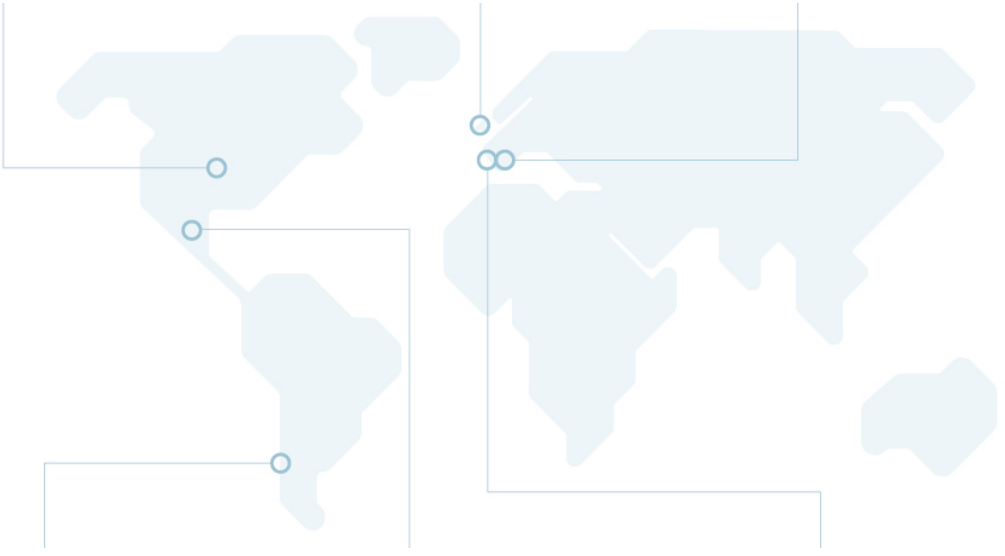
A group of companies, business leaders, sports professionals, NGOs and entertainment groups dedicated to integrating financial education into US culture.

The Numbers Game

Promoting financial education through a series of football-based challenges to reinforce the development of mathematical ability.

***Finanzas para Mortales* - Educational justice**

Alongside *Instituciones Penitenciarias* (Spain's prison authority) and the UCEIF foundation, the Santander Financial Institute (SANFI) ran employee-led basic finance courses to integrate people deprived of liberty. Employees taught prisoners ample economic and financial concepts to enable them to make responsible and informed decisions about daily personal and household finances.



Universia financial education for higher education students

Using digital channels and developed by the Pontificia Universidad Católica de Chile, it aims to empower students from Instituto Profesional AIEP through tools to manage their finances.

Financial education talks

During National financial education week, Santander México gave more than 20 financial education lessons, focusing on the responsible use of financial products and services.

"Tempo é Dinheiro"

Financial education podcasts on such topics as savings, investment, responsible consumption and fraud prevention in the digital era.

Partnerships to boost financial inclusion

Getnet and Prospera

Without GetDay initiative, we are present in 35 cities, around 21 Brazilian states, ensuring access to our solutions throughout the country. We closed 2021 with 44k new entrepreneurs that count with Getnet to make their business grow and prosper.

CEO Partnership for Economic Inclusion

Founded by the United Nations Secretary-General's Special Advocate for Inclusive Finance for Development, Her Majesty Queen Maxima of the Netherlands, the CEOP brings together an influential group of CEOs from several industries to boost financial inclusion around the world.

The collaboration of the CEOs and their companies represents the first high-level private-private partnership to further financial and economic inclusion. With a strong focus on finding sustainable solutions that can drive business growth, the group has agreed to develop partnerships and make specific commitments to expand inclusion among traditionally underserved customer groups such as women, farmers, migrants, and small business owners.



For more details, see www.unsgsa.org/ceop

Santander BEST Africa

Santander BEST Africa (Building Equality through Sustainable Tourism) is the first development cooperation programme driven by Fundación Banco Santander. It's an initiative that aims to contribute to the social and economic development of Africa by supporting women entrepreneurs and their community in the tourism sector, which was greatly affected by the coronavirus crisis.

The programme has supported business continuity and employment during the pandemic and promotes the training and education of, and knowledge sharing between, women entrepreneurs as an effective means of reinforcing economic sustainability in the sector post-Covid.

One of the 34 projects that BEST Africa supports is the Women's Initiative The Gambia (WIG), led by Isatou Ceesay. She and four other women created a recycling centre in Gambia to help tackle the high amounts of waste that accumulate in their community. It acted as a catalyst for many other women to get involved, empowering them through participation in a sustainable and profitable initiative.

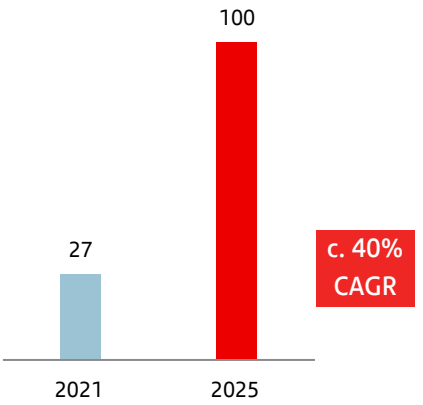
Sustainable Investment

SASB FN-CB-240a.1, FN-CB-240a.3, FN-CB-240a.4,

ESG in Wealth Management & Insurance

Sustainability is shaping our future and driving the opportunities we create for our clients. In 2021, we scaled up our push for sustainability, building on our initial ESG strategy from 2019 to become the best wealth and insurance manager in Europe and the Americas. We set the ambitious goal to reach 100 billion euros in sustainable AUM[1] by 2025, we created a global ESG strategy team to coordinate the efforts of our three businesses and we strengthened SAM's ESG dedicated team. We are deploying ESG training programmes for all our teams, conscious that our employees' engagement is crucial to the success of our strategy. We will continue working with our stakeholders on building a sustainable future through the strengthening of our ESG product offering across our three businesses.

WMI SUSTAINBLE AuMs (€ BN)

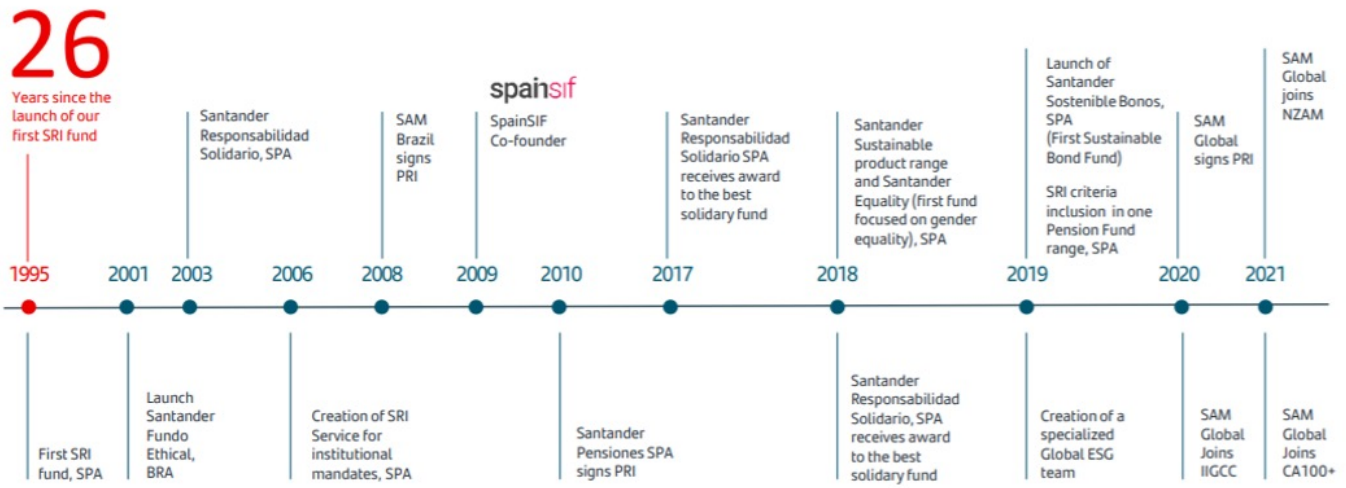


Santander Asset Management

2021 was a crucial year for SAM and its ESG and climate-related commitments. In January, we joined Climate Action 100+, an investor-led collaboration that promotes cooperative dialogue to ensure the world's largest greenhouse gas emitters act on climate change. In March, SAM became the first asset manager in Spain and Latin America (minus Brazil) to sign up to the Net Zero Asset Managers initiative, pledging to become net zero by 2050 and setting the tentative goal of halving net emissions for 50% of our AUM (within the scope of net zero2) by 2030.

As member of the Institutional Investors Group on Climate Change (IIGCC) and signatory to the Principles on Responsible Investment (PRI), in SAM we continue to keep the highest standards in the industry. We're also proud to be the main sponsor of the Global PRI event to be held in-person in Barcelona in September 2022.

A long-term commitment to sustainability and key achievements in 2021



NET ZERO ASSET MANAGER | Climate Action 100+ | PRI Principles for Responsible Investment | IIGCC The Institutional Investors Group on Climate Change

1. AuMs classified as Article 8 and 9 funds (SFDR) from SAM, plus third-party funds and other ESG products according to the EU taxonomy from Private Banking. We apply equivalent ESG criteria to SAM's funds in Latin America.
2. Assets within the net-zero scope are 54% of all SAM assets that currently have a net-zero methodology (of which nearly 50% have carbon measurement ratios). This target could be scaled up as data becomes available.

Our ESG product offering

We offer a full line of ESG products. We have 11 billion euros in AUM in 29 ESG products and 80 mandates in six countries. We are focused on maximizing the number of Article 8 and 9 funds under SFDR and embedding ESG in our pension plans in Spain.

Team, methodology and policies

We are the first asset manager in Spain with a global team dedicated to ESG investment and we continue to improve our ESG methodology (also used by Private Banking and Insurance). Our database covers 25,000 companies and 190 governments, helping us rate SAM and third-party funds and guiding our insurance partners (as asset owners) in their investment mandates with ESG standards.

We also integrated ESG criteria into our stewardship activities by increasing our focus and resources towards our engagement and voting strategy, promoting our global bilateral action with companies to increase their transparency and joining collaborative actions such as Climate Action 100+. Our new voting policy is consistent with our ESG principles. We aim to raise investors' awareness on ESG through our "Rethink invEStinG" publications.

During the past eight years our solidarity funds have donated 22.7 million euros to more than 25 NGOs and specific projects related to social economy, training for employment, health and financial education among other causes. Special donations have been done to La Paz University Hospital in 2020 and Cruz Roja logistics centre in La Palma in 2021. Our Santander Solidario 1 fund was awarded Spain's Best Solidarity Fund in 2021 by Expansion.

XXXII Premios Fondos 2021 Expansión allfunds



SAM ESG product offering

Best-in-class ESG products in our core geographies

San Sostenible RF 1-3
San Sostenible Bonos
3 Pension Funds

San Respons Solidario
Inveractivo Confianza
San Sostenible 1
San Sostenible 2
6 Pension Funds

San Sost. Acciones
San Equality Acciones
4 Pension Funds

80 Mandates

San Ethical Ações
Go Global Equity ESG

SAM RV Global ESG
SAM ESG

Acciones Global Desarrollado

San Sustentàvel

San Sostenible RF 1-3
Go Global Equity ESG

■ Fixed income ■ Balanced ■ Equity ■ Portfolios

For more details on our performance on ESG issues, see www.santanderassetmanagement.com/sustainability

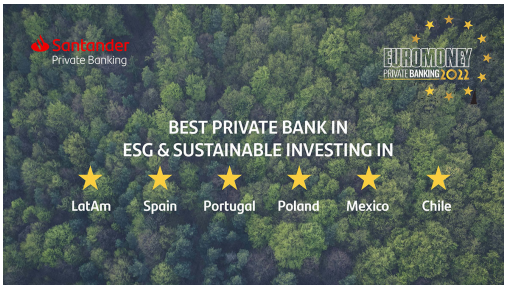
For more details on our net zero commitment, see www.santanderassetmanagement.com/content/view/6924/file/NETZERO%20SAM_NOV21.pdf

Private Banking

In 2021 we rounded off our proposition of impact solutions with renewable energy funds, green bonds, social bonds and equity options. Our sustainable assets (including SAM and third-party funds) amounted to 18 billion euros by the end of the year. Additionally, we provided our bankers with better ESG communications and learning materials, we designated ESG experts in every country and we improved ESG advisory products and services. We also included sustainability topics in our Wealth Talks, our series of exclusive conferences with clients.

Future Wealth, a thematic investment initiative we launched in 4Q'20, also considers the environment as part of its strategy to complement traditional investments with innovative and sustainable sources of growth and returns.

By 2022 we aim to offer sustainable portfolio management (with ESG analysis and reporting) in all our geographies. In the coming months, we will continue to make our list of funds under advice more sustainable by increasing the number of article 8 and 9 funds (according to SFDR).



For more details, see www.santanderprivatebanking.com

1. AuMs classified as Article 8 and 9 funds (SFDR) from SAM, plus third-party funds and other ESG products according to the EU taxonomy from Private Banking. We apply equivalent ESG criteria to SAM's funds in Latin America.

Insurance

We are working on rolling out a sustainable insurance proposition in all our markets by 2024. Based on our social responsibility and with the aim of protecting families and businesses, we want our proposition to focus on 3 dimensions:

- Protect assets classified as sustainable (electric vehicles, green homes, etc.)
- Support types of insurance that contribute to the ESG dimensions (microinsurance, health and life insurance designed for specific target groups, etc.)
- Invest our insurance policies in sustainable assets (i.e. Life savings AUM invested under ESG)

As part of our regular business, we will continue adopting the UN's Principles for Sustainable Insurance (PSI) in all of our joint ventures.

PSI Principles for Sustainable Insurance

Support for higher education and other local initiatives

GRI 203-1, 203-2 and 413-1

2021 progress and 2019-2021 commitments

Support for higher education

106 million
euros invested

162,232
beneficiaries of scholarships, internships and entrepreneurial programmes

Community investment

46 million
euros invested[A]

2.1 million
people helped

Our 2019-2021 commitment

To finance 325.000 scholarships/internships and entrepreneur programmes[B]

→ Results:

387,651
beneficiaries of scholarships, internships and entrepreneurial programmes

Our 2019-2021 commitment

To help four million people through various social action programmes[C]

→ Results:

6.1 million
people helped

More than 150 million euros in total community investment in 2021[A]

Santander remains firmly committed to helping build an inclusive, equitable and sustainable society, with a higher education programme that we have been running through Santander Universities for over 25 years.

So far, **Santander Universities has helped more than 790,000 students**, **professionals, entrepreneurs and SMEs with over 2.1 billion euros** and partnerships with more than 1,000 universities in 15 countries.

A. In addition, Banco Santander made two extraordinary donations in 2021 to Fundación Banco Santander of 55,750,000 Banco Santander shares as financial support for it to bear (at least partially) the costs of fulfilling its founding purposes with the return on the shares. For more details, see 'Other community support programmes' in this section. Santander Portugal created a new foundation that will promote programmes with a high social, economic and environmental impact. The bank made a EUR 22,500,000 donation that will help the foundation begin operations, consolidate its financial base and cover the costs it will incur in pursuit of its founding purpose in the coming years. In the US, Santander Holdings USA, Inc. donated USD 50 million to Santander Consumer USA Foundation so it can fulfil its founding purpose in the coming years by working with, and investing in, organizations and other entities that make a positive social and cultural difference in the communities we serve.
B. The initial target set for the period 2019-2021 was 200,000 beneficiaries of scholarships, grants and entrepreneurship programmes. At the beginning of 2021, and after meeting the target a year early, Santander Universities committed to grant an additional 125,000 scholarships and grants.For more details on the calculation methodology, see "Support for higher education" in this section.
C. For more details on the calculation methodology, see "Other programmes to support communities" in this section.

Support for higher education

106
millions of euros to universities

997
partner universities and institutions in 15 countries[A]

162,232
beneficiaries of scholarships, internships and entrepreneurial programmes[A]

A. This figure only includes universities that have an agreement with Santander Universities. Adding Universia and Fundación Universia's data, the total figure is 1,415 universities and academic institutions in 28 countries.

We have been committed to higher education for 25 years. Santander Universities is a unique global programme that supports education, entrepreneurship and employability. We focus on three areas:

Education

We support access to higher education and academic mobility and encourage excellence and equal opportunity.

40,632
educational scholarship beneficiaries

Entrepreneurship

We support emerging ventures through access to world-class resources such as training, visibility and funding.

23,120
entrepreneurship beneficiaries

Employability

We offer internships, training programmes and upskilling/ reskilling grants for students and professionals.

98,480
employment, upskilling and reskilling scholarships beneficiaries

Commitment

We believe education provides the basis for a fair society and strong economy. Through Santander Universities, we aim to award 325,000 scholarships, internships and entrepreneurship programmes between 2019 and 2021.[B]

Progress

Scholarships, internships and entrepreneurship programmes[C,D]



B. The initial target set for the period 2019-2021 was 200,000 beneficiaries of scholarships, grants and entrepreneurship programmes. At the start of 2021, and after meeting the target one year ahead, Santander Universities is committed to awarding a further 125,000 scholarships and grants.
C. Beneficiary measurement methodology, with procedures that are consistent with Banco Santander's global reporting system in order to determine the reach and intensity of Santander Universities' sponsorship policy in its areas of activity (e.g. education, employment and entrepreneurship). It provides a detailed view of the extent of Santander Universities' sponsorship and a final number of its beneficiaries. It also is the basis for Santander Universities' social impact assessment model.
D. The covid-19 pandemic changed our roadmap for 2020 and 2021. Many traditional (face-to-face) and mobility grants were replaced by online grants with a much broader scope.

Santander Scholarships

We continued to deliver on our commitment to train people by helping them access higher education and academic mobility, boosting their employability and accompanying them in their lifelong learning, as well as encouraging excellence and equal opportunity.

In 2021, we expanded our scholarships to include programmes open to all profiles and ages, paying special attention to new market needs. That's why we're adding two more concepts to our scholarship programmes:

-**Reskilling**: Helping participants acquire new knowledge and skills in different areas, enhancing their professional versatility and increasing their career change options.

-**Upskilling**: Providing training in soft and hard skills to drive more efficient adaptation to current roles at a time of deep transformation and digitalization within companies.

Santander Scholarships has seven categories:

- **Santander Tech** to promote learning about computer programming, blockchain, machine learning, cloud & DevOps and product design strategies.
- **Santander Skills** to help develop the fundamental soft skills needed in today's workplace.
- **Santander Women** to prepare women with career development, leadership training and negotiation skills.
- **Santander Studies** to help students complete their studies with special aid to promote equal opportunity and academic excellence among low-income students.
- **Santander Language** for professional foreign language training.
- **Santander Internship** for university students' job training to provide recent graduates with quality entry-level job opportunities.
- **Santander Research** to provide undergraduates, graduates and PhD students with material and financial support to start or continue their research.

Scholarship platform

The many scholarships we offer alongside universities and institutions around the world can be found on www.becas-santander.com, which closed the year with nearly 2,5 million registered users. Here are a few examples:

Santander Scholarships Women | W50 Leadership - LSE & Santander Women | Emerging Leaders - LSE

In both programmes, developed with LSE, we continued to mould women leaders. W50 is intense training for women with leadership skills and the ambition to be top-level executives. Emerging Leaders is for the next generation of leading women.

Santander Scholarships Tech | Digital Business - The University of Chicago

To celebrate the 25th anniversary of Santander Universities, we worked with University of Chicago to create a special scholarship to teach new technologies and digital management models in highly competitive professional settings.

Santander Scholarships Language I English for Professional development - University of Pennsylvania

Language skills are a springboard to the international market. This programme, developed with University of Pennsylvania, gave participants the opportunity to explore their career path and improve their command of English to accomplish professional objectives.

Santander Scholarships Studies | Santander Graduação

A leading programme in Brazil, it targets underserved university students to provide them with financial aid to continue their studies (e.g. payment of enrolment fees, learning materials, food, transport and other costs).

Santander Scholarships Studies | Erasmus

The core purpose is to promote academic excellence through international experiences, equal opportunity, inclusion and recognition for young people. In its third year, it awarded 2,152 scholarships for courses at educational institutions in the EU, as well as international internships.

Pamela Riquelme, beneficiary of Santander Scholarships Women | W50 Leadership - LSE

"I not only felt closeness and support from professors and mentors at such a top-level school as the London School of Economics, but also joined a global, diverse network of exceptional women who shared, reflected and grew professionally and as women during the programme".

Entrepreneurship

Santander Universities supports emerging ventures, through Santander X (www.santanderx.com), by providing training and connecting them with the resources they need to grow and prosper.

Global initiatives

In 2021 we set global challenges, ran another two Explorer programme´s editions and launched ´Santander X 100´, our global community of selected startups and scaleups from Santander X programmes that promotes innovation as a driver of productivity, economic growth and employment.

Global Challenges

We launched three global challenges to support the most promising solutions that can scale up globally and foster innovation with visibility and training.

Santander X Environmental Challenge

An initiative to support innovative companies worldwide and promote a low-carbon economy. It has two categories which encompass multiple challenges related to climate change. Over 350 startups from all over the world entered.

The winners of the **Be Mindful Category** (to raise awareness about the importance of a small environmental footprint) were:

- **Xilinat** (Mexico), whose sustainable processes turn farm waste into a natural sweetener.
- **Plastecowood** (UK), which turns mixed plastic waste into durable and environmentally friendly plastic wood planks.
- **Breeze Technologies** (Germany), which enables companies to monitor, manage and optimize air quality indoors, in cities and in industrial facilities.

The winners of the **Be Sustainable Category** (to promote green finance and investment) were:

- **Cogo Connecting Good** (UK), an app that shows consumers and companies their carbon footprint's impact in real-time as well as how to reduce it.
- **ClimateTrade** (Spain), a carbon-offset marketplace where companies looking to become carbon neutral choose green projects to invest carbon credits in.
- **Scoobic Urban Mobility** (Spain), sustainable urban transport in the form of last-mile vehicles.

Santander X Global Challenge | Helping Businesses Prosper

We called upon startups and scaleups to submit innovative, scalable solutions that will help SMEs make the digital transition and be more efficient. Close to 500 companies took part.

The winners of the **Startup Category** were:

- **Privasee** (UK), a data protection platform that uses data mapping and self-updating privacy policies.
- **Social Piper** (Mexico), a social media marketing solution for SMEs that uses artificial intelligence.

The winners of the **Scaleup Category** were:

- **Whyline** (Argentina/US), a customer relationship management (CRM) service and marketing channel that clears sources of traffic and data for faster experiences with daily tasks.
- **Alyne** (Germany), a cyber-security and regulatory compliance solution that uses artificial intelligence.

Santander X Global Challenge | Finance For All

A new global challenge for startups and scaleups to submit innovative solutions with growth potential that enable all members of society to obtain banking products and services. Six companies emerged victorious from the over 250 that took part.

The winners of the **Startup Category** were:

- **SympliFi** (UK), which enables immigrants to help their unbanked family members in their home country access financing.
- **Mosabi** (US), an e-learning business platform for better financial health.
- **Lana** (Spain), an app that helps self-employed workers grow their business.

The winners of the **Scaleup Category** were:

- **True Financial Link** (US), a platform that empowers a trustworthy relative to protect family members from unwanted transactions.
- **Bankuish** (EEUU), which gives freelancers and gig workers easy access to pre-approved loans.
- **Coinscrap Finance** (Spain), which enables banks and insurers to understand their customers better and open up new sources of revenue.

Francisco Benedito, CEO of ClimateTrade
Winner of Santander X Environmental Challenge in the Be Sustainable Category

"Top professionals from Banco Santander helped us develop and expand our green economy project. Initiatives such as the Santander X Environmental Challenge are, without a doubt, vital to promote and support green entrepreneurship".

Santander X 100

We launched 'Santander X 100', our global community of selected startups and scaleups from Santander X programmes that promotes innovation as a driver of productivity, economic growth and employment.

It's a new way for top, advanced-stage projects from different countries to network and access advice, training, capital, clients, talent and other valuable resources they need to keep growing.

Current members of Santander X 100 are from Argentina, Brazil, Chile, Germany, Mexico, Spain, the UK and the US.

Explorer

In 2021, we launched two new editions of Explorer programme in Spain to help turn business ideas into projects and solutions. It also touched down in Argentina, Brazil, Chile, Mexico and Portugal for the first time (in an online format).

So far, we've given over 10,000 young entrepreneurs the tools to turn their ideas into viable and sustainable solutions.

Local initiatives

The Santander X local awards recognize and promote the best university entrepreneurial ventures in two categories: ´Launch´, for projects preparing to go to market; and ´Accelerate´, for high-impact startups preparing for accelerated and sustainable growth. The winning teams represented their countries and universities at the Santander X Global Awards.

We held awards contests in Argentina, Brazil, Chile, Mexico, Spain and the UK, with almost 800 projects submitted.


Santander X Argentina Award | Emprendedor X


Santander X Brazil Award


Santander X Chile Award | Ideas X


Santander X Mexico Award


Santander X Spain Award


Santander X Entrepreneurship Awards

Universia

Universia is the world's largest university network, with over 862 affiliated universities in 22 countries. It connects institutions, companies and talented people to create a large collaborative community that offers the best training and employability opportunities.

Employability

Universia aims to support talented young people through these three pillars:

- **Guidance:** Personalized support for students that offers career and training advice to boost their employability.

- **Training:** Opportunities to undertake courses (bootcamps and postgraduate studies) and training programmes that teach key job skills, with access to scholarships, discounts, ISAs, loans and other funding.

- **Employment:** Connection with professional (internships or employment) and networking opportunities with companies through competitions, fairs and other events.

The Universia Jobs platform (https://jobs.universia.net/) has more than 9,000 registered companies and 139 universities with a combined 2 million enrolled students.

In 2021, the first **Universia Virtual Employability Fair** was held in Spain and Portugal, with 59 stands where companies and academic institutions promoted their job and learning opportunities.

We received more than 6,700 registrations for the event, which brought together talented people, instructors and employers to engage in direct dialogue through 22 separate talks.

Universia also organised the **Universia STEAM+: eSports Competition**, where Banco Santander, Atresmedia, Iberdrola, Indra, Naturgy, Nestlé and Securitas Direct were able to unearth fresh talent by testing the digital and interpersonal skills of almost 1,600 young people in an innovative environment.

For more details, visit **www.universia.net**

Fundación Universia

At Fundación Universia we focus on inter-university communities; diversity, inclusion and equity; and new models of responsible financing for access to education.

We are a leader in qualified employment and diverse talent development in companies that support inclusive, responsible and sustainable growth. At Banco Santander, we also act as a lever for cultural transformation, contributing to the inclusion of people with disabilities in education and employment.

Since 2021, Fundación Universia has promoted alternative responsible financing models through Plan Circular and bootcamps that use experiential and digital learning to facilitate access to the most in-demand professions.

Its strategic focus is centred on these UN Sustainable Development Goals (SDGs): Quality Education; Decent Jobs and Economic Growth; and Partnerships for the Goals.

Digital transformation in universities

In just three years, **MetaRed** (which is supported by the Fundación Universia) has become the largest university network of information and communications technology (ICT) managers, counting over 1,500 professionals and 1,100 universities from 14 countries in Ibero-America.

It has facilitated training for more than 500 intermediate profiles, held over 75 top-level webinars and assessed the digital skills of some 20,000 university professors.

Elianni Agüero, a story of progress

Elianni Agüero is 26 years old. She's from Cuba but lives in Madrid. After learning to walk again, adapting to living and studying in another country with a distinct culture, earning a technical degree and making it to Santander, "Overcoming" became her maxim at work and in life.

A computer programming engineer with a master's in Data mining and business intelligence from Universidad Complutense de Madrid, Elianni started as an intern on the Santander Start programme in 2021.

By July, she was signing a contract to join Data Analytics in the Strategy & People Insight function of Santander's Human Resources Division.

Fundación Universia supported Elianni in her job search and career development, while enabling Santander to attract the best talent.

For more details, visit **www.fundacionuniversia.net**

420 scholarships	148 people	6,820 people	71 social
for university students with disabilities	with disabilities hired in companies	benefiting from Fundación Universia's support	ISAs under Plan Circular

Other community support programmes

46
million euros in social investment

+1,400
joint initiatives with NGOs and social enterprises

2.1
million people helped

+28,000
volunteers[A]

A. For more details on volunteering, see 'Talented and motivated team' in this chapter.

We promote several initiatives and programmes that improve people's access to education and foster culture and well-being within our communities. We focus on:

Support for childhood education

+790k
children and young people helped to attain a well-rounded, quality education.

Support for social welfare

+1.3mn
people helped amid the risk of social exclusion or vulnerability.

Support for the arts and science

We promote greater access for people to cultural events and programmes.

Our commitment

We believe we can play a major role in improving the lives of the communities where we operate, and aim to help four million people through our community programmes between 2019 and 2021.[B].

Our progress

People helped
through community programmes (millions)



B. Santander has a corporate approach tailored to its requirements and special model to contribute to society. Reviewed by an external auditor, it consists of principles, definitions and standards to track the people who have benefited from our community investment programmes. It does not count those who have benefited from art and cultural initiatives.
C. Cumulative figure since 2019.

Highlighted initiatives by country



Latin America



- TECHO: Together with TECHO Chile, we support the thousands of families that still live in slums in our country, and projects that are in line with the education and progress of the people: a) TECHO Para Aprender: during 2021 the headquarters number 30 was inaugurated. In these places children and adolescents find safe spaces to develop in educational issues (complementary to school). These spaces are self-managed by the community and supported by the Bank and the Foundation.
- Belén Educa: for 21 years, we worked together Fundación Belén educa to support the children and adolescents from educational institutions through transversal academic programs. In 2021.
- Capacitaciones de oficio: through the donation of training hours from the bank, courses for adults are carried out together with a certified educational institution.
- Compromiso País: Santander has been part of this government initiative since 2018, whose objective is to reduce the high number of adults who have not completed their basic education.



In 2021, we helped over 230,000 people in more than 40 community job and digital training programmes.

- Education scholarships: We supported the scholarship programmes of Cáritas, Cimientos, Fundación León, Voy con Vos, Reciduca and other organizations. They help children, young people and families on their educational journey. 458 people benefited from Santander's support in 2021.
- Centro Educativo Pescar: We helped 40 young people aged 18 to 24 seeking support and opportunity get personal development and job skills training.



We maintained our actions to support society and continued with our private social investment strategy with our programs to support children, teenagers, the elderly and entrepreneurs.

- In the 19th edition of the Amigo de Valor Program, we raised R$ 19.8 MM to support 100 initiatives throughout the country, benefiting over 12 thousand people.
- Campanha Brasil sem Fome (Brazil without Hunger Campaign): we accounted for the donation of 200,351 baskets of staple food.

In total, we accounted for 542.545 thousand people impacted by our social actions, such as the Amigo de Valor, Parceiro do Idoso, Blood Donation Campaign and Volunteer Program.



- Teletón is a flagship community support and social responsibility project that organizes fundraisers. Over 70% of civil servants take part in them to foster a culture of solidarity. In 2021, we raised over 186,000 euros, the highest of any company (for the second time).
- Food drive: Through NGO Redalco, we donated 26,483 meals to the people who needed them most due to the food crisis brought on by the pandemic.



Europe

- Alzheimer's Society. From 2019 – 2021 we focused on how to better support customers with dementia as we aim to become the UK's best dementia-friendly bank. During 2021, we improved 16 Santander UK products and services, including creating a series of videos to help people affected by dementia understand complicated financial topics. Internally, we encouraged our colleagues to take our Dementia Friends e-training, fulfilling our guarantee that at least 50% of our employees are equipped to understand dementia. Our fundraising for Alzheimer's Society also continues through charitable activities, raising over £2million.

- Age UK. Since 2016, we've worked together with Age UK to increase the financial independence of older people. We've developed multiple initiatives such as awareness sessions to help prevent frauds and scams, delivered in local Age UK centres, as well as a programme to help older people learn and develop digital skills to make their lives easier and enable them to do more online.

- Santander Foundation. During 2021 we launched our new strategy for 2021 to 2024, helping people to become digitally and financially empowered. We want to provide grants to organisations in the UK, and support them in delivering digital and financial empowerment to people over the next three years.

- Double the power to help". Together with the Santander Bank Polska Foundation, we organised a collection to support the mental health of children and young people affected by the pandemic. PLN 2 million was donated to 16 hospitals.

- "Memory Gym". We supported the Shipyard Foundation's "Memory Gym" project by co-financing the printing of a mind training for seniors guide. It comprises activities, exercises and worksheets for conducting cognitive function training for the elderly. It also includes educational material on online and mobile banking for seniors. This programme has helped 3280 people.

- "Finansiaki". we support the development of competencies in the area of finance and entrepreneurship. The internet portal https://finansiaki.pl/ includes materials containing ideas for building knowledge through playing with children and spending time together. The "Finansiaki" programme also includes lessons carried out by volunteers in schools and kindergartens. In 2021, 228 children participated in seven such meetings.

- "Here I live, here I change EKO". Santander Bank Polska S.A. Foundation´s grant programme enables local communities to change their environment with parks, gardens, plant murals, "green" bus stops and other eco-projects. Out of 1,062 organisations that applied the competition, 58 projects were selected and co-financed with a total amount of PLN 300 thousand.

- We support Asociación Española Contra el Cancer (The Spanish association against cancer or "AECC") on its Mayores y Cáncer ("Senior citizens and cancer") initiative that promotes a comprehensive care model for patients over 65 and their families.

- We help Banco de Alimentos (Spain's food bank) deliver food to vulnerable groups. Employees volunteer as part of its annual Gran Recogida de Alimentos ("great food drive") campaign.

- Fundación Banco Santander works to build a more equitable, inclusive and sustainable society. We develop projects that cover: culture, environment and research and social action. We help over 200 NGOs a year with digitalization, training and funding for projects aimed at those most affected by the pandemic. We also launched our new Santander for the Seas project, which funded marine biodiversity initiatives with 450,000 euros.

  The foundation is also in charge of preserving and publicizing the Banco Santander Collection. It is expected to play a part in operating the Pereda Building, our iconic headquarters that will soon become a modern space for culture and innovation following its refurbishment (now under way).

  In 2021, Santander made two extraordinary donations to Fundación Banco Santander for a total of 55,750,000 Banco Santander shares. Those donations are intended as financial support for the Foundation, so that the return on the shares allows it to bear (at least partially) the costs of fulfilling its founding purposes.

  We also continue to support the Best for Africa programme (see more information in the Financial Empowerment section).

  For more details visit www.fundacionbancosantander.com

- #TodosJuntos campaign, to raise funds to give access to food and medicine to vulnerable people. €250.000 raised and 74,000 people helped.

- Café Joyeux Portugal. This initiative, developed by Associação VilacomVida, aims to promote the employability and certified professional training of people with intellectual and developmental difficulties.

- Santander Participatory Donation 2021: Santander employees chose 16 social and environmental institutions to be supported by the Bank.

- "Santander Mais Comunidade" Prize. This prize aims to reward and recognize the work of social and environmental organizations chosen by the public, via Santander Portugal's website.

- Partnership with the Portuguese Rugby Federation - social inclusion initiatives through Rugby have been developed with children and teenagers.

- 21 Associação Sara Carreira Scholarships. This Association's purpose is to support children and young people with limited resources, by granting them access to education.



North America



Santander's charitable giving is focused on supporting not-for-profit organizations which help people prosper. 2021 contribution included:

- $9 million to 207 nonprofit organizations focused on financial empowerment, through programming and services for financial education, workforce development, and career readiness for youth, students and adults
- $4 million to 116 nonprofit organizations supporting small businesses and entrepreneurship, through programming and services providing technical assistance, business coaching and mentorship, education and capital grants
- $5 million to 243 nonprofit organizations that increase access to affordable housing and create healthier neighbourhoods through programming and services providing education, housing preservation, and support to individuals and families lacking housing stability

Charitable giving is a pillar of our Inclusive Communities Plan, an $11 billion, five-year commitment of lending, investments, and charitable contributions that began in 2017 and culminates at the end of this year.



More than 16 years ago we started fundraising campaigns throughout our ATM network to support social and environmental causes. Some of them are:

- UNICEF. To protect children's rights and the right to quality education. In 2021, we raised $1,240,075 to help 12,807 indigenous children. We also made a LikeU seed donation of $1,000,000 that benefited 1,569 children to meet their educational needs after schools closed because of the pandemic.
- *Fideicomiso Por los Niños de México, Todos en Santander*. We support children who are in a vulnerable economic and social condition by financing education, health and nutrition projects for them. In 2021, $12,526,750 were donated via 85 projects that helped 13,683 children and teenagers.
- *Reforestamos* ("We reforest"). In 2021 we raised $1,233,940 at ATMs, benefiting 6,800 people. The LikeU seed donation was $200,000 and benefited 102 people.

Key metrics

Employees

GRI 102-7, 102-8, 102-41, 202-1, 202-2, 401-1, 403-9, 403-10, 404-1, 405-1, 405-2 and G4-FS6
SASB FN-AC-330a.1, FN-IB-330a.1, FN0102-06

1. EMPLOYEES BY GEOGRAPHIES AND GENDER[A]

	N° employees		% men		% women		% graduates	
Geographies	2021	2020	2021	2020	2021	2020	2021	2020
Spain[B]	26,249	29,504	50	52	50	48	67	69
Brazil[C]	52,041	42,767	43	46	57	54	62	66
Chile	9,950	10,491	45	46	55	54	42	41
Poland	9,518	10,388	32	31	68	69	86	85
Argentina	8,525	9,058	52	53	48	47	39	53
Mexico[D]	25,957	21,572	46	45	54	55	38	56
Portugal[B]	4,818	6,015	53	54	47	46	63	57
UK[B]	17,578	20,945	44	43	56	57	17	18
USA	15,024	15,677	42	42	58	58	12	11
SCF	14,270	13,359	47	47	53	53	27	31
Others	13,140	11,413	57	53	43	47	47	49
Total	**197,070**	**191,189**	**46**	**46**	**54**	**54**	**47**	**51**

A. Data at year end. The employee data presented is broken down according to the criteria of legal entities, and is therefore not comparable to that found in the Auditors' report and annual consolidated accounts, which are presented by management criteria.
B. The decrease in headcount in these geographies is due to the restructuring processes carried out in 2021.
C. The increase in the number of employees in Santander Brazil was due to the high number of new hires, particularly in technology jobs.
D. The increase in the number of employees in Santander Mexico was due to the integration of outsourcing as the Bank's own staff.

2.1 FUNCTIONAL DISTRIBUTION BY GENDER 2020[A]

	Senior managers					Other managers					Other employees				
	Men		Women		Total	Men		Women		Total	Men		Women		Total
Europe	1,115	75.3%	365	24.7%	1,480	7,350	63.1%	4,290	36.9%	11,640	32,937	44.0%	41,998	56.1%	74,935
North America	228	82.0%	50	18.0%	278	956	67.9%	453	32.2%	1,409	15,816	43.1%	20,875	56.9%	36,691
South America	319	76.0%	101	24.1%	420	3,247	59.0%	2,257	41.0%	5,504	26,614	45.2%	32,218	54.8%	58,832
Group total	**1,662**	**76.3%**	**516**	**23.7%**	**2,178**	**11,553**	**62.3%**	**7,000**	**37.7%**	**18,553**	**75,367**	**44.2%**	**95,091**	**55.8%**	**170,458**

2.2 FUNCTIONAL DISTRIBUTION BY GENDER 2021[A]

	Senior managers[B]					Other managers					Other employees				
	Men		Women		Total	Men		Women		Total	Men		Women		Total
Europe	1,039	72.7%	390	27.3%	1,429	6,865	63.6%	3,926	36.4%	10,791	29,934	44.2%	37,773	55.8%	67,707
North America	223	78.8%	60	21.2%	283	1,181	67.0%	583	33.0%	1,764	18,299	44.1%	23,226	55.9%	41,525
South America	318	73.4%	115	26.6%	433	2,955	60.4%	1,934	39.6%	4,889	29,137	42.7%	39,112	57.3%	68,249
Group total	**1,580**	**73.7%**	**565**	**26.3%**	**2,145**	**11,001**	**63.1%**	**6,443**	**36.9%**	**17,444**	**77,370**	**43.6%**	**100,111**	**56.4%**	**177,481**

A. Data at year end.
B. The higher number of women classified as Senior Managers is the result of the progress made on the public commitment of Responsible Banking on women in senior positions, which aims for 30% of senior managers to be women by 2025.

3.1. WORKFORCE DISTRIBUTION BY AGE BRACKET 2020[A]

Number and % of total

	aged <= 25		aged 26 - 35		aged 36 - 45		aged 46 - 50		age over 50	
Europe	4,871	5.53%	17,996	20.44%	31,827	36.14%	13,484	15.31%	19,877	22.57%
North America	4,704	12.26%	15,597	40.64%	9,317	24.28%	3,279	8.54%	5,481	14.28%
South America	4,141	6.39%	29,498	45.55%	20,796	32.11%	5,072	7.83%	5,249	8.11%
Group total	**13,716**	**7.17%**	**63,091**	**33,00%**	**61,940**	**32.40%**	**21,835**	**11.42%**	**30,607**	**16.01%**

3.2. WORKFORCE DISTRIBUTION BY AGE BRACKET 2021[AB]

Number and % of total

	aged <= 25		aged 26 - 35		aged 36 - 45		aged 46 - 50		age over 50	
Europe	3,764	4.71%	15,659	19.59%	29,730	37.20%	13,316	16.66%	17,458	21.84%
North America	5,320	12.21%	17,817	40.89%	10,942	25.11%	3,505	8.04%	5,988	13.74%
South America	10,989	14.94%	29,107	39.56%	22,378	30.42%	5,616	7.63%	5,481	7.45%
Group total	**20,073**	**10.19%**	**62,583**	**31.76%**	**63,050**	**31.99%**	**22,437**	**11.39%**	**28,927**	**14.68%**

A. Data at year end.
B. The <25 age group increase due to the incorporation of a company in the Group's perimeter with a high number of employees in this age group.

4.1. DISTRIBUTION BY TYPE OF CONTRACT 2020[A]

	Permanent / Full time					Permanent / Part-time				
	Men		Women		Total	Men		Women		Total
Europe	39,325	50.9%	37,957	49.1%	77,282	874	11.7%	6,576	88.3%	7,450
North America	16,681	44.9%	20,500	55.1%	37,181	135	24.9%	499	78.7%	634
South America	29,927	46.9%	33,861	53.1%	63,788	232	25.6%	676	74.4%	908
Group total	**85,933**	**48.2%**	**92,318**	**51.8%**	**178,251**	**1,241**	**13.8%**	**7,751**	**86.2%**	**8,992**

	Temporary / Full time					Temporary / Part-time				
	Men		Women		Total	Men		Women		Total
Europe	992	37.4%	1,658	62.6%	2,650	211	31.4%	462	69.0%	673
United Kingdom	184	32.7%	379	67.3%	563	0	0%	0	0%	0
South America	21	35.0%	39	65.0%	60	0	0%	0	0%	0
Group total	**1,197**	**36.6%**	**2,076**	**63.4%**	**3,273**	**211**	**31.4%**	**462**	**69.0%**	**673**

4.2. DISTRIBUTION BY TYPE OF CONTRACT 2021[A,B]

	Permanent / Full time					Permanent / Part-time				
	Men		Women		Total	Men		Women		Total
Europe	35,465	51.0%	34,119	49.0%	69,584	826	12.6%	5,706	87.4%	6,532
North America	19,222	45.5%	23,031	54.5%	42,253	119	21.0%	448	79.0%	567
South America	31,510	45.1%	38,398	54.9%	69,908	853	23.8%	2,725	76.2%	3,578
Group total	**86,197**	**47.4%**	**95,548**	**52.6%**	**181,745**	**1,798**	**16.8%**	**8,879**	**83.2%**	**10,677**

	Temporary / Full time					Temporary / Part-time				
	Men		Women		Total	Men		Women		Total
Europe	1,398	42.0%	1,933	58.0%	3,331	149	31.0%	332	69.2%	480
United Kingdom	362	48.1%	390	51.9%	752	0	0.0%	0	0.0%	0
South America	47	55.3%	38	44.7%	85	0	0.0%	0	0.0%	0
Group total	**1,807**	**43.4%**	**2,361**	**56.6%**	**4,168**	**149**	**31.0%**	**332**	**69.2%**	**480**

A. Data at year end.
B. The increase in part-time permanent employees in South America is due to the addition of a company in the Group's perimeter with a high number of part-time permanent employees.

5. ANNUAL RATE OF CONTRACTS BY GENDER

	2021			2020		
	Men	Women	Total	Men	Women	Total
Employees with permanent /full time contract	84,724	92,308	177,033	85,796	94,435	180,231
Employees with permanent/part-time contracts	1,776	9,502	11,277	1,155	7,717	8,872
Employees with temporary/full-time contracts	1,158	1,776	2,934	1,441	2,291	3,732
Employees with temporary/part-time contracts	165	292	456	211	470	681
Group Total	**87,822**	**103,878**	**191,700**	**88,603**	**104,913**	**193,516**

6.1. ANNUAL RATE OF CONTRACTS BY AGE BRACKET 2020

	aged <= 25	aged 26-35	aged 36-45	aged 46-50	aged over 50	Total
Employees with permanent /full time contract	10,668	58,474	59,343	20,825	30,922	180,231
Employees with permanent/part-time contracts	1,099	2,360	2,426	887	2,100	8,872
Employees with temporary/full-time contracts	1,001	1,621	652	159	298	3,732
Employees with temporary/part-time contracts	209	252	143	26	51	681
Group Total	**12,977**	**62,707**	**62,564**	**21,898**	**33,370**	**193,516**

6.2. ANNUAL RATE OF CONTRACTS BY AGE BRACKET 2021

	aged <= 25	aged 26-35	aged 36-45	aged 46-50	aged over 50	Total
Employees with permanent /full time contract	10,725	56,373	60,418	21,699	27,818	177,033
Employees with permanent/part-time contracts	2,641	2,923	2,733	924	2,055	11,277
Employees with temporary/full-time contracts	800	1,299	541	137	157	2,934
Employees with temporary/part-time contracts	150	159	82	13	52	456
Group Total	**14,317**	**60,754**	**63,774**	**22,772**	**30,083**	**191,700**

7. ANNUAL RATE OF CONTRACT BY CATEGORY

	2021				2020			
	Senior Managers	Other Managers	Other employees	Total	Senior Managers	Other Managers	Other Employees	Total
Employees with permanent /full time contract	2,118	17,194	157,720	177,033	2,150	18,911	159,169	180,231
Employees with permanent/part-time contracts	5	165	11,107	11,277	7	154	8,711	8,872
Employees with temporary/full-time contracts	16	81	2,836	2,934	13	83	3,636	3,732
Employees with temporary/part-time contracts	1	13	442	456	0	16	665	681
Total Grupo	**2,141**	**17,454**	**172,105**	**191,700**	**2,170**	**19,164**	**172,182**	**193,516**

8. EMPLOYEES WHO WORK IN THEIR HOME COUNTRY[A,B]

%

	Managers		Other employees		Total	
	2021	2020	2021	2020	2021	2020
Europe	87.26	88.45	95.76	95.38	95.61	95.27
North America	91.52	91.01	99.74	99.75	99.69	99.69
South America	91.46	91.19	98.22	98.25	98.18	98.21
Group total	**88.67**	**89.30**	**97.57**	**97.24**	**97.47**	**97.15**

A. Data at year end.
B. Data from US is not included as it is confidential information.

9.1 DIFFERENTLY-ABLED EMPLOYEES RATIO BY REGION[A,B]

%	2021	2020
Europe	1.74	1.64
North America	0.24	0.21
South America	3.07	3.27
Group total	**1.90**	**1.90**

9.2. DIFFERENTLY-ABLED EMPLOYEES[A,B]

Number of employees	2021	2020
Spain	408	386
Rest of the Group	3,295	3,191
Total Group	**3,703**	**3,577**

A. Data at year end.
B. Data from Mexico not included as it is confidential information.

10. COVERAGE OF THE WORKFORCE BY COLLECTIVE AGREEMENT[A]

	2021		2020	
Countries	%	N° Employees	%	N° Employees
Spain	99.92	26,228	99.80	29,444
Brazil	98.66	51,345	99.19	42,422
Chile	100.00	9,950	100.00	10,491
Poland	0.00	0	0.00	0
Argentina	73.78	6,290	72.64	6,580
Mexico	30.94	8,031	30.34	6,544
Portugal	99.42	4,790	99.14	5,963
UK	100.00	17,578	100.00	20,945
US	0.00	0	0.00	0
SCF[B]	51.73	7,382	56.89	7,600
Other business units	59.60	7,832	60.01	6,849
Total Group	**70.75**	**139,426**	**71.57**	**136,838**

A. Data at year end.
B. SCF data for 2020 recalculated to consider its US-based employees not covered by the collective bargaining agreement.

11.1. DISTRIBUTION OF NEW HIRES BY AGE BRACKET 2020

% of total

	aged <= 25	aged 26-35	aged 36-45	aged over 45	aged > 50
Europe	25.93	39.57	23.55	6.13	4.82
North America	36.49	39.29	14.75	4.50	4.97
South America	19.67	50.67	22.18	3.97	3.51
Group total	**28.84**	**42.05**	**19.58**	**4.95**	**4.58**

11.2. DISTRIBUTION OF NEW HIRES BY AGE BRACKET 2021[A]

% of total

	aged <= 25	aged 26-35	aged 36-45	aged over 45	aged > 50
Europe	27.57	40.68	21.92	5.84	3.98
North America	30.77	41.13	17.65	4.78	5.67
South America	32.33	46.57	16.68	2.61	1.80
Group total	**30.84**	**43.24**	**18.00**	**4.09**	**3.82**

A. The increase in new hires in South America was mainly due to the high number of new hires in Santander Brazil, especially in technology positions.

11.3. DISTRIBUTION OF NEW HIRES BY GENDER

	2021			2020		
	Men	Women	Total	Men	Women	Total
Europe	8.16%	7.34%	7.73%	7.79%	6.24%	6.97%
North America	36.95%	32.88%	34.72%	18.14%	19.55%	18.92%
South America	22.63%	17.04%	19.50%	9.03%	3.98%	6.34%
Group total	**19.68%**	**16.76%**	**18.09%**	**10.20%**	**8.25%**	**9.15%**

12. DISTRIBUTION OF DISMISSALS[A,C]

by gender

	2021						2020					
	Men	%[B]	Women	%[B]	Total	%[B]	Men	%[B]	Women	%[B]	Total	%[B]
Senior managers	77	4.87%	18	3.19%	95	4.43%	30	1.81%	4	0.78%	34	1.56%
Other managers	719	6.54%	341	5.29%	1,060	6.08%	470	4.07%	225	3.21%	695	3.75%
Other employees	7,348	9.50%	9,237	9.23%	16,585	9.34%	4,267	5.66%	5,466	5.75%	9,733	5.71%
Total Group	**8,144**	**9.05%**	**9,596**	**8.96%**	**17,740**	**9.00%**	**4,767**	**5.38%**	**5,695**	**5.55%**	**10,462**	**5.47%**

by age

	2021			2020		
	Men	Women	Total	Men	Women	Total
aged <=25	737	1,149	1,886	342	363	705
aged 26-35	1,961	2,535	4,496	1,502	1,878	3,380
aged 36-45	1,828	2,770	4,598	1,286	1,932	3,218
aged 46-50	743	863	1,606	499	553	1,052
aged >50	2,875	2,279	5,154	1,137	970	2,107
Total Group	**8,144**	**9,596**	**17,740**	**4,766**	**5,696**	**10,462**

A. Dismissal: unilateral termination decided by the company of an employment contract not subject to term expiration. The concept includes encouraged redundancies within the context of restructuring processes.
B. Percentage expressing the number of dismissals over the total number of employees in each group.
C. Dismissals increased due to restructuring in some of the Group's subsidiaries in 2021.

13. EXTERNAL TURNOVER RATE BY GENDER[A,B]

% of total

	2021			2020		
	Men	Women	Total	Men	Women	Total
Europe	17.62	17.32	17.46	8.71	9.46	9.11
North America	25.49	24.54	24.97	19.92	16.88	18.22
South America	21.03	18.94	19.86	14.54	14.11	14.31
Group total	**20.53**	**19.51**	**19.97**	**12.77**	**12.51**	**12.63**

A. Excludes temporary leaves of absence and transfers to other Group companies.
B. The rate of rotation increased due to restructuring in some of the Group's subsidiaries in 2021.

14.1 EXTERNAL TURNOVER RATE BY AGE BRACKET[A] 2020

% of total

	aged <= 25	aged 26-35	aged 36-45	aged 46-50	aged over 50	Total
Europe	26.36	10.58	6.17	5.48	10.58	9.11
North America	32.53	17.52	14.91	13.45	16.38	18.22
South America	15.50	14.15	12.96	12.91	20.88	14.31
Group total	**25.20**	**13.83**	**9.76**	**8.40**	**13.38**	**12.63**

A. Excludes temporary leaves of absence and transfers to other Group companies.

14.2. EXTERNAL TURNOVER RATE BY AGE BRACKET[A] 2021

% of total

	aged <= 25	aged 26-35	aged 36-45	aged 46-50	aged over 50	Total
Europe	38.63	18.70	11.04	8.62	29.27	17.46
North America	51.03	26.06	17.22	16.03	18.02	24.97
South America	25.73	20.87	16.90	13.51	21.36	19.86
Group total	**34.87**	**21.67**	**14.18**	**11.00**	**25.45**	**19.97**

A. Excludes temporary leaves of absence and transfers to other Group companies.

15. REMUNERATION BY FUNCTION, GENDER AND REGION[A]

	Senior managers[B]				Other managers[C]			
	Men	Women	GPG ratio (Median)[D]	GPG-SAB ratio (Median)[E]	Men	Women	GPG ratio (Median)[D]	GPG-SAB ratio (Median)[E]
Europe	289,263	191,317	26.5%	21.1%	90,895	63,950	31.5%	26.5%
North America	690,088	445,220	18.4%	5.5%	233,580	196,908	5.6%	1.8%
South America	377,932	219,080	30.3%	17.3%	76,807	69,465	(4.4%)	(2.2%)
Group total	**427,242**	**265,458**	**29.3%**	**21.6%**	**128,859**	**100,224**	**13.9%**	**12.1%**

Total remuneration (average)[A]	384,971	118,633
Group Total 2020	415,975	107,477
Variation 2021 vs 2020 (%)	(7.5)%	10.4%

	Other employees[C]								
	Men	Women	Ratio GPG (Median)[D]	GPG-SAB ratio (Median)[E]	Men	Women	GPG Ratio (Median)[D]	GPG-SAB ratio (Median)[E]	Total employees
Europe	49,648	38,065	19.4%	18.0%	57,269	40,052	20.9%	19.1%	47,596
North America	44,960	33,121	23.3%	14.7%	64,777	38,344	29.7%	26.2%	49,975
South America	23,510	17,094	16.8%	22.9%	29,080	18,511	19.4%	25.7%	23,210
Group total	**40,244**	**29,717**	**25.9%**	**27.0%**	**53,785**	**33,350**	**32.3%**	**30.0%**	**42,628**

Total remuneration (average)[A]	34,352		53,785	33,350	32.3%	30.0%	42,628
Group Total 2020	34,602		55,151	34,476	31.7%		43,867
Variation 2021 vs 2020 (%)	(0.7)%		(2.5)%	(3.3)%	2.0 %		(2.8)%

By Age Brackets

	aged <= 25	aged 26-35	aged 36-45	aged 46-50	aged over 50	Total
Total remuneration (average)[A]	11,819	23,394	42,250	59,824	66,958	42,628
Group Total 2020	16,140	26,943	47,253	64,868	69,482	43,867
Variation 2021 vs 2020 (%)	(26.8)%	(13.2)%	(10.6)%	(7.8)%	(3.6)%	(2.8)%

A. Data at 2021 year-end. Employees' average total remuneration includes their annual base salary, pensions and variable remuneration paid in the year.
B. Includes group sr. executive vp, executive vp and vice-president.
C. The variation includes the effect of internal reclassification between employee categories in different geographies.
D. GPG Ratio (median) includes annual base salary and variable remuneration paid in the year.
E. GPG Ratio - SAB (median) includes annual base salary paid in the year.

16. AVERAGE REMUNERATION SENIOR OFFICERS

Thousands euros

				2021			2020		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Executive officers[A]	1	1	2	10,724	13,752	12,238	6,247	7,239	6,743
Non-executive officers	7	5	12	363	293	334	239	207	227
Senior officers	12	3	15	4,758	1,597	4,126	3,610	2,288	3,362
Diff. Male vs Female					(66.4)%			(36.6)%	

A. Sergio Rial excluded from the calculation of executive directors

16.1 RATIO BETWEEN THE BANK'S MINIMUM ANNUAL SALARY AND THE LEGAL MINIMUM ANNUAL SALARY BY COUNTRY AND GENDER 2020

	% Legal Minimum Wage		
	Men	Women	% legal minimum wage
Germany	100.32%	100.32%	100.32%
Argentina	380.69%	380.69%	380.69%
Brazil	178.62%	178.62%	178.62%
Chile	179.14%	144.15%	161.64%
US	236.45%	236.45%	236.45%
Spain	175.29%	175.29%	175.29%
Mexico	160.09%	160.09%	160.09%
Poland	101.54%	100.00%	100.77%
Portugal	188.98%	188.98%	188.98%
UK	176.26%	176.26%	176.26%

16.2 RATIO BETWEEN THE BANK'S MINIMUM ANNUAL SALARY AND THE LEGAL MINIMUM ANNUAL SALARY BY COUNTRY AND GENDER 2021

	% Legal Minimum Wage		
	Men	Women	% legal minimum wage
Germany	205.45%	205.45%	205.45%
Argentina	375.62%	375.62%	375.62%
Brazil	185.62%	185.62%	185.62%
Chile	177.16%	145.36%	161.26%
US	259.78%	262.31%	261.04%
Spain	132.72%	155.44%	144.08%
Mexico	165.01%	165.01%	165.01%
Poland	100.00%	100.00%	100.00%
Portugal	181.95%	181.95%	181.95%
UK	206.58%	158.56%	182.57%

17. TRAINING

	2021	2020
Total hours of training	6,030,787.47	5,913,435.04
% employees trained[A]	99.05	100.00
Total attendees	5,578,255	5,939,158
Hours of training per employee[A]	30.60	30.93
Total investment in training	75,138,476	61,304,729
Investment per employee	381.28	320.65
Cost per hour	12.46	10.37
% female participants	53.39	53.66
% of e-learning training attendees	91.42	91.97
% of e-learning hours	76.22	48.06
Employee satisfaction (up to 10)	8.46	8.18

A. Calculated considering the staff at the end of each year. The incorporation of both employees and entities to the Group at the end of 2021 fiscal year has a signification impact on the result of this indicator in comparison to 2020.

18. HOURS OF TRAINING BY CATEGORY

	2021		2020	
	Hours	Average	Hours	Average
Senior officers	60,804	28.35	65,274	29.97
Managers[A]	695,353	39.86	940,619	50.7
Other employees	5,274,630	29.72	4,907,542	28.79
Group total	**6,030,787**	**30.6**	**5,913,435**	**30.93**

A. Fewer training hours due to downsizing.

19. HOURS OF TRAINING BY GENDER

	2021	2020
	Average	Average
Men	32.75	31.76
Women	28.8	30.21
Group total	**30.6**	**30.93**

20. ABSENTEEISM BY GENDER AND REGION[A,B,C]

	2021			2020		
	Men	Women	Total	Men	Women	Total
Europe	2.50	5.12	3.90	2.60	5.00	3.89
North America	0.93	1.75	1.38	0.81	1.56	1.23
South America	1.50	2.92	2.27	2.07	3.99	3.12
Group total	**1.83**	**3.63**	**2.80**	**2.08**	**3.97**	**3.11**

A.Days missed due to occupational accidents. non-work related illness and non-work related accident for every 100 days worked.
B. Santander UK does not count hours not worked due to covid-19 as absences so they will not affect the remuneration objectives set prior to the health crisis.
C. Banco Santander Brazil only considers the accidents that after an internal specialist investigation were recognized as work-related and had a Communication of work-related accident ("CAT") registered in the Brazilian Social Security in 2021. Likewise, this indicator only considers the cases that had 15 or more days of absence due to non-work-related accidents or common illness.

21. ACCIDENT RATE[A,B]

%	2021			2020		
	Men	Women	Total	Men	Women	Total
Europe	0.04	0.10	0.07	0.04	0.12	0.08
North America	0.00	0.02	0.01	0.01	0.02	0.01
South America	0.01	0.02	0.02	0.02	0.05	0.04
Group total	**0.02**	**0.05**	**0.04**	**0.03**	**0.07**	**0.05**

A. Hours missed due to occupational accident involving leave between the number of total hours worked. The hours worked are theoretical hours. This includes accidents *in itinere*.
B. Banco Santander Brazil only considers the accidents that after an internal specialist investigation were recognized as work-related and had a Communication of work-related accident ("CAT") registered in the Brazilian Social Security in 2020Banco Santander Brazil only considers the accidents that after an internal specialist investigation were recognized as work-related and had a Communication of work-related accident ("CAT") registered in the Brazilian Social Security in 2021

22. OCCUPATIONAL HEALTH AND SAFETY[A,B]

	2021			2020		
	Men	Women	Total	Men	Women	Total
Frequency rate[C]	1	1	1	1	2	2
Severity rate[D]	0.03	0.08	0.06	0.03	0.1	0.07
No. of fatal occupational accidents	0	0	0	1	0	1
Work related illness[E]	0	0	0	0	0	0
Total number of accidents[F]	183	388	571	197	475	672

A. Occupational injuries that can be documented are reported, without exception for serious injuries.
B. Banco Santander Brazil only considers the accidents that after an internal specialist investigation were recognized as work-related and had a Communication of work-related accident ("CAT") registered in the Brazilian Social Security in 2021.
C. Number of accidents at work with leave for every 1,000 hours worked. The hours worked are theoretical hours. In itinere accidents are included.
D. Days not worked due to work accident with leave for every 1,000 hours worked. The hours worked are theoretical hours. In itinere accidents are included.
E. No member of the group's staff is exposed to occupational diseases, given that the activity carried out by Santander professionals and the sector in which they operate is not recognized in Royal Decree 1299/2006.
F. Refers to occupational accidents with sick leave. Including accidents on the way to and from work.

Customers

23. GROUP CUSTOMERS[A]

	2021	2020	var.
Europe	**45,899,479**	**47,122,309**	**(3)%**
Spain	13,571,008	13,970,512	(3)%
Portugal	3,060,473	3,047,020	—%
United Kingdom	23,569,326	24,516,785	(4)%
Poland	5,430,274	5,213,476	4%
Others Europe[B,C]	268,398	374,516	(28)%
South America	**63,031,232**	**57,208,967**	**10%**
Brazil[D]	53,445,934	48,347,665	11%
Chile	4,113,888	3,605,104	14%
Argentina	4,152,335	3,913,086	6%
Others South America[E]	1,319,075	1,343,112	(2)%
North America	**24,494,428**	**24,314,248**	**1%**
México	19,592,102	18,898,106	4%
United States[F]	4,731,155	5,136,495	(8)%
Others North America[C,G]	171,171	279,647	(39)%
Digital Consumer Bank	**19,436,550**	**19,610,511**	**(1)%**
Santander Consumer Bank[H]	17,857,599	18,237,909	(2)%
Openbank	1,578,951	1,372,602	15%
Total	**152,861,690**	**148,256,035**	**3%**

A. Figures corresponding to total customers, understood as the first holder of at least one product or service with a current contract. 2020 data has been redefined to accommodate 2021 reporting segments.
B. Rest of Europe: BP Rest (Bahamas and Switzerland), SCIB (not included individually in each country) and PagoNxt.
C. The changes in customers in these segments are due to changes in the scope of consolidation.
D. Brazil: Private Banking: Decision groups; Santander Financiamiento: Financeira's exclusive customer data.
E. Rest of South America: Uruguay (including customers of Paganza, Creditel and Retop), Peru, Colombia and PagoNxT.
F. US includes BPI Miami
G. Rest of North America: PagoNxT
H. SCF includes customers in all European countries, including the UK.

24. DIALOGUE BY CHANNEL

	2021	2020	Var .2021/2020 %.
Branches			
Number of branches	9,879	11,236	(12.1)%
Digital banking[A]			
Users[B]	47.44	42.36	12.0 %

A. Santander Consumer Finance not included.
B. Counts once for users of both Internet and mobile banking.

25. CUSTOMER SATISFACTION

	2018	2019	2020	2021
Argentina	83	86	90	91
Brazil[A]	80	86	89	n/a
Chile	86	86	87	90
Uruguay	95	94	93	96
Spain	87	86	87	84
Poland	98	98	99	96
Portugal	91	86	86	90
UK	97	96	94	95
Mexico	98	95	95	94
USA	83	88	87	88
Group	**89**	**90**	**91**	**92**

A. In 2021 Brazil has not measured the customer satisfaction indicator. It will measure it again in 2022.

26. TOTAL COMPLAINTS RECEIVED[A]

	2021	2020	2019
Spain	120,953	150,298	91,046
Portugal	3,570	4,036	4,655
United Kingdom	20,069	22,625	30,298
Poland	5,179	6,057	6,193
Brazil[B]	195,340	146,067	133,841
Mexico	82,033	80,031	75,459
Chile	8,009	8,328	6,474
Argentina[C]	5,013	3,512	4,106
US	3,205	4,292	4,097
SCF	35,215	39,064	30,535

A. Compliance metrics according to group-wide criteria, which may not match local criteria such as that of the UK's Financial Conduct Authority (FCA) or in Brazil.
B. Increase in Brazil due to the inclusion of claims that were handled independently last year and to the government's enhancement of official channels.
C. Increase in Argentina mainly due to fraudulent online purchases amid growing e-commerce since the outbreak of the pandemic.

27. Equator Principles

	Project Finance		
Category	A	B	C
TOTAL	**1**	**56**	**6**
Sector			
Infrastructure	0	3	3
Oil & gas	0	2	1
Energy	1	51	2
Region			
Americas			
United States	0	18	0
Chile	0	1	0
Mexico	0	1	0
Brazil	0	1	0
Europe			
Spain	0	23	1
United Kingdom	0	3	0
France	0	1	0
Portugal	0	0	3
Germany	0	1	0
Italy	0	2	1
Poland	1	3	0
Type			
Designated countries[A]	1	52	5
Non-designated countries	0	4	1
Independent review			
Yes	1	55	3
No	0	1	3

A. In accordance with the definition of designated countries included in the Equator Principles, i.e, those considered to have a solid framework of environmental and social governance, legislation and institutional capacity to protect their inhabitants and the environment.

28. Country by country report

According GRI 207-4 TAX a country-by-country report of financial, economic, and tax-related information for each jurisdiction in which Santander operates is required. The information of profit/loss before tax, corporate income tax paid on a cash basis and number of employees, as well as the basis of calculation of this number, is already included in the appendix VI of the consolidated financial statements (Annual Banking Report):

EUR million

	2021			
Jurisdiction	Revenues from third-party sales[A]	Revenues from intra-group transactions with other tax jurisdictions[A]	Tangible assets other than cash and cash equivalents[B]	Corporate income tax accrued on profit/loss[C]
Germany	1,720	-56	2,015	184
Argentina	1,366	-2	640	75
Austria	180	-3	13	17
Bahamas	7	-2	1	0
Belgium	77	1	5	8
Brazil[D]	10,742	-158	1,621	1,710
Canada	61	-6	1	5
Chile	2,424	-13	389	13

China	22	0	4	-1
Colombia	49	2	3	3
United Arab Emirates	0	3	0	0
Spain[E]	6,448	1,137	12,312	66
United States	7,481	-54	14,732	391
Denmark	180	-4	36	25
Finland	82	36	49	13
France	818	6	89	90
Greece	0	0	1	0
Hong Kong	104	-10	5	4
India	0	1	0	0
Ireland	107	-144	970	1
Isle of Man	2	13	2	1
Italy	510	-2	32	71
Jersey	-9	51	7	2
Luxembourg	175	3	49	56
Mexico	3,613	-32	1,425	181
Norway	240	15	15	37
The Netherlands	97	-2	5	51
Peru	112	-2	3	17
Poland	1,935	10	256	95
Portugal	1,381	6	653	113
Puerto Rico	4	0	0	-1
United Kingdom	5,809	-10	1,985	518
Singapore	12	0	0	1
Sweden	180	0	7	12
Switzerland	133	6	52	7
Uruguay	342	-3	38	34
Total Consolidated Group	**46,404**	**787**	**37,415**	**3,799**

A. The figure of revenues from intra-group transactions with other tax jurisdictions includes interest income, interest expenses, commission income and commission expenses for transactions between Group companies with residence in different tax jurisdictions, as well as intra-group income which elimination is reflected in the total income of the consolidated income statement as the counterparty expense is recorded in another item of the consolidated income statement not included in total income.
B. Tangible assets: Composed by Tangible assets and Non-current assets held for sale, as well as Inventories.
C. The accrued corporate income tax is current year expense, not including deferred taxes.
D. Including the information relating to a branch in the Cayman Islands with Corporate income tax accrued of EUR 97 million.
E. Includes Corporate Center.

Reasons for the difference between corporate income tax accrued on profit/loss and the tax due if the statutory tax rate is applied to profit/loss before tax are mainly due the criteria for calculating taxes, which establishes temporary or permanent restrictions on the deduction of expenses, exemptions, etc., generating the corresponding differences between tax and accounting result. Thus, in addition to the temporary differences that generate deferred taxes, as main adjustments to the taxable income it should be noted the monetary correction in Chile and Mexico, the hyperinflation adjustments in Argentina, the deduction of juros and taxes on margins in Brazil and in some cases, such as in Poland, permanent adjustments due to non-deductible expenses like Bank Levy or some recognized provisions; with the rest of the Group's relevant jurisdictions at rates close to their nominal rates.

Environment and climate change

GRI 301-1, 301-2, 301-3, 302-1, 302-2, 302-3, 303-1, 303-3, 303-5, 305-1, 305-2, 305-3, 305-4, 306-2, 306-3, 306-4 and 306-5

29. ENVIRONMENTAL FOOTPRINT 2020-2021[A]

	2021	2020	Var. 2020-2021 (%)
Consumption[B]			
Water (m^3)[C]	1,808,668	2,064,113	-12.4
Water (m^3/employee)	9.76	11.07	-11.9
Normal electricity (millions of kwh)	227	395	-42.6
Green electricity (millions of kwh)	676	526	28.5
Total electricity (millions of kwh)	903	920	-1.9
Total internal energy consumption (GJ)[D]	3,714,227	3,758,183	-1.2
Total internal energy consumption (GJ/employee)	20.04	20.16	-0.6
Total paper (t)[E]	7,345	8,966	-18.1
Recycled or certified paper (t)[E]	6,020	7,336	-17.9
Total paper (t/employee)	0.04	0.05	-17.6
Waste			—
Paper and cardboard waste (kg)[F,G]	6,323,866	5,926,139	6.7
Paper and cardboard waste (kg/employee)	34.11	31.79	7.3
Greenhouse gas emissions			—
Direct emissions (CO_2 teq)[H,I]	25,672	24,818	3.4
Indirect electricity emissions (CO_2 teq)-MARKET BASED[J,K]	57,425	128.633	-55.4
Indirect electricity emissions (CO_2 teq)-LOCATION BASED[J]	269,615	282.216	-4.5
Indirect emissions from displacement of employees (CO_2 teq)[L,M]	35,420	40,708	-13.0
Total emissions (CO_2 teq)- MARKET BASED	118,517	194,159	-39.0
Total emissions (CO_2 teq/employee)	0.64	1.04	-38.6
Average number of employees	185,379	186,429	-0.6

A. The scope of information includes the main countries of operation: Argentina, Brazil, Chile, Germany, Mexico, Poland, Portugal, Spain, United Kingdom and United States (excluding Puerto Rico and Miami).

B. The decrease in consumption levels was partly due to the extension of the pandemic situation during the year, which has kept the occupancy of offices and branches at low levels throughout 2021, in contrast to the previous year, 2020, which recorded normal occupancy levels during the first months of that year. This was also the result of the Group's efforts to promote savings in the consumption of resources, especially paper.

C. Information is provided exclusively on water withdrawal from the public network.

D. It is also reported that the external energy consumption resulting from employee travel and business trips has been: 500,311GJ in 2021 and 579,155 GJ in 2020.

E. The figure for total paper and certified or recycled paper for 2020 has been recalculated from that published in 2020 report, based on information provided by the USA.

F. The data for 2019 and 2020 do not include waste from the commercial network in Brazil. The amount of paper and cardboard waste reported is managed in its entirety by authorised waste managers and is collected separately, which guarantees its proper recycling. Grupo Santander will work in the near future to ensure that all this waste undergoes recycling operations.

G. The increase in managed paper and board waste is mainly a consequence of the branch concentration process carried out in the Spanish branch network in 2021.

H. These emissions include those derived from the direct consumption of energy (natural gas and diesel, and additionally, in the particular case of Mexico, gasoline and diesel for automobiles and LPG) and correspond to scope 1, defined by the GHG Protocol standard. To calculate these emissions, the emission factors DEFRA 2021 for 2021 and DEFRA 2020 for 2020 were applied

I. The slight increase between 2020 and 2021 is mainly due to the implementation of measures to increase air recirculation in offices and branches in the context of the Covid-19 pandemic situation.

J. These emissions include those derived from electricity consumption and correspond to the scope 2 defined by the GHG Protocol standard. In both 2021 and 2020 the IEA (International Energy Agency) emission factors for 2017 have been used.
- Indirect Electricity Emissions - Market-based: zero emissions have been considered for green electricity consumed in Germany, Spain, Mexico, Portugal and UK; also, it has been considered that in Argentina, Brazil, Chile, Poland and USA, part of electricity consumption is green energy. This altogether has meant a reduction of 212,190 tons of CO_2 equivalent in 2021 and 153,582 in 2020. For the rest of the electrical energy consumed, the emission factor of the IEA corresponding to each country has been applied.
- Indirect emissions of electricity - Location-based: the emission factor of the IEA corresponding to each country has been applied to the total electricity consumed, regardless of its source (renewable or non-renewable).

K. The reduction in indirect electricity emissions has been mainly due to the increase in the purchase of green energy in 2021 in the countries that make up the G10

L. These emissions include emissions from employees travelling from central services in each country to their workplaces by individual car, collective vehicle and rail, and from employees' business travel by air and car. The distribution of employees by type of travel has been made on the basis of surveys or other estimates. The conversion factors DEFRA 2021 for 2021 and DEFRA 2020 for 2020 were used to calculate emissions from employee travel. - The number of employees travelling to work in their own vehicles was estimated taking into account only the number of parking spaces in the central services buildings in each country and the diesel/petrol consumption mix of the vehicle fleet in each country. Data on employee travel by individual vehicle from Argentina, Poland and the United Kingdom are not reported, as the information is not available. - Employees' journeys in collective vehicles were calculated on the basis of the average distance travelled by the vehicles rented by Grupo Santander for collective transport of its employees in the following countries: Germany, Brazil, the US, Spain, Mexico, Poland, Consumer and Portugal, and within the central services of Spain (CGS) - Data on business trips by car from USA Consumer are not reported, as the information is not available. - Emissions derived from the use of courier services are not included, nor are those derived from the transport of funds, nor those from any other purchase of products or services, nor those indirect ones caused by the financial services provided.

M. Indirect emissions from displacement of employees have suffered a significant decrease. The main factors for this decrease are the reduction in mobility because of the covid-19 pandemic, in contrast to 2020, where the number of displacement of employees remained at normal levels at the beginning of the year. The reduced occupancy levels in 2021 have also contributed to the lower GHG emissions recorded.

Non-financial information Law content index

Equivalent table of legal disclosure requirements under Spanish law 11/2018

	Description of the metric/concept included in the 11/2018 Law to be disclosed	Chapters/section of the Consolidated directors report where the info is available	Correspondence with GRI indicators/Other regulations
0. General Information	Short description of the Group's business model (it will include its business environment, its organization and structure, the markets in which it operates, its objectives and strategies, and the main factors and trends that may affect its future performance).	Business model and strategy (p. 6), What our stakeholders tell us (p. 24).	GRI 102-1 GRI 102-2 GRI 102-3 GRI 102-4 GRI 102-6 GRI 102-7 GRI 102-14 GRI 102-15
	A description of the policies that the Group applies, which will include: the due diligence procedures applied for the identification, assessment, prevention and mitigation of risks and significant impacts and of verification and control, including the measures in which they have been adopted):	Governance (p. 29). Conduct and ethical behaviour (p. 37) (Environmental and social risk analysis section).	GRI 103-2 GRI 103-3
	The results of these policies, including key indicators of relevant non-financial results that allow the monitoring and evaluation of progress and that favour the comparability between companies and sectors, in accordance with national, European or international frameworks of reference used for each matter.	Inclusive and sustainable growth (p. 71). A talented and motivated team (p. 44). Governance (p. 29). Acting responsibly towards customers (p. 61).	GRI 103-2 GRI 103-3
	The main risks related to these matters associated with the Group's activities (business relationships, products or services) that may have a negative effect in these areas, and how the Group manages these risks, explaining the procedures used to detect and assess them in accordance with national, European or international frameworks of reference for each matter. It must include information about the impacts that have been detected, offering a breakdown, in particular of the main risks in the short, medium and long term.	Supporting the green transition (p. 72). Acting responsibly towards customers (p. 61). Conduct and ethical behaviour (p. 37) (Environmental and social risk analysis section). Risk management and compliance chapter (p. 430).	GRI 102-15 GRI 102-30

	Description of the metric/concept included in the 11/2018 Law to be disclosed	Chapters/section of the Consolidated directors report where the info is available	Correspondence with GRI indicators/Other regulations
1. Environmental Information	Detailed information on the current and foreseeable effects of the activities of the company in the environment and, where appropriate, health and safety, environmental evaluation or certification procedures; the resources dedicated to the prevention of environmental risks; the application of the principle of caution, the amount of provisions and guarantees for environmental risks.	Supporting the green transition (p. 72).	GRI 102-29 GRI 102-31 GRI 201-2 GRI 103-2 (GRI of environmental dimension)
		Supporting the green transition (p. 72) (Environmental footprint section).	GRI 102-11 GRI 102-29
		Conduct and ethical behaviour (p. 37) (Environmental and social risks analysis section).	GRI 102-11
		At the end of the 2021 financial year, no significant account is presented in the Consolidated Annual Accounts of the Group that should be included in this chapter regarding environmental provisions or guarantees.	GRI 102-11
	Contamination:		
	Measures to prevent, reduce or repair CO_2 emissions that seriously affect the environment, taking into account any form of air pollution, including noise and light pollution.	Supporting the green transition (p. 72) (Environmental footprint section).	GRI 103-2 (GRI 302 y 305)
	Circular economy and waste prevention and management:		
	Waste prevention measures, waste recycling measures, waste reuse measures; other forms of waste recovery and reuse; actions against food waste.	Supporting the green transition (p. 72) (Environmental footprint section).	GRI 103-2 (GRI 306) GRI 301-2 GRI 306-3
	Sustainable use of resources:		
	Use and supply of water according to local limitations	Supporting the green transition (p. 72) (Environmental footprint section). Key metrics (p. 117).	GRI 303-5
	Consumption of raw materials and measures taken to improve the efficiency of its use.	Supporting the green transition (p. 72) (Environmental footprint section). Key metrics (p. 117).	GRI 103-2 (GRI 301) GRI 301-1 GRI 301-2
	Energy: direct and indirect consumption, measures taken to improve energy efficiency, use of renewable energies	Supporting the green transition (p. 72) (Environmental footprint section). Key metrics (p. 117).	GRI 103-2 (GRI 302) GRI 302-1 GRI 302-3
	Climate change:		
	Important elements of greenhouse gas emissions generated as a business activity (including goods and services produced)	Supporting the green transition (p. 72) (Environmental footprint section). Key metrics (p. 117).	GRI 103-2 (GRI 305) GRI 305-1 GRI 305-2 GRI 305-3 GRI 305-4
	Measures taken to adapt to the consequences of climate change	Supporting the green transition (p. 72) (Environmental footprint section).	GRI 103-2 (GRI 305) GRI 201-2
	Reduction targets voluntarily established in the medium and long term to reduce greenhouse gas emissions and means implemented for this purpose.	Supporting the green transition (p. 72) (Environmental footprint section).	GRI 103-2 (GRI 305)
	Protection of biodiversity:		
	Measures taken to preserve or restore biodiversity	The impacts caused by the direct activities of Banco Santander on biodiversity are not material due to the financial activity carried out by the entity.	GRI 103-2 (GRI 304)
	Impacts caused by the activities or operations of protected areas		

	Description of the metric/concept included in the 11/2018 Law to be disclosed	Chapters/section of the Consolidated directors report where the info is available	Correspondence with GRI indicators/Other regulations
2. Social	**Employment:**		
	Total number and distribution of employees by gender, age, country and professional classification	Key Metrics (p. 117).	GRI 103-2 (GRI 401) GRI 102-8 GRI 405-1
	Total number and distribution of contracts modes and annual average of undefined contracts, temporary contracts, and part-time contracts by: sex, age and professional classification.	Key Metrics (p. 117).	GRI 102-8 GRI 405-1
	Number of dismissals by: gender, age and professional classification.	Key Metrics (p. 117).	GRI 401-1
	Average remuneration and its progression broken down by gender, age and professional classification	Key Metrics (p. 117).	GRI 405-2
	Salary gap and remuneration of equal or average jobs in society	A talented and motivated team (p. 44) (Diversity and Inclusion section).	GRI 103-2 (GRI 405) GRI 405-2
	Average remuneration of directors and executives (including variable remuneration, allowances, compensation, payment to long-term savings forecast systems and any other payment broken down by gender)	Key Metrics (p. 117).	GRI 102-35 GRI 102-36 GRI 103-2 (GRI 405)
	Implementation of work disconnection policies	A talented and motivated team (p. 44) (The way we work section).	GRI 103-2 (GRI 401)
	Employees with disabilities	Key metrics (p. 117).	GRI 405-1
	Organization of work:		
	Organization of work time	A talented and motivated team (p. 44) (The way we work section).	GRI 103-2 (GRI 401)
	Number of absent hours	Key Metrics (p. 117). A talented and motivated team (p. 44) (Our wellbeing section).	GRI 403-9
	Measures designed to facilitate work-life balance and encourage a jointly responsible use of said measures by parents	A talented and motivated team (p. 44) (The way we work section).	GRI 103-2 (GRI 401)
	Health and safety:		
	Conditions of health and safety in the workplace	A talented and motivated team (p. 44) (Our wellbeing section).	GRI 103-2 (GRI 403)
	Occupational accidents, in particular their frequency and severity, as well as occupational illnesses. Broken down by gender.	Key Metrics (p. 117). A talented and motivated team (p. 44) (Our wellbeing section)	GRI 403-9 GRI 403-10
	Social relations:		
	Organization of social dialogue (including procedures to inform and consult staff and negotiate with them)	What our stakeholders tell us (p. 24). A talented and motivated team (p. 44) (Social dialogue and restructuring section). Acting responsibly towards customers (p. 61).	GRI 103-2 (GRI 402)
	Percentage of employees covered by collective bargaining agreements by country	Key Metrics (p. 117).	GRI 102-41
	Balance of the collective bargaining agreements (particularly in the field of health and safety in the workplace)	A talented and motivated team (p. 44) (Our wellbeing section)	GRI 403-1 GRI 403-4
	Training:		
	The policies implemented in the field of training	A talented and motivated team (p. 44) (Talent management section).	GRI 103-2 (GRI 404) GRI 404-2
	Total number of hours of training by professional categories.	Key Metrics (p. 117).	GRI 404-1
	Accessibility:		
	Universal accessibility of people	A talented and motivated team (p. 44) (People with disabilities section). Acting responsibly towards customers (p. 61). Support to higher education and other local initiatives (p. 107) (Fundación Universia section).	GRI 103-2 (GRI 405)

	Description of the metric/concept included in the 11/2018 Law to be disclosed	Chapters/section of the Consolidated directors report where the info is available	Correspondence with GRI indicators/Other regulations
2. Social	**Equality:**		
	Measures taken to promote equal treatment and opportunities between women and men, Equality plans (Chapter III of Organic Law 3/2007, of 22 March, for the effective equality of women and men), measures taken to promote employment, protocols against sexual and gender-based harassment, Policy against all types of discrimination and, where appropriate, integration of protocols against sexual and gender-based harassment and protocols against all types of discrimination and, where appropriate, management of diversity	A talented and motivated team (p. 44) (Diversity and Inclusion section).	GRI 103-2 (GRI 405 and 406)
		Support to higher education and other local initiatives (p. 107).	
3. Human Rights	Application of due diligence procedures in the field of Human Rights	Governance (p. 29). Conduct and ethical behaviour (p. 37) (Environmental and social risk analysis section). Responsible Procurement (p. 68).	GRI 102-16 GRI 102-17 GRI 103-2 (GRI 412)
	Prevention of the risks of Human Rights violations and, where appropriate, measures to mitigate, manage and repair any possible abuses committed	Governance (p. 29). Conduct and ethical behaviour (p. 37) (Environmental and social risk analysis section). Responsible Procurement (p. 68).	GRI 410-1 GRI 412-1 GRI 412-3
	Complaints about cases of human rights violations	A talented and motivated team (p. 44) (Speaking up, active listening and taking action section)	GRI 406-1
	Promotion and compliance with the provisions of the fundamental conventions of the International Labour Organization regarding respect for freedom of association and the right to collective bargaining.	A talented and motivated team, Social dialogue and restructuring section	GRI 103-2 (GRI 406)
	Elimination of discrimination in respect of employment and occupation; elimination of forced or compulsory labour; and the effective abolition of child labour.	Conduct and ethical behaviour (p. 37) (Environmental and social risk analysis section)	GRI 103-2 (GRI 406)
4. Fight against corruption	Measures taken to prevent corruption and bribery	Governance (p. 29). Risk management and compliance chapter (p. 430) (7.2 Compliance and conduct risk management section)	GRI 102-16 GRI 102-17
	Measures to combat money laundering	Governance (p. 29). Risk management and compliance chapter (p. 430) (7.2 Compliance and conduct risk management section)	GRI 103-2 (GRI 205) GRI 205-1 GRI 205-2 GRI 205-3
	Contributions to non-profit foundations and entities	Support to higher education and other local initiatives (p. 107).	GRI 413-1

	Description of the metric/concept included in the 11/2018 Law to be disclosed	Chapters/section of the Consolidated directors report where the info is available	Correspondence with GRI indicators/Other regulations
5. Information on the company	**Commitments of the company to sustainable development:**		
	The impact of the company's activity on employment and local development	Support to higher education and other local initiatives (p. 107). Financial inclusion and empowerment (p. 96). Conduct and ethical behaviour (p. 37) (Environmental and social risk analysis).	GRI 103-2 (GRI 203) GRI 203-1 GRI 203-2 GRI 411-1 GRI 413-1
	The impact of the company's activity on local towns and villages and in the country.	Support to higher education and other local initiatives (p. 107). Financial inclusion and empowerment (p. 96).	GRI 103-2 (GRI 203) GRI 203-1 GRI 203-2 GRI 413-1
	Relations maintained with the representatives of local communities and the modalities of dialogue with them.	What our stakeholders tell us (p. 24).	GRI 102-43 GRI 413-1
	Association or sponsorship actions	Support to higher education and other local initiatives (p. 107).	GRI 102-12 GRI 102-13
	Outsourcing and suppliers:		
	Inclusion of social, gender equality and environmental issues in the procurement policy	Responsible procurement (p. 68).	GRI 103-2 (GRI 204, 308 and 414)
	Consideration in relations with suppliers and subcontractors of their responsibility	Responsible procurement (p. 68).	GRI 102-9 GRI 103-2 (GRI 204, 308 and 414) GRI 204-1 GRI 308-1 GRI 414-1
	Supervision and audit systems and resolution thereof	Responsible procurement (p. 68).	GRI 103-2 (GRI 204)
	Consumers:		
	Measures for the health and safety of consumers	Acting responsibly towards customers (p. 61). Risk management and compliance chapter (p. 430) (7.2 Compliance and conduct risk management section)	GRI 103-2 (GRI 416, 417 and 418) GRI 416-1 GRI 417-1 G4-FS15
	Systems for complaints received and resolution thereof	Acting responsibly towards customers. (p. 61) Key metrics (p. 117). Risk management and compliance chapter, section 7.2 Compliance and conduct risk management.(p. 489) GRI content index.	GRI 102-17 GRI 103-2 (GRI 416, 417 and 418) GRI 416-2 GRI 417-2 GRI 418-1
	Tax information:		
	The profits obtained country by country	Auditor's report and 2021 annual consolidate accounts (p. 512). Annex VI Annual banking report and Auditor's Report and 2020 annual consolidate accounts, Annex VI Annual banking report	GRI 103-2 (GRI 207)
	Taxes on benefits paid	Conduct and ethical behaviour (p. 37) (Tax contribution section)	
	Public grants received	GRI content index (p. 144).	GRI 201-4
6. Other relevant information	EU Taxonomy	Information related to article 8 of EU Taxonomy	EU Regulation 2020/852 and Commission Delegated Regulations 2021/2139 of 4 June and 2021/2178 of 6 July

*NB: The data to report this indicator could be quantitative or qualitative

In addition to the contents mentioned in the previous table, the consolidated non-financial information statement of Banco Santander includes the following contents: 102-5, 102-9, 102-10, 102-12, 102-13, 102-18, 102-19, 102-20, 102-21, 102-22, 102-23, 102-24, 102-25, 102-26, 102-27, 102-28, 102-32, 102-33, 102-34, 102-37, 102-40, 102-42, 102-43, 102-44, 102-45, 102-46, 102-47, 102-48, 102-49, 102-50, 102-51, 102-52, 102-53, 102-54, 102-55, 102-56, 201-1, 201-3, 202-1, 202-2, 203-1, 203-2, 206-1, 207-1, 207-2, 207-3, 207-4, 302-1, 302-3, 303-1, 306-1, 306-2, 306-4, 306-5, 307-1, 308-2, 401-2, 402-1, 403-2, 403-3, 403-5, 403-8, 404-3, 405-2, 414-2, 415-1, 417-3, 419-1.

UNEP FI Principles for Responsible Banking reporting index

Reporting and Self-Assessment Requirements	High-level summary of bank's response	Reference(s)/ Link(s) to bank's full response/ relevant information
Principle 1: Alignment We will align our business strategy to be consistent with and contribute to individuals' needs and society's goals, as expressed in the Sustainable Development Goals, the Paris Climate Agreement and relevant national and regional frameworks.		
1.1. Describe (high-level) your bank's business model, including the main customer segments served, types of products and services provided, the main sectors and types of activities, and where relevant the technologies financed across the main geographies in which your bank has operations or provides products and services.	Santander is a retail bank operating in 3 geographies (Europe, North America and South America) and in 10 main markets. Furthermore, we have global businesses like Santander Corporate & Investment Banking; Wealth Management & Insurance; or Santander Global Platform. Our purpose as a company is to help people and businesses prosper. Our aim is to be the best open financial services platform, by acting responsibly and earning the lasting loyalty of our people, customers, shareholders and communities. To this end, we integrate environmental, social and corporate governance (ESG) criteria into our business model. Our business model is based on three pillars: ◦ Customer focus: Deepening the relationships with our customers through a simpler value proposition, superior customer experience and our digital proposition ◦ Our scale: Local scale and leadership. ◦ Diversification. Our geographic and business diversification allow us to overcome regional challenges in our footprint and business lines. Building on our technology to further strengthen our customers' loyalty. Our value proposition includes a broad variety of solutions. Products and services are tailored to meet the needs of our customers, taking advantage of global best practices, but adapted to local singularities. We strive to exceed our stakeholders´ expectations and carry out our activity in a responsible way. Our activity allow us to contribute to several of the UN Sustainable Development Goals and support the Paris Agreement to fight climate change.	Corporate website: www.santander.com • About us • Our approach Digital Annual review 2021 2021 Annual Report: • Our approach • Business model and strategy Other references: Corporate website: • Financial report 2021 • 2021 Earnings Presentation
1.2. Describe how your bank has aligned and/or is planning to align its strategy to be consistent with and contribute to society's goals, as expressed in the Sustainable Development Goals (SDGs), the Paris Climate Agreement, and relevant national and regional frameworks.	In order to contribute effectively to their achievement, we have carried out an analysis to identify and align our strategy with the SDGs on which Banco Santander has the greatest impact. This analysis has highlighted the most relevant goals for Grupo Santander, both in terms of its activity, commitments and strategic focus, as well as the different external factors considered. We have identified three SDGs in which the Group has the greatest impact (8, 13 and 16) and eight more to which we also make a very significant contribution through our activity and our social programmes (1, 4, 5, 7, 10, 11, 12, 13 y 17) Tackling climate change is a key objective at Santander. We support the Paris Agreement goals and our ambition is to be net zero carbon emissions by 2050. Our main lines of action are: a) align our portfolio with the Paris Agreement Goals and set sector portfolio alignment targets in line with the NZBA and with the NZAMi; b) help customers transition to a low-carbon economy; c) reduce our impact on the environment by remaining carbon neutral and sourcing all our electricity from renewable energy; d) embed climate in risk management; understand and manage the sources of climate change risks in our portfolios.	Corporate website: www.santander.com • Our approach - Our contribution to SDGs 2021 Annual Report: • Helping society tackle global challenges: 2030 agenda

Reporting and Self-Assessment Requirements	High-level summary of bank's response	Reference(s)/ Link(s) to bank's full response/ relevant information
Principle 2: Impact and Target Setting We will continuously increase our positive impacts while reducing the negative impacts on, and managing the risks to, people and environment resulting from our activities, products and services. To this end, we will set and publish targets where we can have the most significant impacts.		
2.1. Impact Analysis: Show that your bank has identified the areas in which it has its most significant (potential) positive and negative impact through an impact analysis that fulfills the following elements: a) Scope: The bank's core business areas, products/services across the main geographies that the bank operates in have been as described under 1.1. have been considered in the scope of the analysis. b) Scale of Exposure: In identifying its areas of most significant impact the bank has considered where its core business/its major activities lie in terms of industries, technologies and geographies. c) Context & Relevance: Your bank has taken into account the most relevant challenges and priorities related to sustainable development in the countries/regions in which it operates. d) Scale and intensity/salience of impact: In identifying its areas of most significant impact, the bank has considered the scale and intensity/salience of the (potential) social, economic and environmental impacts resulting from the bank's activities and provision of products and services. (your bank should have engaged with relevant stakeholders to help inform your analysis under elements c) and d)) Show that building on this analysis, the bank has: • -identified and disclosed its areas of most significant (potential) positive and negative impact. • - identified strategic business opportunities in relation to the increase of positive impacts / reduction of negative impacts.	Our in-depth materiality review included direct stakeholder input (internal and external interviews and surveys on the bank's ESG priorities), in line with best practice. Following the proposed Corporate Sustainability Reporting Directive (CSRD) and leading ESG reporting standards, we applied the principle of double materiality: (1) financial materiality (how ESG issues impact financial performance); and (2) environmental and social materiality (how ESG action impacts society and the environment). Our materiality assessment identified 15 ESG topics we should focus on. Classified in crucial, major and relevant issues. Among crucial topics are: • Customer experience and satisfaction. Supporting customers and local economies with products and services that meet their needs. Giving them services and products that are Simple, Personal and Fair. Innovating and using digital technologies to maximize access to products and services • Financial inclusion and empowerment. Designing, developing and delivering products and services that ensure access to the financial system and meet credit needs. Building resilience through financial education. • Green finance. Supporting our customers in their transition to a low carbon economy by embedding environmental factors in products and risk analyses, and by supporting the growth of sustainable financial product markets • ESG in risk management, embedding climate. Ensuring our risk management framework incorporates customers' and operations' environmental (e.g. climate) and social (e.g. human rights) risks, and outlining them in policies and procedures • Culture, conduct & ethical behaviours. Ensuring exemplary conduct by everybody: being Simple, Personal & Fair in all we do; and embedding Risk Pro, ethical channels and best-in-class policies and controls on employees' internal conduct, transparency towards customers and ethical behaviour. This annual report discloses information on progress and plans relating to addressing these and other topics. In particular, in 2021: • We committed to net zero emissions by 2050. We become founding member of UNEP FI's Net Zero Banking Alliance. And first decarbonization targets set. • We develop our Sustainable finance classification system setting the criteria to offer, manage and report sustainable financing. • We mobilized more than 32bn in green finance, and launched our third green bond raised EUR 1 billion in an eight-year non-preferred senior debt issue that will finance wind and solar power projects. • We ranked in the Top 3 in NPS in 8 markets, up from 6 in 2020. • We strengthen Santander Finance for all programme. Santander Chile, Santander Colombia and Santander Perú launched new microfinance programmes for entrepreneurs, while we continued to expand Prospera in Brazil and TUIIO in Mexico. In addition Santander Universities launched the Santander X Global Challenge | Finance For All to find innovative solutions that ensure access to banking products and services. •	2021 Annual Report- Responsible banking chapter • What our stakeholders tell us • ESG priorities • Supporting green transition • Environmental and social risk analysis 2021 Annual Report Risk management and compliance chapter • 1.2 Santander Top and emerging risks Other references: • Climate finance report[A] A. (This report is produced after the Annual Report and will be available throughout the month of July 2022 on our corporate website (currently available report 2020-June 2021)

Reporting and Self-Assessment Requirements	High-level summary of bank's response	Reference(s)/ Link(s) to bank's full response/ relevant information
Please provide your bank's conclusion/statement if it has fulfilled the requirements regarding Impact Analysis.		
We will continue to improve our materiality analysis and while further exploring and integrating recognised impact methodologies as started this year for our infrastructure operations.		
2.2. Target Setting Show that the bank has set and published a minimum of two Specific, Measurable (can be qualitative or quantitative), Achievable, Relevant and Time-bound (SMART) targets, which address at least two of the identified "areas of most significant impact", resulting from the bank's activities and provision of products and services. Show that these targets are linked to and drive alignment with and greater contribution to appropriate Sustainable Development Goals, the goals of the Paris Agreement, and other relevant international, national or regional frameworks. The bank should have identified a baseline (assessed against a particular year) and have set targets against this baseline. Show that the bank has analysed and acknowledged significant (potential) negative impacts of the set targets on other dimensions of the SDG/climate change/society's goals and that it has set out relevant actions to mitigate those as far as feasible to maximize the net positive impact of the set targets.	To meet the identified challenges, we have set 11 targets which reflect our commitment to building a more responsible bank. • To be Top 10 company to work for in at least 6 countries • To have between 40-60% of women on our board by 2021 • To have at least 30% of women in senior positions by 2025. • To eliminate the equal pay gap by 2025. • To facilitate the mobilization of €120 billion of green finance between 2019 and 2025 • To financially empower 10 million people between 2019 and 2025 through increasing microfinance activities, financial education programmes and other tools that give access to financial services. • To be carbon neutral in our own operation by 2020 • To use 100% of our electricity from renewable sources in all countries by 2025. • To eliminate unnecessary single-use plastics in corporate buildings and branches • To fund 200,000 scholarships, internships and entrepreneur programmes between 2019 and 2021. • To help 4 million people through our community programmes between 2019 and 2021. Additionally we updated our climate strategy, committing to: i) aligning our power generation portfolio with the Paris Agreement by 2030; ii) stop providing financial services to power generation customers with a revenue dependency on coal of over 10% in 2030; iii) reduce our worldwide exposure to coal mining production to zero by 2030; iv) and the ambition to be net zero carbon emissions by 2050. In 2021, we met (or exceeded) all our commitments for 2019-2021 and made progress on all our targets. Our new public commitments include initial decarbonization targets for the power industry for 2025 and 2030, which measure emission intensity. • Thermal coal-related power & mining phase out • Reduce emissions intensity of our power generation portfolio from 0.23 tCO2e/MWh to 0.18 tCO2e/MWh by 2025, and to 0.11 tCO2e/MWh by 2030 • Sustainable investment: 100 billion euros in assets under management with ESG criteria by 2025. We'll continue to set decarbonization targets for the other sectors. Together with the targets for 2019-2025, they will form part of our new public commitments in the 2022-2025 agenda.	2021 Annual Report- Responsible Banking chapter -2021 Overview - ESG priorities -Supporting the green transition
Please provide your bank's conclusion/statement if it has fulfilled the requirements regarding Target Setting.		
The bank has a set of SMART objectives focused on the areas where it can generate the most impact, in accordance with materiality analysis mentioned in the previous section.		
2.3 Plans for Target Implementation and Monitoring Show that your bank has defined actions and milestones to meet the set targets. Show that your bank has put in place the means to measure and monitor progress against the set targets. Definitions of key performance indicators, any changes in these definitions, and any rebasing of baselines should be transparent.	The responsible banking forum and the Group's responsible banking, sustainability and culture committee are responsible for monitoring compliance with public commitments, together with other management and performance indicators in the area of responsible banking and sustainability. Commitments are embedded and part of the Group financial planning, which a three year plan with yearly forecast. The Responsible Banking unit and its network, in collaboration with the remaining areas and local units, defines short, medium and long term action plans to achieve the objectives. In addition, the Bank's Management Control function has been involved to increase monitoring and quality of public commitments. This function is responsible for ensuring the consistency of information and provides regular monitoring of the various commitments.	2021 Annual Report- Responsible Banking chapter - 2021 overview - Governance

Reporting and Self-Assessment Requirements	High-level summary of bank's response	Reference(s)/ Link(s) to bank's full response/ relevant information
Please provide your bank's conclusion/statement if it has fulfilled the requirements regarding Plans for Target Implementation and Monitoring.		
Grupo Santander has defined at corporate and local level, various action plans to boost our commitments.		
2.4. Progress on Implementing Targets For each target separately: Show that your bank has implemented the actions it had previously defined to meet the set target. Or explain why actions could not be implemented / needed to be changed and how your bank is adapting its plan to meet its set target. Report on your bank's progress over the last 12 months (up to 18 months in your first reporting after becoming a signatory) towards achieving each of the set targets and the impact your progress resulted in. (where feasible and appropriate, banks should include quantitative disclosures)	Grupo Santander regularly reports on the achievements and scope of its responsible banking strategy and targets. In 2021, we met (or exceeded) all our commitments for 2019-2021 and made progress on all our targets. Targets achieved: • To be one of the top 10 companies to work for in at least six of the core geographies where we operate by 2021. In 2021: Top 10 in 6 geographies. • To have between 40-60% women on our board by 2021. In 2021: 40% • Carbon neutral in our own operations in 2020. In 2021 we have continued to implement measures to reduce our CO_2 emissions, and have offset the remaining emissions. • To eliminate unnecessary single use plastic in our branches and corporate buildings by 2021. In 2021: 100% of reduction. • To fund 325,000 scholarships, internships and entrepreneur programmes between 2019 and 2021. Since 2019: 387,651 scholarships (+19% target) • To help four million people through our community programmes between 2019 and 2021. Since 2019: 6.1 million (+53% target Targets in progress: • To have 30% women in our senior positions by 2025. In 2021: 26.3% • To eliminate the equal pay gap by 2025. In 2021: 1% • To finance or facilitate mobilization of €120 billion between 2019 and 2025 to tackle climate change. Since 2019: 65.7 billion • To financially empower 10 million people between 2019 and 2025. Since 2019: 7.5 million • To use 100% of our electricity from renewable sources in our buildings by 2025. In 2021: 75%	2021 Annual Report- Responsible Banking chapter - 2021 Overview
Please provide your bank's conclusion/statement if it has fulfilled the requirements regarding Progress on Implementing Targets		
In 2021, we met (or exceeded) all our commitments for 2019-2021 and made progress on all our targets.		

Reporting and Self-Assessment Requirements	High-level summary of bank's response	Reference(s)/ Link(s) to bank's full response/ relevant information
Principle 3: Clients and Customers We will work responsibly with our clients and our customers to encourage sustainable practices and enable economic activities that create shared prosperity for current and future generations.		
3.1.Provide an overview of the policies and practices your bank has in place and/or is planning to put in place to promote responsible relationships with its customers. This should include high-level information on any programmes and actions implemented (and/or planned), their scale and, where possible, the results thereof.	Being responsible means offering our customers products and services that are Simple, Personal and Fair. Our product, service and consumer protection framework sets out the principles that promote a strong SPF relationship with customers and establishes the basics for managing and mitigating conduct risk in design, sales, post-sales and services. The Compliance and conduct function abides by our Consumer protection policy, which sets out the highest ethical standards we expect our teams to uphold towards customers. We report on our consumer protection principles in all our geographies to make sure we embed them in our day-to-day. We use our customers' voice and business indicators to spot unsatisfactory customer service, fee-related issues, incidents at ATMs and other areas for improvement, and to come up with plans to address them. Our product governance forum ensures the products and services that we market meet the needs of identified target segments and are reasonably and clearly priced. In 2021, we enhanced our ESG product validation and finally, 9 proposals were validated with impact on this matter That's why all our employees undertake a mandatory, annual course on the management of conduct risks in sales and consumer protection. We run special training programmes for our sales teams to arm them with the knowledge and skills that will enable them to sell our products and services effectively. In 2021, we worked on an instruction manual about our vulnerable customer and special case management model, and set a roadmap for its roll-out among subsidiaries, therefore ensuring a consistent, group-wide approach to identifying and managing vulnerable customers in such high-impact procedures as collections and fraud management In 2021, we continued to focus on resolving complaints at the first point of contact with customers and on opening digital channels for quicker, alternative access to feedback mechanisms. We heightened the monitoring and reporting of customer issues in areas that are considered critical due to the knock-on effects of the pandemic.	Corporate website www.santander.com • Policies Annual report 2021 - Responsible banking chapter • What our stakeholders tell us • Governance • Acting responsible towards customers • Support to the green transition • Financial inclusion and empowerment • Sustainable investment
3.2. Describe how your bank has worked with and/or is planning to work with its clients and customers to encourage sustainable practices and enable sustainable economic activities. This should include information on actions planned/implemented, products and services developed, and, where possible, the impacts achieved.	All our activity is guided by policies, principles and frameworks to ensure we behave responsibly in everything we do. • The general sustainability policy sets out principles and commitments focused on adding value to our main stakeholders. • The environmental, social and climate change risk management policy details how we identify and manage risks, in oil and gas, energy, mining and metals, and in soft commodities. • The sensitive sectors policy establishes guidelines for the evaluation and decision making on participation of the Group in certain sectors, which could lead to reputational risks. We developed our sustainable finance classification system (SFCS), which sets out sustainable finance definition in the group. Consistent with this, we have a catalogue of sustainable products and a green book. We are a leader in renewable energy financing, and have a strong financial empowerment strategy - Santander Finance for All. We issued our third EUR 1 billion green bond to finance and refinance renewable wind and solar power. We're expanding our range of ESG products in Wealth Management. As of December 2021, we had over €27bn AuM.	

Reporting and Self-Assessment Requirements	High-level summary of bank's response	Reference(s)/ Link(s) to bank's full response/ relevant information
Principle 4: Stakeholders We will proactively and responsibly consult, engage and partner with relevant stakeholders to achieve society's goals.		
4.1. Describe which stakeholders (or groups/ types of stakeholders) your bank has consulted, engaged, collaborated or partnered with for the purpose of implementing these Principles and improving your bank's impacts. This should include a high-level overview of how your bank has identified relevant stakeholders and what issues were addressed/results achieved.	Our strategy is based on a virtuous circle centred on trust and loyalty of our employees, customers, shareholders and communities. To achieve this we promote the active listening of our stakeholders. Listening, analysing, assessing and responding to their opinions and concerns we not only identify issues, we also spot opportunities, which allows us to guarantee our activity and to maintain the right functioning of the entire value chain. In addition, we also regularly analyse the most relevant environmental, social and governance issues demands of analysts and investors. And we continuously monitor the emergence of new standards and good practice at international level. Actively participating in the consultation processes of both authorities and sectoral associations and other organizations that influence the development of relevant policies on the sustainable development agenda. We have followed closely the adoption of the Taxonomy Regulation that sets the criteria for classifying economic activities as environmentally sustainable. It also dictates the information that financial and non-financial companies will have to disclose about the environmental impact of their activities. As a result, we have published our banking products' eligibility under the EU Taxonomy. We also designed our Sustainable Finance Classification System to make classifying, monitoring and reporting on sustainable financing easier. It also guides our development of sustainable products and services fully in the line with our customers' expectations and the strictest market standards. We are part of the main and most important local and global initiatives to support the inclusive and sustainable growth. Some examples are: UNEP FI. We are a founding signatory to the United Nations Principles for Responsible Banking. In 2021, we continued participating in Phase III of the UNEP FI project on the TCFD's recommendations for banks. World Business Council for Sustainable Development (WBCSD). Banking Environment Initiative (BEI); UN Global Compact, CEO Partnership for Financial Inclusion; or Equator Principles. In 2021, in support of our Net Zero ambition, we joined the Glasgow Financial Alliance for Net Zero, Net Zero Asset Management and were co-founders to the Net Zero Banking Alliance. Within GFANZ, we co-led the Net Zero Public Policy and their call to action launched in October. Our performance is also assessed by leading analysts and ESG indices (DJSI, MSCI, CDP, sustainalytics). Participating in these indices and trying to improve our position in them helps us to continuously improve our processes. In 2021 we have improved our positioning in all of them. Finally, as a consequence of our commitment to transparency, we closely monitor all developments in ESG disclosure. In January 2021 we were one of the companies committed to implementing the World Economic Forum's Stakeholder Capitalism Metrics, and as a result this year we have taken this standard into account for the first time in the preparation of our Responsible banking chapter (Consolidated Statement of Non-Financial Information).	Annual report 2021 - Responsible banking chapter • What our stakeholders tell us • Partnership to promote our agenda • Shareholder value - ESG indices and analyst • Supporting the green transition - Sustainable finance classification system (SFCS) • Supporting the green transition - Our banking products' eligibility under the EU Taxonomy • Stakeholder Capitalism Metrics content index Annual report 2021 - Economic and financial review • Economic, regulatory and competitive context

Reporting and Self-Assessment Requirements	High-level summary of bank's response	Reference(s)/ Link(s) to bank's full response/ relevant information
Principle 5: Governance & Culture We will implement our commitment to these Principles through effective governance and a culture of responsible banking		
5.1. Describe the relevant governance structures, policies and procedures your bank has in place/is planning to put in place to manage significant positive and negative (potential) impacts and support effective implementation of the Principles.	All our activity is guided by policies, principles and frameworks to ensure we behave responsibly in everything we do. The responsible banking, sustainability and culture committee (RBSCC) assists the board of directors in fulfilling its oversight responsibilities with respect to the Group's responsible banking strategy, sustainability and culture issues. The committee is supported by the RB forum, that executes the responsible banking agenda across the Group, drives decision-making on responsible banking issues and, ensures the execution of any mandates from the RBSCC, other Board committees and the board of directors. It also ensures alignment on key issues, including the review and escalation of reports to the RBSCC. To complete this corporate governance and drive progress on the responsible banking agenda, there is a Responsible Banking unit supported by a senior advisor on responsible business practices reporting directly to the Group's executive chairman.	Corporate website: www.santander.com -About us -Our approach 2021 Annual Report- Responsible Banking chapter -What our stakeholders tell us -Governance -A strong and inclusive culture
5.2. Describe the initiatives and measures your bank has implemented or is planning to implement to foster a culture of responsible banking among its employees. This should include a high-level overview of capacity building, inclusion in remuneration structures and performance management and leadership communication, amongst others.	The culture and sustainability local units coordinate and foster their sustainable banking agenda, ensuring that they are aligned with the corporate strategy and policies. Likewise, each subsidiary has appointed a senior responsible for the sustainable banking function. Created in 2021, our new Responsible banking framework's establishes common principles, roles and responsibilities, key processes and governance drive us towards a more sustainable business model that delivers on our purpose to help people and businesses prosper. It also reinforces our commitment to Agenda 2030: the UN Sustainable Development Goals (SDGs), the Paris Agreement and the Principles for Responsible Banking. The Group's policies and guidance set the standard for all units. We systematically review the scope of policies relating to the integration of ESG criteria to ensure compliance with international best practice. In 2021, the Responsible Banking function was made part of the policy approval process to embed sustainability criteria in all policies.	2021 Annual Report, Corporate Governance chapter -Responsible Banking, sustainability and culture, Committee activities report
5.3 Governance Structure for Implementation of the Principles Show that your bank has a governance structure in place for the implementation of the PRB, including: a) target-setting and actions to achieve targets set b) remedial action in the event of targets or milestones not being achieved or unexpected negative impacts being detected.	Our strong corporate culture, The Santander Way, is fully aligned to our corporate strategy. It includes our purpose, our aim, and how we conduct business. It is the bedrock of our bank, a responsible bank.	

Please provide your bank's conclusion/ statement if it has fulfilled the requirements regarding Governance Structure for Implementation of the Principles.

The Group has a solid and well-structured responsible banking governance model to meet future challenges and implement necessary measures that allow us to develop our activity in a responsible and sustainable way.

Reporting and Self-Assessment Requirements	High-level summary of bank's response	Reference(s)/ Link(s) to bank's full response/ relevant information
Principle 6: Transparency & Accountability We will periodically review our individual and collective implementation of these Principles and be transparent about and accountable for our positive and negative impacts and our contribution to society's goals.		
6.1 Progress on Implementing the Principles for Responsible Banking Show that your bank has progressed on implementing the six Principles over the last 12 months (up to 18 months in your first reporting after becoming a signatory) in addition to the setting and implementation of targets in minimum two areas (see 2.1-2.4). Show that your bank has considered existing and emerging international/regional good practices relevant for the implementation of the six Principles for Responsible Banking. Based on this, it has defined priorities and ambitions to align with good practice. Show that your bank has implemented/is working on implementing changes in existing practices to reflect and be in line with existing and emerging international/regional good practices and has made progress on its implementation of these Principles.	The Responsible Banking chapter of our 2021 Annual report is our consolidated non-financial information statement. This is the eighteenth annual document the Santander Group publishes to disclose its sustainability commitments. This chapter includes information for the period: from 1 January to 31 December 2020. This chapter has been verified by PricewaterhouseCoopers Auditores, S.L., the independent firm which also audited the Group´s annual financial statements for the year. Santander has relied on internationally recognized standards such as the Global Reporting Initiative (GRI) and Sustainability Accounting Standards Board (SASB) in its preparation. And for the first time, also considering the WEF Stakeholder Capitalism Metrics. This chapter has been prepared in accordance with the GRI Standards: Comprehensive option. Additionally, in this chapter detailed information is provided to respond to the Law 11/2018, which transposes to the Spanish legal system the Directive 2014/95/ EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/ EU as regards disclosure of non-financial and diversity information. We actively participate and we are part of the main initiatives and working groups that foster responsible business practices at local and international level. Some examples are: • UNEP FInance initiative. We are one of the founding signatories to the he UN Principles for Responsible Banking. We have also continued our participation in the TCFD Pilot II following the first pilot which started back in 2017. • World Business Council for Sustainable Development (WBCSD). We are part of the Future of Work, which supports companies in adapting their own business and human resources strategy to evolve in line with the digital age. • Banking Environment Initiative (BEI). We participate in two initiatives related to climate, the Soft Commodities Compact and the new Bank 2030 initiative. • CEO Partnership for Financial Inclusion. We are part of the private sector partnership for financial inclusion. • Equator Principles. We analyse the environmental and social risks of all our funding transactions that fall under the scope of the Equator Principles.	2021 Annual Report, Responsible Banking chapter

Please provide your bank's conclusion/statement if it has fulfilled the requirements regarding Progress on Implementing the Principles for Responsible Banking

Through the responsible banking chapter of the Annual Report we give accounts of all our commitments related sustainability and responsible banking. We participate actively and we are part of the main initiatives and working groups that foster responsible business practices at local and international level.

Global Reporting Initiative (GRI) content index

GRI 102-55

GRI Standards: GENERAL DISCLOSURES

GRI Standard	Disclosure	Page	Omission
GRI 101: FOUNDATION			
GRI 102: GENERAL DISCLOSURES			
ORGANIZATIONAL PROFILE	102-1 Name of the organization	Business model and strategy (p. 6).	-
	102-2 Activities, brands, products, and services	Business model and strategy (p.6).	-
	102-3 Location of headquarters	Business model and strategy (p. 6).	-
	102-4 Location of operations	Business model and strategy (p. 6).	-
	102-5 Ownership and legal form	Business model and strategy (p. 6).	-
	102-6 Markets served	Business model and strategy (p.6).	-
	102-7 Scale of the organization	Business model and strategy (p. 6). Key Metrics (p. 117).	-
	102-8 Information on employees and other workers	Key metrics (p. 117).	1
	102-9 Supply chain	Responsible procurement (p. 68).	-
	102-10 Significant changes to the organization and its supply chain	Responsible procurement (p. 68).	-
	102-11 Precautionary Principle or approach	Conduct and ethical behaviour (p. 37). (Environmental and social risk management policy section)	-
	102-12 External initiatives	Governance (p. 29) (Joint initiatives to promote our agenda section). Shareholder value (p. 69) (ESG indices and analysts section).	-
	102-13 Membership of associations	Santander participates in industry associations representing financial activity in the countries where it operates, as the AEB in the case of Spain	-
STRATEGY	102-14 Statement from senior decision-maker	What our stakeholders tell us (p. 24) (Governance section).	-
	102-15 Key impacts, risks, and opportunities	A strong and inclusive culture: The Santander Way (p. 34) (Active listening section). What our stakeholders tell us (p. 24). Supporting the green transition (p. 72) (Risk management section). Risk management and compliance chapter (p. 430).	-
ETHICS AND INTEGRITY	102-16 Values, principles, standards, and norms of behaviour	Governance (p. 29). A strong and inclusive culture: The Santander Way (p. 34). Acting responsibly towards customers. (p. 61).	-
	102-17 Mechanisms for advice and concerns about ethics	A talented and motivated team (p. 44) (section 1. Speaking up, active listening and taking action) Risk management and compliance (p. 430).	-

GRI Standard	Disclosure	Page	Omission
	102-18 Governance structure	Corporate Governance chapter of the annual report. (p. 179).	-
	102-19 Delegating authority	Corporate Governance chapter of the annual report (p. 179).	-
	102-20 Executive-level responsibility for economic, environmental, and social topics	Corporate Governance chapter of the annual report (p. 179).	-
	102-21 Consulting stakeholders on economic, environmental, and social topics	Corporate Governance chapter of the annual report (p. 179). Auditor's report and annual consolidated accounts (p. 512). What our stakeholders tell us (p. 24).	-
	102-22 Composition of the highest governance body and its committees	Corporate Governance chapter of the annual report (p. 179).	-
	102-23 Chair of the highest governance body	Corporate Governance chapter of the annual report. (p. 179). Auditor's report and consolidated annual accounts (p. 512).	-
	102-24 Nominating and selecting the highest governance body	Corporate Governance chapter of the annual report (p. 179). Auditor's report and consolidated annual accounts (p. 512).	-
	102-25 Conflicts of interest	What our stakeholders tell us (p. 24). Corporate Governance chapter of the annual report (p. 179). Auditor's report and consolidated annual accounts (p. 512).	-
	102-26 Role of highest governance body in setting purpose, values, and strategy	Shareholder value (p. 69). Corporate Governance chapter of the annual report (p. 179). Auditor's report and consolidated annual accounts (p. 512).	-
	102-27 Collective knowledge of highest governance body	Shareholder value (p. 69). Corporate Governance chapter of the annual report (p. 179). Auditor's report and consolidated annual accounts (p. 512).	-
	102-28 Evaluating the highest governance body's performance	Shareholder value (p. 69). Corporate Governance chapter of the annual report (p. 179). Auditor's report and consolidated annual accounts (p. 512).	-
GOVERNANCE	102-29 Identifying and managing economic, environmental, and social impacts	Auditor's report and consolidated annual accounts (p. 512). Risk management and compliance (p. 430). Supporting the green transition (p. 72) (Risk management section).	-
	102-30 Effectiveness of risk management processes	Supporting the green transition (p. 71) (Risk management section). Risk management and compliance chapter (p. 430).	-
	102-31 Omission of economic, environmental, and social topics	Governance (p. 29).Risk management and compliance chapter (p. 430). Auditor's report and consolidated annual accounts (p. 512).	-
	102-32 Highest governance body's role in sustainability reporting	Santander´s Board approved this report on February, 24th 2022 related to the 2021 period, and the Corporate Governance Chapter of the Annual Report published in 2022.	-
	102-33 Communicating critical concerns	Auditor's report and consolidated annual accounts (p. 512).	-
	102-34 Nature and total number of critical concerns	Governance (p. 29). Acting responsibly towards customers (p. 61) (Complaints management section).	-
	102-35 Remuneration policies	A talented and motivated team (p. 44). (Diversity and inclusion section, equal pay subsection) Corporate Governance chapter of the Annual Report (p. 179).	-
	102-36 Process for determining remuneration	What our stakeholders tell us (p. 24). Shareholder's value (p. 69). Corporate Governance Chapter of the Annual Report (p. 179). Risk supervision, regulation and compliance committee activities in 2021 (p. 234).	-
	102-37 Stakeholders' involvement in remuneration	What our stakeholders tell us (p. 24). Shareholder's value (p. 69). Corporate Governance Chapter of the Annual Report (p. 179). Risk supervision, regulation and compliance committee activities in 2021 (p. 234).	-
	102-38 Annual total compensation ratio	–	2
	102-39 Percentage increase in annual total compensation ratio	–	2

GRI Standard	Disclosure	Page	Omission
STAKEHOLDER ENGAGEMENT	102-40 List of stakeholder groups	What our stakeholders tell us (p. 24).	-
	102-41 Collective bargaining agreements	What our stakeholders tell us (p. 24).	-
	102-42 Identifying and selecting stakeholders	What our stakeholders tell us (p. 24).	-
	102-43 Approach to stakeholder engagement	What our stakeholders tell us (p. 24).	-
	102-44 Key topics and concerns raised	What our stakeholders tell us (p. 24).	-
REPORTING PRACTICE	102-45 Entities included in the consolidated financial statements	Further information section of this chapter (p. 131). Auditor's report and consolidated annual accounts (p. 512).	-
	102-46 Defining report content and topic Boundaries	Our approach (p. 23). Further information section of this chapter (p. 131).	-
	102-47 List of material topics	What our stakeholders tell us (p. 24).	-
	102-48 Restatements of information	About this chapter (p. 16).	-
	102-49 Changes in reporting	About this chapter (p. 16).	-
	102-50 Reporting period	About this chapter (p. 16).	-
	102-51 Date of most recent report	About this chapter (p. 16).	-
	102-52 Reporting cycle	About this chapter (p. 16).	-
	102-53 Contact point for questions regarding the report	General information chapter (p. 808).	-
	102-54 Claims of reporting in accordance with the GRI Standards	About this chapter (p. 16).	-
	102-55 GRI content index	GRI Content Index. (p. 144).	-
	102-56 External assurance	About this report (p. 16). Independent verification report(p. 175).	-

GRI Standards: Topic-specific disclosures

Identified material aspect	Material aspect boundary	GRI Standard	Disclosure	Page		Scope	Omission
ECONOMIC STANDARDS							
ECONOMIC PERFORMANCE							
Ethical behaviour and risk management / Compliance and adapting to regulatory changes	Internal and external	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). "Material aspect boundary" of GRI Content Index		-	-
			103-2 The management approach and its components	Governance (p. 29). "Page" of the GRI 201: Economic Performance"		-	-
			103-3 Evaluation of the management approach	Governance (p. 29)."Page" of the GRI 201: Economic Performance"		-	-
		GRI 201: ECONOMIC PERFORMANCE		**€ million**	**2021**		
				Economic value generated[1]	46,414		
				Gross income	46,404		
				Net loss on discontinued operations	0		
				Gains/(losses) on disposal of assets not classified as non-current held for sale	53		
				Gains/(losses) on disposal of assets not classified as discontinued operations	-43		
				Economic value distributed	24,541		
				Dividends	836		
				Other administrative expenses (except taxes)	7,443		
				Personnel expenses	11,216		
				Income tax and other taxes2	4,894		
				CSR investment	152		
			201-1 Direct economic value generated and distributed	Economic value retained (economic value generated less economic value distributed)	21,873	Group	-
				1. Gross income plus net gains on asset disposals. 2. Only includes income tax on profits accrued and taxes recognised during the period. Tax contribution section (Conduct and ethical behaviours) provides additional information on the taxes paid.			
			201-2 Financial implications and other risks and opportunities due to climate change	Supporting the green transition (p. 72). 10. Climate and environmental risk section (p. 499) on Risk management and compliance chapter.		Group	-
			201-3 Defined benefit plan obligations and other retirement plans	The liability for provisions for pensions and similar obligations at 2021 year-end amounted to EUR 3,185 million. Endowments and contributions to the pension funds in the 2021 financial year have amounted to EUR 359 million. The detail may be consulted in Auditor´s report and annual consolidated accounts.		Group	-
			201-4 Financial assistance received from government	The Bank has not received significant subsidies or public aids during 2020 and 2021. The detail may be consulted in Auditor´s report and annual consolidated accounts.		Group	-

Identified material aspect	Material aspect boundary	GRI Standard	Disclosure	Page	Scope	Omission
MARKET PRESENCE						
Attracting and retaining talent / Diversity / Community investment	Internal	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	A strong and inclusive culture: The Santander Way (p. 34). Column "Page" of the GRI 201: Economic Performance.	-	-
			103-3 Evaluation of the management approach	A strong and inclusive culture: The Santander Way (p. 34). Column "Page" of the GRI 201: Economic Performance.	-	-
		GRI 202: MARKET PRESENCE	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	Key metrics (p. 117).	Group	-
			202-2 Proportion of senior management hired from the local community	Key metrics (p. 117). The Group Corporate Human Resources Model aims to attract and retain the best professionals in the countries in which it operates.	Group excluding USA	-
INDIRECT ECONOMIC IMPACT						
Community investment	External	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	Financial inclusion and empowerment (p. 96). Support to higher education and other local initiatives (p. 107).	-	-
			103-3 Evaluation of the management approach	Financial inclusion and empowerment (p. 96). Support to higher education and other local initiatives (p. 107).	-	-
		GRI 203: INDIRECT ECONOMIC IMPACT	203-1 Infrastructure investments and services supported	Support to higher education and other local initiatives (p. 107).	Group	-
			203-2 Significant indirect economic impacts	Support to higher education and other local initiatives (p. 107).	Group	-
PROCUREMENT PRACTICES						
Ethical behaviour and risk management	External	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	Responsible procurement (p. 68).	-	-
			103-3 Evaluation of the management approach	Responsible procurement (p. 68).	-	-
Ethical behaviour and risk management	External	GRI 204: PROCUREMENT PRACTICES	204-1 Proportion of spending on local suppliers	Responsible procurement (p. 68).	Group	3

Identified material aspect	Material aspect boundary	GRI Standard	Disclosure	Page	Scope	Omission
ANTI-CORRUPTION						
Ethical behaviour and risk management / Compliance and adapting to regulatory changes / Corporate governance-transparency	Internal and External	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	2021 overview (p. 18). A strong and inclusive culture: The Santander Way (p. 34).	-	-
			103-3 Evaluation of the management approach	2021 overview (p. 18). A strong and inclusive culture: The Santander Way (p. 34).	-	-
		GRI 205: ANTI-CORRUPTION	205-1 Operations assessed for risks related to corruption	Risk management and compliance chapter (p. 430).	Group	-
			205-2 Communication and training about anti-corruption policies and procedures	Conduct and ethical behaviour (p. 37) (Finance crime compliance section). Risk management and compliance chapter (p. 430).	Group	-
			205-3 Confirmed incidents of corruption and actions taken	Conduct and ethical behaviour (p. 37) (Ethical channel section). Risk management and compliance chapter (p. 430).	Group	4
ANTI-COMPETITIVE BEHAVIOR						
Ethical behaviour and risk management / Compliance and adapting to regulatory changes	Internal and external	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	2021 overview (p. 18). A strong and inclusive culture: The Santander Way (p. 34). Column "Page" of the GRI 206: Anti-competitive Behaviour.	-	-
			103-3 Evaluation of the management approach	2021 overview (p. 18). A strong and inclusive culture: The Santander Way (p. 34). Column "Page" of the GRI 206: Anti-competitive Behaviour.	-	-
		GRI 206: ANTI-COMPETITIVE BEHAVIOUR	206-1 Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	The Italian Competition Authority ("ICA") has imposed Banca PSA Italia a fine of EUR 6,077,606 as part of an investigation against the Captive Banks for running an unlawful cartel from 2003 to April 2017, aimed at exchanging sensitive commercial information in the car financing market in Italy, in order to restrict competition for the sale of financed cars, in violation of Article 101 TFEU. Decision was appealed before the administrative court in 2019. On 21 October 2020, the administrative court of Lazio has annulled in its entirety the ICA´s decision about the car financing cartel. As a result of this judgement, the decision is annulled in its entirety, and all charges against PSA and against SCF Italy are no longer valid. ICA has appealed before the Consiglio di Stato. It is expected that the appeal will be resolved by Q1 2022. On 23 September 2020 the UOKiK (Office of Competition and Consumer Protection in Poland) published its decision in which a clause used by Santander Bank Poland in annexes to agreements on residential mortgage loans indexed to foreign currencies, was declared abusive. The clause relates to FX exchange rate (method of its determination). Fine: EUR 5,2 million. Santander Bank Poland has appealed the decision. Pending of the first hearing.	Group	5

Identified material aspect	Material aspect boundary	GRI Standard	Disclosure	Page	Scope	Omission
Compliance and risk management / Ethical behaviour	Internal and external	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	2021 overview (p. 18). A strong and inclusive culture: The Santander Way (p. 34). Column "Page" of the GRI 207: Tax.	-	-
			103-3 Evaluation of the management approach	2021 overview (p. 18). A strong and inclusive culture: The Santander Way (p. 34). Column "Page" of the GRI 207: Tax.	-	-
		GRI 207: TAX	207-1 Approach to tax	Conduct and ethical behaviour (p. 37) (Principles of action in tax matters)	Group	-
			207-2 Tax governance, control, and risk management	Conduct and ethical behaviour (p. 37) (Principles of action in tax matters)	Group	-
			207-3 Stakeholder engagement and management of concerns related to tax	Conduct and ethical behaviour (p. 37) (Principles of action in tax matters)	Group	-
			207-4 Country-by-country reporting	Key metrics (p. 117) (country-by-country report)	-	-
ENVIRONMENTAL STANDARDS						
MATERIALS						
Internal environmental footprint	Internal and external	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	Supporting the green transition (p. 72) (Environmental footprint).	-	-
			103-3 Evaluation of the management approach	Supporting the green transition (p. 72) (Environmental footprint).	-	-
Internal environmental footprint	Internal and external	GRI 301: MATERIALS	301-1 Materials used by weight or volume	Supporting the green transition (p. 72) (Environmental footprint). Key metrics (p. 117).	Group	6
			301-2 Recycled input materials used	Supporting the green transition (p. 72) (Environmental footprint). Key metrics (p. 117) (Environmental footprint).	Group	6
			301-3 Reclaimed products and their packaging materials	Not applicable due to the type of Group financial activity.	Group	-
ENERGY						
Internal environmental footprint	Internal and external	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	Supporting the green transition (p. 72) (Environmental footprint).	-	-
			103-3 Evaluation of the management approach	Supporting the green transition (p. 72) (Environmental footprint).	-	-
		GRI 302: ENERGY	302-1 Energy consumption within the organization	Supporting the green transition (p. 72) (Environmental footprint). Key metrics (p. 117).	Group	6
			302-2 Energy consumption outside of the organization	Key metrics (p. 117).	Group	6
			302-3 Energy intensity	Key metrics (p. 117).	Group	6
			302-4 Reduction of energy consumption	An specific analysis of cause and effect relation for the implemented measures and of the obtained reduction is not available.	Group	-
			302-5 Reductions in energy requirements of products and services	Not applicable due to the type of Group financial activity.	Group	-

Identified material aspect	Material aspect boundary	GRI Standard	Disclosure	Page	Scope	Omission
WATER AND EFFLUENTS						
Internal environmental footprint	Internal and external	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	Supporting the green transition (p. 72) (Environmental footprint).	-	-
			103-3 Evaluation of the management approach	Supporting the green transition (p. 72) (Environmental footprint).	-	-
		GRI 303: WATER AND EFFLUENTS	303-1 Interactions with water as a shared resource	Banco Santander manages its water consumption and supply following local limitations.	Group	-
			303-2 Management of water discharge-related impacts	Not applicable due to the type of Group financial activity.	Group	-
			303-3 Water withdrawal	Supporting the green transition (p. 72) (Environmental footprint). Key metrics (p. 117)	Group	6
			303-4 Water discharge	Not applicable due to the type of Group financial activity.	Group	-
			303-5 Water consumption	Supporting the green transition (p. 72) (Environmental footprint).	Group	6
BIODIVERSITY						
Biodiversity	Internal and external	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Context Index.	-	-
			103-2 The management approach and its components	Conduct and ethical behaviour (p. 37) (Environmental and social risk management).	-	-
			103-3 Evaluation of the management approach	Conduct and ethical behaviour (p. 37) (Environmental and social risk management).	-	-
		GRI 304: BIODIVERISTY	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Not applicable due to the type of Group financial activity.	Group	-
			304-2 Significant impacts of activities, products, and services on biodiversity	Not applicable due to the type of Group financial activity.	Group	-
			304-3 Habitats protected or restored	Conduct and ethical behaviour (p. 37) (Environmental and social risk management)	Group	9
			304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	Not applicable due to the type of Group financial activity.	Group	-

Identified material aspect	Material aspect boundary	GRI Standard	Disclosure	Page	Scope	Omission
EMISSIONS						
Internal environmental footprint	Internal and external	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24) . Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	Supporting the green transition (p. 72) (Environmental footprint).	-	-
			103-3 Evaluation of the management approach	Supporting the green transition (p. 72) (Environmental footprint).	-	-
Internal environmental footprint	Internal and external	GRI 305: EMISSIONS	305-1 Direct (Scope 1) GHG emissions	Supporting the green transition (p. 72) (Environmental footprint). Key metrics (p. 117).	Group	6
			305-2 Energy indirect (Scope 2) GHG emissions	Supporting the green transition (p. 72) (Environmental footprint). Key metrics (p. 117).	Group	6
			305-3 Other indirect (Scope 3) GHG emissions	Supporting the green transition (p. 72) (Environmental footprint). Key metrics (p. 117).	Group	6
			305-4 GHG emissions intensity	Key metrics (p. 117).	Group	6
			305-5 Reduction of GHG emissions	An specific analysis of cause and effect relation for the implemented measures and of the obtained reduction is not available.	Group	-
			305-6 Emissions of ozone-depleting substances (ODS)	Not applicable due to the type of Group financial activity.	Group	-
			305-7 Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	Not applicable due to the type of Group financial activity.	Group	-
WASTE						
Internal environmental footprint	Internal and external	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	Supporting the green transition (p. 72) (Environmental footprint).	-	-
			103-3 Evaluation of the management approach	Supporting the green transition (p. 72) (Environmental footprint).	-	-
		GRI 306: WASTE	306-1 Waste generation and significant waste-related impacts	Supporting the green transition (p. 72) (Environmental footprint).	Group	-
			306-2 Management of significant waste-related impacts	Supporting the green transition (p. 72) (Environmental footprint). Key metrics (p. 117).	Group	-
			306-3 Waste generated	Supporting the green transition (p. 72) (Environmental footprint). Key metrics (p. 117). (Environmental footprint).	Group	-
			306-4 Waste diverted from disposal	Key metrics (p. 117) (Environmental footprint).	Group	6
			306-5 Waste directed to disposal	Key metrics (p. 117).	Group	6

Identified material aspect	Material aspect boundary	GRI Standard	Disclosure	Page	Scope	Omission
ENVIRONMENTAL COMPLIANCE						
Ethical behaviour and risk management / Compliance and adapting to regulatory changes	Internal and external	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	A strong and inclusive culture: The Santander Way (p. 34)	-	-
			103-3 Evaluation of the management approach	A strong and inclusive culture: The Santander Way (p. 34)	-	-
		GRI 307: ENVIRONMENTAL COMPLIANCE	307-1 Non-compliance with environmental laws and regulations	The Bank has not received final sanctions for this concept. In addition, information on litigation and other Group contingencies can be found in Auditor's report and annual consolidated accounts.	Group	5
SUPPLIER ENVIRONMENTAL ASSESSMENT						
Ethical behaviour and risk management	Internal and external	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	Responsible procurement (p. 68).	-	-
			103-3 Evaluation of the management approach	Responsible procurement (p. 68).	-	-
		GRI 308: SUPPLIER ENVIRONMENTAL ASSESSMENT	308-1 New suppliers that were screened using environmental criteria	Responsible procurement (p. 68).	Group	3
			308-2 Negative environmental impacts in the supply chain and actions taken	Responsible procurement (p. 68).	Group	7
SOCIAL STANDARDS						
EMPLOYMENT						
Attracting and retaining talent / Diversity	Internal	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	A talented and motivated team (p. 44) (Talent attraction section).	-	-
			103-3 Evaluation of the management approach	A talented and motivated team (p. 44) (Talent attraction section).	-	-
			401-1 New employee hires and employee turnover	A talented and motivated team (p. 44) (Talent attraction section). Key metrics (p. 117).	Group	-
		GRI 401: EMPLOYMENT	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Benefits detailed in "A talented and motivated team"(p. 44), section "Corporate benefits" are regarding only full-time employees.	Group	-
			401-3 Parental leave	Information breakdown is not available, work is under way to present this information.	Group	-

Identified material aspect	Material aspect boundary	GRI Standard	Disclosure	Page	Scope	Omission
LABOUR/MANAGEMENT RELATIONS						
Attracting and retaining talent / Diversity	Internal	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	Column "Page" of the GRI 402: Labour/ Management relations"	-	-
			103-3 Evaluation of the management approach	Column "Page" of the GRI 402: Labour/ Management relations"	-	-
		GRI 402: LABOR/ MANAGEMENT RELATIONS	402-1 Minimum notice periods regarding operational changes	Santander Group has not established any minimum period to give prior notice relating to organizational changes different from those required by law in each country.	Group	-
OCCUPATIONAL HEALTH AND SAFETY						
Attracting and retaining talent / Diversity	Internal	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	A talented and motivated team (p. 44). Column "Page" of the GRI 403: Occupational Safe and Safety.	-	-
			103-3 Evaluation of the management approach	A talented and motivated team (p. 44). Column "Page" of the GRI 403: Occupational Safe and Safety.	-	-
Attracting and retaining talent / Diversity	Internal	GRI 403: OCCUPATIONAL HEALTH AND SAFETY	403-1 Occupational health and safety management system	Banco Santander has occupational health and safety management systems in place in all the geographies in which it operates, complying with the legal requirements of each country regarding occupational risk prevention.	Group	-
			403-2 Hazard identification, risk assessment, and incident investigation	A talented and motivated team (p. 44) (Employee wellbeing section).	Group	-
			403-3 Occupational health services	A talented and motivated team (p. 44) (Employee wellbeing section).	Group	-
			403-4 Worker participation, consultation, and communication on occupational health and safety	At Banco Santander SA, the percentage of Representation in the Security Committee is 100%.	Banco Santander S.A. and SCF	-
			403-5 Worker training on occupational health and safety	A talented and motivated team (p. 44) (Employee wellbeing section).	Group	-
			403-6 Promotion of worker health	A talented and motivated team (p. 44) (Employee wellbeing section).	Group	-
			403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Not applicable due to the type of Group financial activity.	Group	
			403-8 Workers covered by an occupational health and safety management system	100% of Banco Santander employees are covered by health and safety management systems at work.	Group	1
			403-9 Work-related injuries	A talented and motivated team (p. 44) (Employee wellbeing section). Key metrics (p. 117).	Group	1
			403-10 Work-related ill health	Key metrics(p. 117).	Group	1

Identified material aspect	Material aspect boundary	GRI Standard	Disclosure	Page	Scope	Omission
TRAINING AND EDUCATION						
Attracting and retaining talent / Diversity	Internal	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	A talented and motivated team (p. 44). "Page" of the GRI 404: Training and education.	-	-
			103-3 Evaluation of the management approach	A talented and motivated team (p. 44). "Page" of the GRI 404: Training and education.	-	-
		GRI 404: TRAINING AND EDUCATION	404-1 Average hours of training per year per employee	A talented and motivated team (p. 44) (Talent attraction section). Key metrics (p. 117).	Group	-
			404-2 Programs for upgrading employee skills and transition assistance programs	Banco Santander offers management programmes and continuous training skills that foster the employees´ employability and that, sometimes, help them manage the end of their professional careers. A talented and engaged team (p. 44) (Learning and development section).	Group	-
			404-3 Percentage of employees receiving regular performance and career development omissions.	A talented and motivated team (p. 44) (Performance review and remuneration section). Regular performance and career development are received by the 100% of the employees.	Group	-
DIVERSITY AND EQUAL OPPORTUNITY						
Attracting and retaining talent / Diversity / Incentives tied to ESG criteria	Internal	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	A talented and motivated team (p. 44) (Diversity and Inclusion section).	-	-
			103-3 Evaluation of the management approach	A talented and motivated team (p. 44) (Diversity and Inclusion section).	-	-
Attracting and retaining talent / Diversity / Incentives tied to ESG criteria	Internal	GRI 405: DIVERSITY AND EQUAL OPPORTUNITIES	405-1 Diversity of governance bodies and employees	A talented and motivated team (p. 44) (Diversity and Inclusion section). Key metrics (p. 117). Corporate governance chapter of the Annual Report (p. 179).	Group	-
			405-2 Ratio of basic salary and remuneration of women to men	A talented and motivated team (p. 44) (Diversity and Inclusion section). Key metrics (p. 117).	Group	-
NON-DISCRIMINATION						
Ethical behaviour and risk management / Compliance and adapting to regulatory changes	Internal and external	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	A talented and motivated team (p. 44) (Diversity and Inclusion section).	-	-
			103-3 Evaluation of the management approach	A talented and motivated team (p. 44) (Diversity and Inclusion section).	-	-
		GRI 406: NON-DISCRMINATION	406-1 Incidents of discrimination and corrective actions taken	A talented and motivated team (p. 44) (Active listening section). Risk management and compliance chapter (p. 430).	Group	-

Identified material aspect	Material aspect boundary	GRI Standard	Disclosure	Page	Scope	Omission
FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING						
Not material	Not applicable	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	Not material	-	-
			103-2 The management approach and its components	Not material	-	-
			103-3 Evaluation of the management approach	Not material	-	-
		GRI 407: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Not material	Group	-
CHILD LABOR						
Not material	Not applicable	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	Not material	-	-
			103-2 The management approach and its components	Not material	-	-
			103-3 Evaluation of the management approach	Not material	-	-
		GRI 408: CHILD LABOR	408-1 Operations and suppliers at significant risk for incidents of child labor	Not material	Group	-
FORCED OR COMPULSORY LABOR						
Not material	Not applicable	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	Not material	-	-
			103-2 The management approach and its components	Not material	-	-
			103-3 Evaluation of the management approach	Not material	-	-
		GRI 409: FORCED OR COMPULSORY LABOR	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Conduct and ethical behaviour (p. 117) (Environmental and social risk management)	Group	-
SECURITY PRACTICES						
Ethical behaviour and risk management / Compliance and adapting to regulatory changes	Internal and external	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	Column "Page" of the GRI 410: Security Practices.	-	-
			103-3 Evaluation of the management approach	Column "Page" of the GRI 410: Security Practices.	-	-
		GRI 410: SECUTIRY PRACTICES	410-1 Security personnel trained in human rights policies or procedures	Santander requires to its Safety Services suppliers during the hiring process compliance with Human Rights Regulations	Banco Santander S.A.	-

Identified material aspect	Material aspect boundary	GRI Standard	Disclosure	Page	Scope	Omission
RIGHTS OF INDIGENOUS PEOPLES						
Ethical behaviour and risk management / Compliance and adapting to regulatory changes	External	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	Column "Page" of the GRI 411: Rights of Indigenous People	-	-
			103-3 Evaluation of the management approach	Column "Page" of the GRI 411: Rights of Indigenous People.	-	-
		GRI 411: RIGHTS OF INIDGENOUS PEOPLE	411-1 Incidents of violations involving rights of indigenous people	The Bank ensures, through social and environmental risk assessments in their financing operations under the Equator Principles, that no violations of the indigenous peoples' rights occur in such operations. In 2020, a total of 68 operations were evaluated in this respect.	Group	8
HUMAN RIGHTS ASSESSMENT						
Ethical behaviour and risk management / Compliance and adapting to regulatory changes	External	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	Column "Page" of the GRI 412: Human Rights assessment	-	-
			103-3 Evaluation of the management approach	Column "Page" of the GRI 412: Human Rights assessment	-	-
Ethical behaviour and risk management / Compliance and adapting to regulatory changes	External	GRI 412: HUMAN RIGHTS ASSESSMENT	412-1 Operations that have been subject to human rights Omissions or impact assessments	All the Bank's financing operations under the Equator Principles are subject to social and environmental risk assessments (which includes human rights aspects). In 2020, a total of 68 operations were evaluated in this respect.	Group	8
			412-2 Employee training on human rights policies or procedures	Conduct and ethical behaviours (p. 37) (Human rights protection).	Group	9
			412-3 Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	All of Banco Santander's significant investment agreements and contracts made within the framework of the Equator Principles are subject to a social and environmental risk assessment (including HR aspects).	Group	8

Identified material aspect	Material aspect boundary	GRI Standard	Disclosure	Page	Scope	Omission
LOCAL COMMUNITIES						
Community investment	External	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	Group	-
			103-2 The management approach and its components	Financial inclusion and empowerment (p. 96). Support to higher education and other local initiatives (p. 107) (Community investment section). Supporting the green transition (p. 72).	Group	-
			103-3 Evaluation of the management approach	Financial inclusion and empowerment (p. 96). Support to higher education and other local initiatives (p. 107) (Community investment section). Supporting the green transition (p. 72).	Group	-
		GRI 413: LOCAL COMMUNITIES	413-1 Operations with local community engagement, impact assessments, and development programs	Financial inclusion and empowerment (p. 96) (Finance section), Support to higher education and other local initiatives (p. 107). The Santander Group has several programmes in its ten main countries aim to encourage development and participation of local communities, in which it is carried out an assessment on people helped, scholarships given through agreement with Universities, among others. Moreover, in the last years the Group has developed different products and services offering social and/or environmental added value adapted to each country where Santander develops its activities.	Group	-
			413-2 Operations with significant actual and potential negative impacts on local communities	Conduct and ethical behaviour (p. 37) (Environmental and social risk analysis section).	Group	-
SUPPLIER SOCIAL ASSESSMENT						
Control and management of risks, ethics and compliance	Internal and external	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	Responsible procurement (p. 68).	-	-
			103-3 Evaluation of the management approach	Responsible procurement (p. 68).	-	-
		GRI 414: SUPPLIER SOCIAL ASSESSMENT	414-1 New suppliers that were screened using social criteria	Responsible procurement (p. 68).	Group	3
			414-2 Negative social impacts in the supply chain and actions taken	Responsible procurement (p. 68).	Group	7
PUBLIC POLICY						
Ethical behaviour and risk management / Compliance and adapting to regulatory changes	Internal and external	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	2021 overview (p. 18). A strong and inclusive culture: The Santander Way (p. 34). A talented and motivated team (p. 44). Governance (p. 29). "Page" of the GRI 415: Public Policy.	-	-
			103-3 Evaluation of the management approach	2021 overview (p. 18). A strong and inclusive culture: The Santander Way (p. 34). A talented and motivated team (p. 44). Governance (p. 29). "Page" of the GRI 415: Public Policy.	-	-
		GRI 415: PUBLIC POLICY	415-1 Political contributions	The ties, membership or collaboration with political parties or with other kind of entities, institutions or associations with public purposes, as well as contributions or services to them, should be done in a way that can assure the personal character and that avoids any involvement of the Group, as indicated in Santander Group General Code of Conduct	Group	-

Identified material aspect	Material aspect boundary	GRI Standard	Disclosure	Page	Scope	Omission
CUSTOMER HEALTH SAFETY						
Products and services that are transparent and fair		GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	Acting responsibly towards our customers (p. 61)(Product governance and consumer protection section).	-	-
			103-3 Evaluation of the management approach	Acting responsibly towards our customers (p. 61)(Product governance and consumer protection section).	-	-
		GRI 416: CUSTOMER HEALTH AND SAFETY	416-1 Assessment of the health and safety impacts of product and service categories	Responsible business practices. The Commercialization Committee evaluates potential impact of all products and services, previously they are launched onto the market. These impacts include, among others, clients security and compatibility with other products.	Group	-
			416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	The Bank has not received final sanctions for this concept. In addition, information on litigation and other Group contingencies can be found in Auditor's report and annual consolidated accounts.	Group	5
MARKETING AND LABELING						
Products and services that are transparent and fair	Internal and external	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	Acting responsibly towards our customers (p. 61)(Product governance and consumer protection section).	-	-
			103-3 Evaluation of the management approach	Acting responsibly towards our customers (p. 61)(Product governance and consumer protection section).	-	-
Products and services that are transparent and fair	Internal and external	GRI 417: MARKETING AND LABELING	417-1 Requirements for product and service information and labeling	Responsible business practices. The Commercialization Committee evaluates potential impact of all products and services, previously they are launched onto the market. These impacts include, among others, clients security and compatibility with other products. In addition, the Bank is member of the Association for Commercial Self- Regulation (Autocontrol) assuming the ethical commitment to be responsible regarding the freedom of commercial communication	Group	-
			417-2 Incidents of non-compliance concerning product and service information and labeling	Sanction resolution (€300.000) notified by the Spanish National Securities Market Commission, notified on 22 December 2020, for violation of the provisions foreseen in article 214 of the Spanish Securities Market Act, in relation to the information collected from retail clients for the suitability assessment. An appeal has been filed before the Administrative Contentious Court. Sanctioning resolution from Junta de Andalucía notified on June 23 2021 (€1,03 million), in relation to the inclusion of abusive clauses in contracts. On December 30, 2021 the President UOKIK (Office of Competition and Consumer Protection in Poland) issued a decision against Santander Consumer Bank Poland (SCB Poland) in the proceedings regarding individual offers and insurance, which states that SCB Poland uses practices that violate collective consumer interests. The decision imposes fines that amount to €9.8 million. SCB Poland will appeal UOKIK´S decision.	Group	5
			417-3 Incidents of non-compliance concerning marketing communications	The Bank hasn't received any sanctions concerning this matter. Additional information about Group's litigation and other risks can be found at the Auditor's report and 2021 consolidated annual accounts.	Group	5

Identified material aspect	Material aspect boundary	GRI Standard	Disclosure	Page	Scope	Omission
CUSTOMER PRIVACY						
Measures taken for customer satisfaction	Internal and External	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	Acting responsibly towards our customers (p. 61).	-	-
			103-3 Evaluation of the management approach	Acting responsibly towards our customers (p. 61).	-	-
		GRI 418: CUSTOMER PRIVACY	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	The Bank has not received final sanctions for this concept. In addition, information on litigation and other Group contingencies can be found in Auditor's report and annual consolidated accounts.	Group	5

Identified material aspect	Material aspect boundary	GRI Standard	Disclosure	Page	Scope	Omission
SOCIOECONOMIC COMPLIANCE						
Products and services that are transparent and fair / Ethical behaviour and risk management	Internal and external	GRI 103: MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	What our stakeholders tell us (p. 24). Column "Material aspect boundary" of GRI Content Index.	-	-
			103-2 The management approach and its components	2021 overview (p. 18). A strong and inclusive culture: The Santander Way (p. 34). A talented and motivated team (p. 44). Acting responsibly towards customers (p. 61). Column "Page" of the GRI 419: Socioeconomic Compliance.	-	-
			103-3 Evaluation of the management approach	2021 overview (p. 18). A strong and inclusive culture: The Santander Way (p. 34). A talented and motivated team (p. 44). Acting responsibly towards customers (p. 61). Column "Page" of the GRI 419: Socioeconomic Compliance.	-	-
		GRI 419: SOCIOECONOMIC COMPLIANCE	419-1 Non-compliance with laws and regulations in the social and economic area	On 16 July 2021, the Territorial Delegation for Health and Families in Córdoba rendered a resolution against Openbank for the inclusion of allegedly abusive terms in mortgage loan contracts during the period 2017-2019. The Territorial Delegation alleges that the inclusion of these abusive terms may result in a serious infringement of the Defense and Protection of Consumers and Users Act 13/2003 of Andalucía. Fine: €235.000. Openbank filed an administrative appeal. The proceeding is pending to final resolution. In 2018, the Massachusetts Supreme Court ruled that Notices of Intention to repossess or auction of a repossessed vehicles (NOIs) must expressly describe that any outstanding balance would be reduced by the "fair market value" of the vehicle; Santander Consumer USA (SC) revised its MA NOIs in September 2019. On February 2021, SC reached an agreement to resolve a putative class action filed in June 2019 alleging SC's MA NOIs failed to expressly reference "fair market value" for $5.6 million, which was approved by the Court on 16 December. The Yunker class action settlement is limited to MA borrowers who did not have arbitration provisions in their contracts. On 4 June 2021, the Massachusets Attorney General issued a Civil Investigative Demand (CID) to SC seeking all NOIs provided to Massachusets residents from 30 March 2017 to the present. The parties reached an agreement in principle to resolve the matter for $5.6 million. SC expects to reach a definitive agreement, including the issuance of an Assurance of Discontinuance in the first quarter of 2022. Sanctioning procedure received from Junta de Andalucía, alledging the establishment of abusive clauses in the contracts. SCF received the resolution on 21st of April 2021 imposing a fine of 235.000 million euros. Resolution has been appealed, and decision is pending. In addition, information on litigation and other Group contingencies can be found in Auditor's report and annual consolidated accounts.	Group	5

GRI Standards - Financial services sector disclosures

Identified material aspect	Material aspect boundary	G4 Standard	Disclosure	Page	Scope	Omission
FINANCIAL SERVICES SECTOR DISCLOSURES						
PRODUCT PORTFOLIO						
Ethical behaviour and risk management / Compliance and adapting to regulatory changes / Products and services that are transparent and fair / Products and services offering social and environmental added value	Internal and external	FS1	Policies with specific environmental and social components applied to business lines	Governance (p. 29)., Supporting the green transition (p. 72) (Corporate governance section). Conduct and ethical behaviour (p. 37) (Environmental and social risks analysis section)	Group	-
		FS2	Procedures for assessing and screening environmental and social risks in business lines	Governance (p. 29)., Supporting the green transition (p. 72) (Corporate governance section). Conduct and ethical behaviour (p. 37) (Environmental and social risks analysis section)	Group	-
		FS3	Processes for monitoring clients' implementation of and compliance with environmental and social requirements included in agreements of transactions	Governance (p. 29)., Supporting the green transition (p. 72). Conduct and ethical behaviour (p. 37) (Environmental and social risks analysis section)	Group	-
		FS4	Process(es) for improving staff competency to implement the environmental and social policies and procedures as applied to business lines	Supporting the green transition (p. 72) (Management and staff training section).	Group	-
		FS5	Interactions with clients/ investees/ business partners regarding environmental and social risks and opportunities	A strong and inclusive culture: The Santander Way (p. 34)(Cultural transformation: an ongoing journey). 2021 overview (p. 18). Governance (p. 29) (Joint initiatives to promote our agenda section). Shareholder value (p. 69).Risk management and compliance chapter (p. 430).	Group	-
		FS6	Percentage of the portfolio for business lines by specific region, size (e.g. micro/ SME/large) and by sector	Acting responsibly towards customers (p. 61). Governance (p. 29) (Helping society tackle global challenges: 2030 agenda section). Key metrics (p. 117)	Group	-
		FS7	Monetary value of products and services designed to deliver a specific social benefit for each business line broken down by purpose	Financial inclusion and empowerment (p. 96) (Access and Promoting financial education sections). Sustainable Investment (p. 104).	Group	-
		FS8	Monetary value of products and services designed to deliver a specific environmental benefit for each business line broken down by purpose	Supporting the green transition (p. 72). Sustainable Investment (p. 104).	Group	-

Identified material aspect	Material aspect boundary	G4 Standard	Disclosure	Page	Scope	Omission
AUDIT						
Ethical behaviour and risk management / Compliance and adapting to regulatory changes	Internal and external	FS9	Coverage and frequency of audits to assess implementation of environmental and social policies and risk assessment procedures	Every two years, the Group's Internal audit function reviews the corporate Responsible banking function's governance, materiality analyses, control, procedures and risk culture. If it spots areas for improvement, it will give recommendations to mitigate any operational risks from the Responsible banking function's procedures. The last audit in 2021 ended with an overall rating of "acceptable".	Group	-
ACTIVE OWNERSHIP						
Ethical behaviour and risk management / Compliance and adapting to regulatory changes / Products and services that are transparent and fair / Products and services offering social and environmental added value	Internal	FS10	Percentage and number of companies held in the institution´s portfolio with which the reporting organization has interacted on environmental or social issues	Conduct and ethical behaviour (p. 37) (Environmental and social risks analysis section)	Group	8
		FS11	Percentage of assets subject to positive and negative environmental or social screening	Conduct and ethical behaviour (p. 37) (Environmental and social risks analysis section)	Group	8
		FS12	Voting policy(ies) applied to environmental or social issues for shares over which the reporting organization hold the right to vote shares or advises on voting	The Santander Group has no voting policies relating to social and/or environmental matters for entities over which acts as an advisor. The Santander Employees Pension Fund does have a policy of formal vote in relation to social and environmental aspects, for shareholder meetings of the entities over which it has voting rights	Group	-
		FS13	Access points in low-populated or economically disadvantaged areas by type	Financial inclusion and empowerment (p. 96).	Group	-
		FS14	Initiatives to improve access to financial services for disadvantaged people	Financial inclusion and empowerment (p. 96) (Access section). A talented and motivated team (p. 44) (People with disabilities section). Acting responsibly towards customers (p. 61) (Vulnerable customers section).	Group	-
		FS15	Policies for the fair design and sale of financial products and services	Acting responsibly towards customers (p. 61) (Product and services design section)..	Group	-
		FS16	Initiatives to enhance financial literacy by type of beneficiary	Financial inclusion and empowerment (p. 96) (Promoting financial education section).	Group	-

1.Only information regarding owned employees is disclosed. 2. The indicator is not reported because it is confidential information. 3. Data refers exclusively to centralised purchases data in Aquanima. 4. Information is provided on the total number of complaints related to gifts and invitations/corruption and bribery. 5. Information is provided for claims of any type and over €60,000 that may have a significant reputational impact on the Group and/or that there is an accounting provision because it may materialize in the short, medium or long term. 6. The scope and limitations of this indicator are described on Key Metrics. 7. Only top-200 risk suppliers are reported. 8. Information is only provided on the number of project finance deals of Santander's Bank, which have been analysed regarding social and environmental risks in Equator Principles' frame. 9. Only qualitative information is disclosed. 10. Information is provided on programmes and their direct impacts of the ten main countries of the Group, instead on centres.

Sustainability Accounting Standards Board (SASB) content index

This is the second year in which Santander has decided to report in accordance with the Sustainability Accounting Standards Board (SASB), following its Industry Standards Version 2018-10 issue.

The relevant standards disclosed in this section have been selected according to a materiality-driven analysis, focusing on the industries that are most closely aligned with our businesses within the "Financials sector": Asset Management & Custody Activities (FN-AC), Commercial Banks (FN-CB), Consumer Finance (FN-CF), Investment Banking & Brokerage (FN-IB).

Acknowledging that SASB has a US-based approach, we have done our best efforts for translating it to our European standards.

Currently, we do not disclose all metrics included in the aforementioned industry standards, but we will continue to evaluate additional metrics in the future, enhancing our reporting under SASB framework for meeting the needs of our growing base of stakeholders and investors.

Unless otherwise is noted, all data and descriptions are reported for the Santander Group, if applicable, on a consolidated basis, and not just the segments relevant to the particular industry. The information will refer to the 2021 fiscal year, unless otherwise is specified.

Sustainability Accounting Metrics

Topic	Industry	Accounting Metric	Code	Response
Data Security	Commercial Banks Consumer Finance	(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of account holders affected.	FN-CB-230a.1 FN-CF-230a.1	Refer to 'Litigation and other matters' in the note 25 of the Consolidated accounts in the Auditor's report and consolidated financial statements (p. 512).
	Commercial Banks Consumer Finance	Description of approach to identifying and addressing data security risks.	FN-CB-230a.2 FN-CF-230a.3	Refer to 'Risk Pro' in section 'A strong and inclusive culture' of this chapter (p. 34).; and to 'Relevant mitigation actions' in section 6.2 of 'Risk management and compliance chapter' (p. 430).
Financial Inclusion & Capacity Building	Commercial Banks	(1) Number and (2) amount of loans outstanding qualified to programs designed to promote small business and community development.	FN-CB-240a.1	Refer to 'Acting responsibly towards customers' section of this chapter (p. 61). For more detail see note 10. 'Loans and advances to customers' in the Auditor's report and consolidated financial statements (p. 512). Additionally, all the information related to microfinance programmes are available on the 'Financial inclusion and empowerment' section of this report (p. 96).
	Commercial Banks	(1) Number and (2) amount of past due and nonaccrual loans qualified to programs designed to promote small business and community development.	FN-CB-240a.2	Refer to 'Amounts past due' and 'Impairment of financial assets' in 3.3 'Key metrics' section of the Risk management and compliance chapter. (p. 430). Also refer to notes 2.g and 10.d of the consolidated accounts in the Auditor's report and consolidated financial statements (p. 512).
	Commercial Banks	Number of no-cost retail checking accounts provided to previously unbanked or underbanked customers.	FN-CB-240a.3	Refer to 'Financial inclusion and empowerment' section of this chapter (p. 96).
	Commercial Banks	Number of participants in financial literacy initiatives for unbanked, underbanked, or underserved customers.	FN-CB-240a.4	In 2021, Grupo Santander has financially empowered 3.1 million people. For further information refer to 'Financial inclusion and empowerment' section of this chapter (p. 96).
Incorporation of Environmental, Social, and Governance Factors in Credit Analysis	Commercial Banks	Commercial and industrial credit exposure, by industry.	FN-CB-410a.1	Refer to 'Concentration risk' in section 3.5 'Other credit risk details' of the Risk Management and compliance chapter (p. 430).
	Commercial Banks	Description of approach to incorporation of environmental, social,and governance (ESG) factors in credit analysis.	FN-CB-410a.2	Refer to the 'Environmental and social risk analysis' section on Conduct and ethical behaviour (p. 37), and the 'Climate and environmental risk' (p. 499).section of the Risk management and compliance chapter For further information see our 'General Sustainability Policy and our 'Environmental, social & climate change risk management Policy', both available on our corporate website.

Topic	Industry	Accounting Metric	Code	Response
Incorporation of Environmental, Social, and Governance Factors in investment Banking & Brokerage Activities	Investment Banking & Brokerage	(1) Number and (2) total value of investments and loans incorporating integration of environmental, social, and governance (ESG) factors, by industry.	FN-IB-410a.2	Refer to 'Supporting the green transition' section of this chapter (p. 72).
	Investment Banking & Brokerage	Description of approach to incorporation of environmental, social, and governance (ESG) factors in investment banking and brokerage activities.	FN-IB-410a.3	Refer to 'Supporting the green transition' section of this chapter (p. 72). For further information see our 'General Sustainability Policy', and our 'Environmental, social & climate change risk management policy', both available on our corporate website.
Business Ethics	Asset Management & Custody Activities Commercial Banks Investment Banking & Brokerage	Total amount of monetary losses as a result of legal proceedings associated with fraud, insider trading, anti-trust, anti-competitive behavior,market manipulation, malpractice, or other related financial industry laws or regulations.	FN-AC-510a.1 FN-CB-510a.1 FN-IB-510a.1	Refer to GRI 206-1 discloses legal actions for anticompetitive behaviour, anti-trust, and monopoly practices. For further information, refer to 'Litigation and other matters' section on the Auditor's report and consolidated financial statements (p. 512).
	Asset Management & Custody Activities Commercial Banks Investment Banking & Brokerage	Description of whistleblower policies and procedures.	FN-AC-510a.2 FN-CB-510a.2 FN-IB-510a.2	Refer to 'Ethical Channels' in the section 'A talented and motivated team' of this chapter (p. 44). For further information, see our 'General Code of Conduct', available on our website.
Systemic Risk Management	Commercial Banks Investment Banking & Brokerage	Global Systemically Important Bank (G-SIB) score, by category	FN-CB-550a.1. FN-IB-550a.1.	According to the '2021 list of global systemically important banks (G-SIBs)' released by the Financial Stability Board, Santander´s G-SIB buffer is 1.0 %. (G-SIBs as of November 2021) According to the G-SIB Scores Dashboard from the Basel Committee on Banking Supervision (BCBS), Santander Group´s scores are (end-2020 data): • Score: 192 • Complexity: 106 • Cross-jurisdictional: 469 • Interconnectedness: 149 • Size: 183 • Substitutability: 56
	Commercial Banks Investment Banking & Brokerage	Description of approach to incorporation of results of mandatory and voluntary stress tests into capital adequacy planning, long-term corporate strategy, and other business activities	FN-CB-550a.2. FN-IB-550a.2.	Refer to 'Capital planning and stress tests' in the section 3.5 'Capital management and adequacy' (p. 353) of the Economic and Financial chapter.
Employee Diversity & Inclusion	Commercial Banks, Investment Banking & Brokerage	Percentage of gender and racial/ethnic group representation for (1) executive management, (2) non-executive management, (3) professionals, and (4) all other employees	FN-AC-330a.1 FN-IB-330a.1	Refer to 'Key metrics' section of this chapter (p. 117). For further information, refer to 'Diversity & Inclusion' section of 'A talented and motivated team' this chapter (p. 44). For further information about our diversity and inclusion principles, see our 'Corporate Culture Policy', available on our corporate website.
Activity metrics	Commercial Banks	(1) Number and (2) value of checking and savings accounts by segment: (a) personal and (b) small business.	FN-CB-000.A	Refer to 'Consolidated annual accounts' in Auditor's report and consolidated financial statements (p. 512).
	Commercial Banks	(1) Number and (2) value of loans by segment: (a) personal, (b) small business, and (c) corporate.	FN-CB-000.B	Refer to 'Consolidated annual accounts' in Auditor's report and consolidated financial statements (p. 512).

Stakeholder Capitalism Metrics content index

Stakeholder Capitalism Metrics

Theme	Metric	Response
Principles of governance		
Governing Purpose	**Setting Purpose:** The company's stated purpose, as the expression of the means by which a business proposes solutions to economic, environmental, and social issues. Corporate purpose should create value for all stakeholders, including shareholders.	Our Business model and strategy (p. 6) chapter reflects how we help people and businesses prosper whilst adopting ESG practices, and how we integrated ESG criteria on our 3 key priorities for profitable growth.
	Purpose-led management: How the company's stated purpose is embedded in company strategies, policies, and goals.	Additionally, in Our approach (p. 23) section on the Responsible Banking chapter, we detail in deep how we work to be a more sustainable bank.
Quality of Governing Body	**Governing Body Composition**: Composition of the highest governance body and its committees by: competencies relating to economic, environmental, and social topics; executive or non-executive; independence; tenure on the governance body; number of each individual's other significant positions and commitments, and the nature of the commitments; gender; membership of under-represented social groups; stakeholder representation.	Refer to the Board of directors section on our Corporate Governance chapter (p. 179).
	Progress against strategic milestones: Disclosure of the material strategic economic, environmental, and social milestones expected to be achieved in the following year, such milestones achieved from the previous year, and how those milestones are expected to or have contributed to long-term value.	Refer to ´2021 Overview´ (p. 18) and Our ESG priorities (p. 27) sections on our Responsible Banking chapter
	Remuneration: 1. How performance criteria in the remuneration policies relate to the highest governance body's and senior executives' objectives for economic, environmental and social topics, as connected to the company's stated purpose, strategy, and long-term value. 2. Remuneration policies for the highest governance body and senior executives for the following types of remuneration: Fixed pay and variable pay, including performance-based pay, equity-based pay, bonuses, and deferred or vested shares, Sign-on bonuses or recruitment incentive payments, termination payments, clawback and retirement benefits.	1. Refer to ´Performance review and remuneration´ in A talented and engaged team section on Responsible chapter 2. Refer to ´Remuneration´ section (p. 249) in Corporate Governance chapter.

Theme	Metric	Response
Ethical Behavior	**Anti-corruption**: 1. Total percentage of governance body members, employees and business partners who have received training on the organization's anti-corruption policies and procedures, broken down by region. 2. (a) Total number and nature of incidents of corruption confirmed during the current year but related to previous years and (b) Total number and nature of incidents of corruption confirmed during the current year, related to this year. 3. Discussion of initiatives and stakeholder engagement to improve the broader operating environment and culture, in order to combat corruption.	1. Refer to Financial Crime Compliance on 7.2 Compliance and conduct risk management section (p. 489) in the Risk management and compliance chapter All our employees receive mandatory training on the GCC on an annual basis. 2. Refer to 'Litigation and other matters' in the note 25.e (p. 647) of the consolidated accounts 3. Refer to Financial Crime Compliance on 7.2 Compliance and conduct risk management section (p. 489) in the Risk management and compliance chapter
	Protected ethics advice and reporting mechanisms: A description of internal and external mechanisms for: 1. Seeking advice about ethical and lawful behaviour and organizational integrity 2. Reporting concerns about unethical or unlawful behaviour and organizational integrity	Refer to pages 13-14 in our Code of Conduct (available in our corporate website) In addition see '7.2 Compliance and conduct risk management' (p. 489) in the Risk and compliance management section of our Risk management and compliance chapter. And 'Ethical channels' on 'Conduct and ethical behaviour' section (p. 37) of our Responsible Banking chapter
	Monetary losses from unethical behaviour: Total amount of monetary losses as a result of legal proceedings associated with: fraud, insider trading, anti-trust, anti-competitive behaviour, market manipulation, malpractice, or violations of other related industry laws or regulations.	Refer to 'Litigation and other matters' in the note 25.e (p. 647) of the consolidated accounts
	Alignment of strategy and policies to lobbying: The significant issues that are the focus of the company's participation in public policy development and lobbying; the company's strategy relevant to these areas of focus; and any differences between its lobbying positions, purpose, and any stated policies, goals, or other public positions.	Refer to 'Principles of action in our relationship with political parties' in the Conduct and ethical behaviour section on Responsible banking chapter (p. 37) Our Financing of political parties policy is available on our corporate website
Risk and Opportunity Oversight	**Integrating risk and opportunity into business process**: Company risk factor and opportunity disclosures that clearly identify the principal material risks and opportunities facing the company specifically (as opposed to generic sector risks), the company appetite in respect of these risks, how these risks and opportunities have moved over time and the response to those changes. These opportunities and risks should integrate material economic, environmental, and social issues, including climate change and data stewardship.	Refer to Risk management and Compliance chapter (p. 430). In addition, we report our progress in implementing TCFD recommendations (including Risk management) on Responsible Banking chapter (p. 72) Our Environmental, social and climate change risk policy is available at our corporate website.
Stakeholder Engagement	**Material issues impacting stakeholders**: A list of the topics that are material to key stakeholders and the company, how the topics were identified, and how the stakeholders were engaged.	Refer to What our stakeholder tell us section on Responsible Banking chapter (p. 24). Refer also to Our ESG priorities (p. 27).

Theme	Metric	Response
Planet		
Climate Change	**Greenhouse Gas (GHG) emissions**: For all relevant greenhouse gases (e.g. carbon dioxide, methane, nitrous oxide, F-gases etc.), report in metric tonnes of carbon dioxide equivalent (tCO_2e) GHG Protocol Scope 1 and Scope 2 emissions. Estimate and report material upstream and downstream (GHG Protocol Scope 3) emissions where appropriate.	Refer to ´Table 28. Environmental footprint 2020-2021´ in the Key metrics section of the Responsible Banking chapter (p. 117). • Total emissions (market based): 118.517 T CO_2 teq • Scope 1: 25,672 CO_2 teq • Scope 2 – market based: 57,425 T CO_2 • Scope 2 – location based: 269,615 T CO_2 teq • Scope 3: 35,420 T CO_2 teq
	TCFD implementation: Fully implement the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). If necessary, disclose a timeline of at most three years for full implementation. Disclose whether you have set, or have committed to set GHG emissions targets that are in line with the goals of the Paris Agreement — to limit global warming to well-below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C — and to achieve net-zero emissions before 2050.	Refer to Supporting the green transition section of the Responsible Banking chapter (p. 72), were we report our progress in implementing TCFD recommendations. In 2020, we became carbon neutral on our own operations. In 2021, we set our commitment to be net-zero in carbon emissions by 2050, and we set our first decarbonization targets. in addition, refer to Climate and environmental risk section (p. 499) of the Risk management and compliance chapter.
	Paris-aligned GHG emissions targets: Define and report progress against time-bound science-based GHG emissions targets that are in line with the goals of the Paris Agreement — to limit global warming to well-below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C. This should include defining a date before 2050 by which you will achieve net-zero greenhouse gas emissions and interim reduction targets based on the methodologies provided by the Science Based Targets initiative if applicable.	Refer to Supporting the green transition section (p. 72). of the Responsible Banking chapter. We set our first decarbonization targets. We're committed to aligning our power generation portfolio with the Paris Agreement by 2030. We are also ending financial services to power generation clients by 2030 if over 10% of their revenue depends on thermal coal.
Fresh water availability	**Water consumption and withdrawal in water-stressed areas**: Report for operations where material, mega litres of water withdrawn, mega litres of water consumed and the percentage of each in regions with high or extremely high baseline water stress according to WRI Aqueduct water risk atlas tool. Estimate and report the same information for the full value chain (upstream and downstream) where appropriate.	Refer to Key metrics section on Responsible Banking chapter (p. 117). In 2021, Santander consumed 1,808,668 m3 from the public network, equaling a consumption of 9.76 m3/ employee. (Information is provided exclusively on water withdrawal from the public network). We do not disclose data on water stress, due to our financial activities generating negligible impacts.
Nature Loss	**Land use and ecological sensitivity**: Report the number and area (in hectares) of sites owned, leased or managed in oradjacent to protected areas and/or key biodiversity areas (KBA).	Not identified as a material aspect for the bank and its activity.
Single-use plastics	Report wherever material along the value chain: estimated metric tonnes of single-use plastic consumed. Disclose the most significant applications of single-use plastic identified, the quantification approach used and the definition of single-use plastic adopted.	Refer to 2021 Overview section (p. 18) on Responsible Banking chapter. In 2021 we have met our goal of eliminating unnecessary single-use plastics from our buildings and branches.

Theme	Metric	Response
Prosperity		
Employment and wealth generation	**Absolute number and rate of employment**: 1. Total number and rate of new employee hires during the reporting period, by age group, gender, other indicators of diversity and region. 2. Total number and rate of employee turnover during the reporting period, by age group, gender, other indicators of diversity and region.	Refer to Key metrics section on the Responsible Banking chapter (p. 117). 1. See: • Table 11.2. Distribution of new hires by age bracket 2021 • Table 11.3. Distribution of new hires by gender 2. See: • Table 13. External turnover rate by gender • Table 14.2. External turnover rate by age bracket 2021
	Economic Contribution: 1. Direct economic value generated and distributed (EVG&D) — on an accrual basis, covering the basic components for the organization's global operations, ideally split out by: a. Revenue b. Operating Costs c. Employee wages and benefits d. Payments to providers of capital e. Payments to government f. Community Investment. 2. Financial assistance received from the government. Total monetary value of financial assistance received by the organization from any government during the reporting period.	1. Refer to Global Reporting Initiative (GRI) content index on the Responsible banking chapter, and more specifically to GRI 201.1 Direct economic value generated and distributed (p. 144). • Economic value generated in 2021: EUR 46,414 million • Economic value distributed: EUR 24,541 million • Economic value retained EUR 21,873 million 1.a Revenue: EUR 46,404 million 1.b Operating cost: EUR 21,415 million 1.c Employee wages and benefits: EUR 11,216 million 1.d Payments to providers of capital: N/A 1.e Payments to government: EUR 7,617 million (total taxes) 1.f Community investment: EUR 152 million Further detail for 1a-c refer to Group financial performance section on Economic and financial review chapter (p. 327). Further detail for 1d refer to 3.3 Dividends in Shareholders section on Corporate governance chapter (p. 196). Further detail for 1e refer to "Tax contribution" section on Conduct and ethical behaviour on Responsible banking chapter (p. 37). 2. Grupo Santander did not receive public subsidies in 2021. Refer to Annual banking report, e) (p. 804).
Wealth creation and Employment	**Financial investment contribution disclosure**: 1. Total capital expenditures (CapEx) minus depreciation supported by narrative to describe the company's investment strategy. 2. Share buybacks plus dividend payments supported by narrative to describe the company's strategy for returns of capital to shareholders.	1.Refer to note 16.b Tangible assets – For own use section on the Auditor's report consolidated financial statements (p. 621). Additionally, refer to - Operating expenses data on the Economic and financial review chapter (p. 320). - Note 47. Other general administrative expenses of consolidated annual accounts (p. 701). 2. Refer to Shareholder value section on Responsible Banking chapter (p. 69). and 3. Shareholders. Engagement and general meeting section on Corporate Governance chapter (p. 179).
Community and social vitality	**Total tax paid**: The total global tax borne by the company, including corporate income taxes, property taxes, non- creditable VAT and other sales taxes, employer-paid payroll taxes and other taxes that constitute costs to the company, by category of taxes.	Refer to "Tax contribution" on Conduct and ethical behaviour of the Responsible Banking chapter (p. 37). Further detailed information see Annual banking report (p. 804).
Additional tax remitted	The total additional global tax collected by the company on behalf of other taxpayers, including VAT and employee-related taxes that are remitted by the company on behalf of customers or employees, by category of taxes.	Refer to 'Tax contribution' in the Conduct and ethical behaviour section of the Responsible Banking chapter (p. 37). Further detailed information see Annual banking report (p. 804).

Theme	Metric	Response
Total tax paid by country for significant locations	Total tax paid and, if reported, additional tax remitted, by country for significant locations.	Refer to 'Tax contribution' in the Conduct and ethical behaviour section of the Responsible Banking chapter (p. 37). Further detailed information see Annual banking report (p. 804).
Innovation in better products and services	**Total R&D expenses ($)**: Total costs related to research and development.	Innovation and technological development are strategic pillars of Grupo Santander. We aim to respond to fresh challenges that emanate from digital transformation, focusing on operational excellence and customer experience As in previous years, the latest European Commission ranking (2021 EU Industrial R&D Investment Scoreboard, based on 2020 data) ranked our technological effort first among Spanish companies and we are the second global bank for investment in R&D. The equivalent investment in R&D&I to that considered in this ranking amounted to EUR 1,325 million. Refer to Research, development and innovation (R&D&I) section on Economic and financial review (p. 410). Additional information refer to note 18 on the Audit's report and consolidated financial statements (p. 627)
People		
Dignity and equality	**Diversity and inclusion (%)**: Percentage of employees per employee category, per age group, gender and other indicators of diversity (e.g. ethnicity).	Refer to Key metrics section of the Responsible Banking chapter (p. 117). Additional information on how we promote D&I refer to ´Diversity and inclusion´ in A talented and motivated team section on Responsible Banking chapter (p. 44).
	Pay equality: Ratio of the basic salary and remuneration for each employee category by significant locations of operation for priority areas of equality: women to men; minor to major ethnic groups; and other relevant equality areas.	In 2021 our equal pay gap declined to 1% from 1.5% in 2020. We set up fair pay programmes to reduce the equal pay gap. They include systematic reviews tied to remuneration cycles (merit-based promotions and bonuses), work reorganization and career development plans to recruit, engage, and retain diverse talent. Refer to ´Equal pay´ in A talented and motivated team section on Responsible Banking chapter (p. 44).
	Wage level (%): 1. Ratios of standard entry-level wage by gender compared to local minimum wage 2. Ratio of CEO's total annual compensation to median total annual compensation of all employees (excluding the CEO)	1. Refer to Key metrics section on Responsible banking chapter (p. 117). Table ´16.2 Ratio between the Bank's minimum annual salary and the legal minimum annual salary by country and gender 2021´ We take as a reference the Bank's minimum annual salary in each country. **2.** Refer to 6. Remuneration section on Corporate Governance chapter (p. 179).
	Risk for incidents of child, forced or compulsory labor: An explanation of the operations and suppliers considered to have significant risk for incidents of child labor, forced or compulsory labor. Such risks could emerge in relation to type of operation (such as manufacturing plant) and type of supplier; or countries or geographic areas with operations and suppliers considered at risk.	Refer to ´Protecting human rights´ in "Environmental and social risk analysis" on Conduct and ethical behaviour of the Responsible banking chapter (p. 37). We have zero tolerance towards employee, customer and supplier discrimination, forced labour and child exploitation. We respect the provisions of the ILO convention and the legal minimum working aged established in countries. Further detail on our Human rights policy, available at our corporate website.

Theme	Metric	Response
	Discrimination and Harassment Incidents (#) and the Total Amount of Monetary Losses ($): Number of discrimination and harassment incidents, status of the incidents and actions taken and the total amount of monetary losses as a result of legal proceedings associated with (1) law violations and (2) employment discrimination.	Refer to 'Litigation and other matters' in note 25.e of the Auditor's report and consolidated financial statements (p. 647).
	Freedom of Association and Collective Bargaining at Risk (%): 1. Percentage of active workforce covered under collective bargaining agreements 2. An explanation of the assessment performed on suppliers for which the right to freedom of association and collective bargaining is at risk including measures taken by the organization to address these risks.	1. Refer to Key metrics section on Responsible banking chapter (p. 117). - Table 10. Coverage of the workforce by collective agreement
Health and well being	**Health and Safety (%)**: 1. The number and rate of fatalities as a result of work-related injury; high-consequence work-related injuries (excluding fatalities); recordable work-related injuries, main types of work- related injury; and the number of hours worked. 2. An explanation of how the organization facilitates workers' access to non-occupational medical and healthcare services and the scope of access provided for employees and workers.	1. Refer to Key metrics section on the Responsible Banking chapter (p. 117). • Table 21. Accident rate • Table 22. Occupational health and safety 2. Refer to Our wellbeing in A talented and motivated team section on Responsible banking chapter (p. 44).
Skills for the future	**Training provided (#, $):** 1. Average hours of training per person that the organization's employees have undertaken during the reporting period, by gender and employee category (total number of trainings provided to employees divided by the number of employees). 2. Average training and development expenditure per full time employee.	Refer to Key metrics section on the Responsible Banking chapter (p. 117). • Table 17. Training • Table 18. Hours of training by category • Table 19. Hours of training by gender • 30,60 hours per employee • EUR 381.28 of investment per employee.

SDGs contribution content index

We have identified eleven SDGs and associated targets on which we have the greatest impact.

Summary of SDG target	Relevant reference in the 2021 ESG Report and appendix
SDG 1	
1.2 Reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions	• Support for higher education and other local initiatives. Other community support programmes (p.107)
1.4 Ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services	• Acting responsibly towards customers. Product Governance and consumer protection. Sales processes. Vulnerable customers (p. 61) • Financial inclusion and empowerment (p. 96)
1.5 Build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters	• Financial inclusion and empowerment (p. 96)
SDG 4	
4.3 Ensure equal access for all to affordable and quality technical, vocational and tertiary education, including university.	• Support for higher education and other local initiatives. Support for higher education (p. 107)
4.4 Substantially increase the number of young people and adults with technical and vocational skills to access quality employment and entrepreneurial opportunities.	• Support for higher education and other local initiatives. Support for higher education (p. 107)
4.5 Eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for persons with disabilities, indigenous populations and vulnerable children, among others.	• Support for higher education and other local initiatives. Support for higher education (p. 107)
4.6 Substantially increase the scholarships available to developing countries for enrolment in higher education, including vocational training and ICT, technical, engineering and scientific programmes	• Support for higher education and other local initiatives. Other community support programmes (p. 107) • Financial inclusion and empowerment (p. 96)
SDG 5	
5.1. End all forms of discrimination against all women and girls everywhere.	• A talented and engaged team. A diverse and inclusive workplace. Gender equality (p. 44)
5.5 Ensure women's full and effective participation in, and equal opportunities for, leadership at all levels of decision making	• A talented and engaged team. A diverse and inclusive workplace. Gender equality (p. 44)

SDG 7	
7.1 Ensure universal access to affordable, reliable and modern energy services	• Supporting the green transition. Supporting our customers in the green transition. Corporate and Investment Banking. Financing renewable energies (p. 72) • Supporting the green transition. Supporting our customers in the green transition. Retail and commercial banking (p. 72)
7.b Expand infrastructure and improve technology to provide modern and sustainable energy services	• Supporting the green transition. Supporting our customers in the green transition. Corporate and Investment Banking. Financing renewable energies (p. 72)
SDG 8	
8.3 Promote development-orientated policies that support production, job creation, entrepreneurship, creativity and innovation, and promote the start-up and growth of micro, small and medium-sized enterprises through access to financial services and other means.	• Financial inclusion and empowerment (p. 96) • Support for higher education and other local initiatives. Support for higher education. Entrepreneurship (p. 107)
	• Supporting the green transition. Environmental footprint (p. 72)
8.5 Secure wholesome and productive employment and decent work for all - most notably young people and persons with disabilities - and equal pay for work of equal value.	• A talented and engaged team. A diverse and inclusive workplace. Gender equality (p. 44) • A talented and engaged team. A diverse and inclusive workplace. People with disabilities (p. 44) • Support for higher education and other local initiatives. Support for higher education. Fundación Universia (p. 107)
8.6 Substantially reduce the proportion of youth not in employment, education or training	• Support for higher education and other local initiatives. Support for higher education (p. 107)
8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment	• Conduct and ethical behaviour. Ethical channel (p. 37) • A talented and motivated team. A diverse and inclusive workplace. Employee wellbeing. Employee wellbeing (p. 44) • A talented and motivated team. Work-life balance and job efficiency. Social dialogue and restructuring (p. 44)
8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all	• Financial inclusion and empowerment (p. 96)
SDG 10	
10.2 Strengthen and promote social, economic and political inclusion for all	• Financial inclusion and empowerment (p. 96) • Support for higher education and other local initiatives. Other community support programmes (p. 107)

SDG 11	
11.1 Ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	• Financial inclusion and empowerment (p. 96)
11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage	• Conduct and ethical behaviour. Environmental and social risk management (p. 37) • Support for higher education and other local initiatives. Other community support programmes (p. 107)
11.6 Reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	• Supporting the green transition. Environmental footprint (p. 72)
SDG 12	
12.2 Achieve the sustainable management and efficient use of natural resources	• Supporting the green transition. Environmental footprint (p. 72)
12.5 Substantially reduce waste generation through prevention, reduction, recycling and reuse	• Supporting the green transition. Environmental footprint (p. 72)
12.6 Achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	• see Responsible Banking chapter [p. 15]
SDG 13	
13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	• Supporting the green transition. Our approach (p. 72) • Supporting the green transition. Risk management (p. 72)
SDG 16	
16.5 Considerably reduce corruption and bribery in all their forms.	• Conduct and ethical behaviour. General code of conduct (p. 37) • Conduct and ethical behaviour. Financial Crime Compliance (p. 37)
16.6 Develop effective, accountable and transparent institutions at all levels	• About this report (p. 16) • Shareholder value. Communication with shareholder, investors and analysts (p. 69) • Shareholder value. ESG indices and analysts(p. 69) • Further information (p. 131)
16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels	• What our stakeholders tell us (p. 24)
SDG 17	
	• What our stakeholders tell us (p. 24) • Governance. Partnerships to promote our agenda (p. 29)

Independent verification report

GRI 102-56



This version of our report is a free translation of the original, which was prepared in Spanish. All possible care has been taken to ensure that the translation is an accurate representation of the original. However, in all matters of interpretation of information, views or opinions, the original language version of our report takes precedence over this translation.

Independent verification report

To the shareholders of Banco Santander, S.A.:

Pursuant to article 49 of the Code of Commerce, we have verified, with the scope of a limited assurance engagement, "Responsible banking" chapter, which corresponds to the attached Consolidated Statement of Non-Financial Information ("SNFI") for the year ended 31 December 2021 of Banco Santander, S.A. (Parent company) and subsidiaries (hereinafter "Banco Santander") which forms part of the accompanying Banco Santander's consolidated management report.

The content of the SNFI includes information additional to that required by current mercantile legislation in relation to non-financial information, which has not been covered by our verification work. In this respect, our work was limited solely to verifying the information identified in table included in the section "Non-financial information Law content index" and in the "Global Reporting Initiative (GRI) content index" included in the accompanying SNFI.

Responsibility of the directors of the Parent company

The preparation of the SNFI included in Banco Santander's consolidated management report and the content thereof, are the responsibility of the directors of Banco Santander, S.A. The SNFI has been drawn up in accordance with the provisions of current mercantile legislation and following the criteria of the *Sustainability Reporting Standards* of the *Global Reporting Initiative* ("GRI Standards") in line with the Exhaustive option and the Financial Services Sector Disclosures of the GRI G4 Guidelines Industry Supplement in accordance with the details provided for each matter in the table included in the section "Non-financial information Law content index" and in the "Global Reporting Initiative (GRI) content index" of the consolidated management report.

This responsibility also includes the design, implementation and maintenance of the internal control considered necessary to allow the SNFI to be free of material misstatement due to fraud or error.

The directors of Banco Santander, S.A. are also responsible for defining, implementing, adapting and maintaining the management systems from which the information required to prepare the SNFI is obtained.

Our independence and quality control

We have complied with the independence requirements and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants ("IESBA Code") which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

PricewaterhouseCoopers Auditores, S.L., Torre PwC, Pº de la Castellana 259 B, 28046 Madrid, España
Tel.: +34 915 684 400 / +34 902 021 111, Fax: +34 915 685 400, www.pwc.es

R. M. Madrid, hoja 87.250-1, folio 75, tomo 9.267, libro 8.054, sección 3ª
Inscrita en el R.O.A.C. con el número S0242 - CIF: B-79 031290

Our firm applies International Standard on Quality Control 1 (ISQC 1) and accordingly maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

The engagement team consisted of professionals specialising in Non-financial Information reviews, specifically in information on economic, social and environmental performance.

Our responsibility

Our responsibility is to express our conclusions in a limited assurance independent report based on the work we have performed. We carried out our work in accordance with the requirements laid down in the current International Standard on Assurance Engagements (ISAE) 3000 Revised, Assurance Engagements other than Audits or Reviews of Historical Financial Information (ISAE 3000 Revised) issued by the International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC) and in the Guidelines for verification engagements of the Statement of Non-Financial Information issued by the Spanish Institute of Auditors ("Instituto de Censores Jurados de Cuentas de España").

In a limited assurance engagement, the procedures performed vary in nature and timing of execution, and are less extensive, than those carried out in a reasonable assurance engagement and accordingly, the assurance provided is also lower.

Our work consisted of posing questions to management as well as to the various units of Banco Santander that were involved in the preparation of the SNFI, of the review of the processes for compiling and validating the information presented in the SNFI, and in the application of certain analytical procedures and review procedures on a sample basis, as described below:

- Meetings with the Banco Santander, S.A. personnel to understand the business model, policies and management approaches applied, principal risks relating to these matters and to obtain the information required for the external review.
- Analysis of the scope, relevance and integrity of the content of the SNFI for the year 2021, based on the materiality analysis carried out by Banco Santander and described in section "What our stakeholders tell us", taking into account the content required by current mercantile legislation.
- Analysis of the procedures used to compile and validate the information presented in the SNFI for the year 2021.
- Review of information relating to risks, policies and management approaches applied in relation to material matters presented in the SNFI for the year 2021.
- Verification, by means of sample testing, of the information relating to the content of the SNFI for the year 2021 and that it was adequately compiled using data provided by the sources of the information.
- Obtaining a management representation letter from the directors and management of the Parent company.

pwc

Conclusion

Based on the procedures performed in our verification and the evidence we have obtained, nothing has come to our attention that causes us to believe that the "Responsible banking" chapter, which corresponds to the attached SNFI of Banco Santander, S.A. and its subsidiaries, for the year ended 31 December 2021 has not been prepared, in all material respects, in accordance with the provisions of current mercantile legislation and in accordance with the criteria of the GRI Standards described in line with the Exhaustive option and the Financial Services Sector Disclosures of the GRI G4 Guidelines in accordance with the details provided for each matter in the table included in the section "Non-financial information Law content index" and in the "Global Reporting Initiative (GRI) content index" of the consolidated management report.

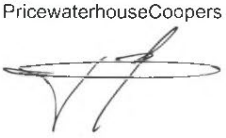
Emphasis of matter

The Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 relating to the establishment of a framework to facilitate sustainable investments, establishes the obligation to disclose information on the manner and extent to which the assets of the company are associated with economic activities eligible according to Taxonomy for the first time for the year 2021, provided that the SNFI is published as of 1 January 2022. Consequently, comparative information on this matter has not been included in the accompanying SNFI. In addition, information has been included in respect of the criteria that the directors of Banco Santander have chosen to apply the criteria that, in their opinion, best allow compliance with the new obligation and that are defined in note "Information about Article 8 of the EU Taxonomy Regulation" of the accompanying SNFI. Our conclusion has not been modified in relation to this matter.

Use and distribution

This report has been drawn up in response to the requirement established in current Spanish mercantile legislation and therefore may not be suitable for other purposes and jurisdictions.

PricewaterhouseCoopers Auditores, S.L.



Pablo Bascones Ilundáin

25 February 2022

[THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY]

Corporate governance



1. 2021 Overview 182

Statement from Bruce Carnegie-Brown, lead independent director 182

1.1 Board skills and diversity 182

1.2 Board effectiveness 183

1.3 Alignment of executive compensation with group strategy, investors and long term sustainability 184

1.4 Engagement with our shareholders in 2021 184

1.5 Achievement of our 2021 goals 185

1.6 Priorities for 2022

2. Ownership structure 188

2.1 Share capital 188

2.2 Authority to increase capital 188

2.3 Significant shareholders 189

2.4 Shareholders' agreements 189

2.5 Treasury shares 190

2.6 Stock market information 192

3. Shareholders. Engagement and general meeting 193

3.1 Shareholder communication and engagement 193

3.2 Shareholder rights 195

3.3 Dividends and shareholder remuneration 196

3.4 2021 AGM 197

3.5 Our next AGM in 2022 199

4. Board of directors 200

4.1 Our directors 201

4.2 Board composition 209

4.3 Board functioning and effectiveness 215

4.4 Executive committee activities in 2021 221

4.5 Audit committee activities in 2021 222

4.6 Nomination committee activities in 2021 226

4.7 Remuneration committee activities in 2021 230

4.8 Risk supervision, regulation and compliance committee activities in 2021 234

4.9 Responsible banking, sustainability and culture committee activities in 2021 238

4.10 Innovation and technology committee activities in 2021 242

4.11 International advisory board 244

4.12 Related-party transactions and conflicts of interest 244

5. Management team 247

6. Remuneration 249

6.1 Principles of the remuneration policy 249

6.2 Remuneration of directors for supervisory and collective decision-making duties: policy applied in 2021 249

6.3 Remuneration of directors for executive duties 252

6.4 Directors' remuneration policy for 2022, 2023 and 2024 submitted to a binding shareholder vote 262

6.5 Preparatory work and decision-making process in relation to the remuneration polity, with a description of the participation of the remuneration committee 270

6.6 Remuneration of non-director members of senior management 271

6.7 Prudentially significant disclosures document 272

7. Group structure and internal governance 273

7.1 Corporate centre 273

7.2 Internal governance 273

8. Internal control over financial reporting (ICFR) 276

8.1 Control environment 276

8.2 Risk assessment in financial reporting 277

8.3 Control activities 278

8.4 Information and communication 279

8.5 Monitoring 280

8.6 External auditor report 281

9. Other corporate governance information 284

9.1 Reconciliation with the CNMV's corporate governance report model 284

9.2 Statistical information on corporate governance required by the CNMV 288

9.3 Table on compliance with or explanations of recommendations on corporate governance 308

9.4 Reconciliation to the CNMV's remuneration report model 310

9.5 Statistical information on remuneration required by the CNMV 311

Structure of our corporate governance report

On 12 June 2018, the CNMV (Spanish stock market authority) approved new models for annual reports on corporate governance and remuneration, allowing companies to draft them in an open format.

Thus, our corporate governance report (comprising this chapter) follows since then an open format. This includes:

- Legally-required content for the corporate governance report.
- Reports on the activities of board committees. See sections 4.4 to 4.10.
- Annual report on directors' remuneration, which we are required to prepare and submit to a non-binding vote at our 2022 annual general meeting. See section 6. 'Remuneration'.
- Directors' remuneration policy. See section 6.4 'Directors' remuneration policy for 2022, 2023 and 2024 submitted to a binding shareholder vote'.
- Cross references to find the information for each section of the corporate governance and remuneration reports in the CNMV's required format in this and other chapters of the annual report. See sections 9.1 'Reconciliation with the CNMV's corporate governance report model' and 9.4 'Reconciliation with the CNMV's remuneration report model'.
- Cross references to find the information supporting each response to all recommendations in the CNMV'S Good Governance Code for Listed Companies (Spanish Corporate Governance Code) in the 2021 corporate governance and other chapters of this annual report. See section 9.3 'Table on compliance with and explanations of recommendations on corporate governance'.



1. 2021 Overview



'The continuing impact of the global pandemic on our business, on our customers and on our employees, taken together with an uncertain economic and geopolitical environment, reinforces the need for Banco Santander board of directors' constant vigilance of the management and oversight of its operations. We do this through a commitment to strong and effective governance processes to ensure that the board and management are directing Santander Group and its operations in the best interests of all our stakeholders, including shareholders, customers, employees, regulators and the communities in which we work around the world. We are also committed to playing our part in helping decarbonize the physical environment around us and reach net zero by 2050.

Santander's sophisticated governance model is designed to ensure that it can deliver its strategic plans, while ensuring that appropriate checks and balances are in place, so that the business is, at all times, resilient and sustainable in the face of a rapidly changing set of challenges and aligned with our values. During 2021, we devoted time to reviewing the roles and responsibilities of the most senior executives, including those of the executive chair and the CEO; and the independence, integrity and robustness of Banco Santander´s control functions. Details of the governance reviews conducted in that regard are outlined in the nomination committee report. Succession planning for our board members and senior managers remains a priority and will enable us to attract and retain the diverse range of highly talented colleagues we need to lead Banco Santander.

Notwithstanding the strong performance of Santander in 2021, it is important that we are never complacent and that we continue to challenge ourselves and look to improve our governance where possible'.

Bruce Carnegie-Brown, Lead independent director

1.1 Board skills and diversity

The board's composition did not change in 2021, after three years in which 47% of its members were renewed in order to boost diversity and expertise. 40% of board members are women, in line with its even representation target (of 40-60%) of both genders; and 66.67% are independent directors.

The changes in recent years have strengthened its banking, financial, technological and digital prowess; made it more diverse in terms of regional origin; and, overall, given it the right composition to lead the Group in pursuit of its strategy now and in the future.

On 24 February 2022, the board of directors nominated Germán de la Fuente Escamilla to be made a new independent director at the annual general meeting called for 31 March on first call or on 1 April on second call (2022 AGM), and fill the vacancy left by Álvaro Cardoso de Souza, who had announced he would effectively step down once a nomination was approved. See section 3.5 'Our next AGM in 2022'.

Germán de la Fuente has a solid background in auditing, accounting and the banking industry, and held senior positions at Deloitte for over 30 years.

Changes to the director category

Sergio Rial has changed his classification from executive to other external (non-executive or independent) having ceased his executive functions as CEO of Banco Santander (Brazil), S.A. and regional head of South America of the Group.

Board committees

The board made the following changes to the composition of its committees to further enhance their operations and support in their

areas of expertise, according to best international practice and internal regulation:

- Nomination committee: Gina Díez Barroso joined the committee on 22 December 2021, raising the number of committee members from three to four.
- Risk supervision, regulation and compliance committee: Belén Romana García was appointed chair of the committee on 1 April 2021, replacing Álvaro Cardoso, who stepped down on the same date and was replaced by Pamela Walkden on 1 May 2021.

1.2 Board effectiveness

Covid-19 and after the pandemic

In 2020, the pandemic's unprecedented effect on health and the global economy required a rapid, coordinated and sustained response from Santander to safeguard business continuity and tackle challenges effectively. In 2021, the board and its committees carried on that effort amid recovery from the crisis.

Banco Santander's Special situations global office (SSGO) reviewed Covid-19 management to recognize strengths in special situation governance, as well as opportunities to improve it. The board received its findings (based on feedback from core functions and external agents) and approved the improvements being made.

The exercise recognized the good practices adopted and rapid reaction capacity adopted by Banco Santander. In this sense, our management of the crisis has been recognised both externally (Euromoney award "Excellence in leadership" as best bank in the management of the crisis) and internally (95% of employees consider the crisis management to be very good). In addition, the review highlighted some areas of improvement: the relevance of the early and forward-looking threat identification, the speed-up of decision-making process and the coordination across the Group.

In addition to reviewing the special situation governance system, the board oversaw the measures taken for our stakeholders:

- **Employees**: reorganization of the way of working (promoting the remote working) and implemented protocols and preventive measures with the aim of protecting the health of all the Group's employees.
- **Customers**: revamp the digital and remote channels with multiple customised solutions to help retail customers and businesses; relaxing loan conditions for people and businesses hit by the pandemic (payment holidays, grace periods); or swiftly facilitating government-backed lines of credit and other public assistance measures.
- **Shareholders**: hybrid and remote general meetings that shareholders could attend in person or online, and revision of the shareholder remuneration policy according to ECB recommendations.
- **Society**: engagement with governments and institutions to aid recovery from the crisis, including donations of urgent health equipment and supplies.

Group and subsidiary board relations

Strengthening the ties between the Group's and the subsidiaries' boards of directors is key to effective oversight of policies, controls and corporate culture. In the last two years, the global pandemic heightened the need for the effective cross-border cooperation that our proven Group Subsidiary Governance Model (GSGM) facilitates. That governance model is strengthened by the presence of a number of Group non-executive directors on our subsidiary boards: Luis Isasi at Santander España; Álvaro Cardoso at Banco Santander (Brasil), S.A.; Homaira Akbari at Santander Consumer USA Holdings Inc.; and Pamela Walkden at Santander UK plc and Santander UK Group Holdings plc (having replaced Bruce Carnegie-Brown in 2021). See section 7. 'Group structure and internal governance'.

In 2021 we also continued to hold committee chair conventions across the Group. They reinforced our coordination and accentuated the benefits of cross-border cooperation.

Specifically, conventions of the audit and responsible banking, sustainability and culture committees chairs were held at the Santander Headquarters in Boadilla del Monte. The conventions aimed to foster further collaboration between countries, raise awareness about global initiatives and expectations, collectively debate current affairs and relevant operational matters, as well as encouraging networking among attendees.

Both events were successful and productive, with universal positive feedback received from participants. Our approach to holding such conventions will continue in 2022 and beyond.

Board assessment and actions to continuously improve its functioning

Corporate governance is a key priority for Santander. Our governance model has consistently received strong support from shareholders, as evidenced by their high participation in general meetings and strong percentage of approval for corporate management and the re-election of the executive chair and other directors. As we are aware that governance arrangements need to adapt to contingent and forward-looking business and strategy needs, we must continuously monitor and enhance the functioning of our governance bodies.

While we are confident of the effectiveness of Santander's governance model, we regularly assess our governance framework with the support of external advisers as required. We also review individual and collective skills to ensure the board's competence and diversity are sufficient for it to function effectively and hold management to account through constructive challenge.

In 2020 we asked Egon Zehnder to conduct an effectiveness review of the board of directors and its committees in line with our policy to have an external party assess their annual effectiveness every three years. Egon Zehnder concluded that Santander's board is highly effective, with recent changes in its composition resulting in a stellar set of diverse and outstanding individuals and that its governance model with the current individuals in key roles, is well designed and effectively implemented with demonstrable outcomes, as shown in the performance of Banco Santander and high satisfaction of the board members.

In addition, in 2021 we asked another external firm to execute a broader review of our governance arrangements with the aim of assessing its overall functioning and adherence of Santander's governance model to regulations, supervisors' expectations, and industry best practice. After an in-depth analysis, the external firm came to the conclusion that Santander has implemented a sophisticated governance model that suits its group-wide characteristics and requirements. The external firm highlighted that Santander's corporate governance is a key tool to drive the Group towards the implementation of its medium and long-term strategy,

while managing the BAU operations and keeping a strong control on risks. They also acknowledged the high profile of Santander's board members as well as the diversity of board in terms of gender, geography, age and background.

Both external firms identified some areas for further improvement that contributed to an internal discussion led by the nomination committee and its chair, our lead independent director.

In view of the conclusions of both reviews, in December 2021 the board of directors approved an action plan that will further align our corporate governance arrangements with supervisors' expectations and best industry practices. It revolves around these objectives:

- Ensuring continued clarity of the role and the responsibilities of the most senior executives, including the executive chair and CEO;
- Ensuring that checks and balances remain appropriate and effective; and
- Ensuring that the independence of control functions remains fully preserved.

The plan will be executed in 2022 under the coordination of the general secretary and with oversight of the nomination committee and its chair.

In addition to the above-mentioned structured reviews and resultant action plan, we encourage an environment of ongoing feedback and suggestions from the board members focused on continuous improvement. In 2021, the non-executive directors, under the leadership of the lead independent director, identified the following areas for improvement:

- Optimizing board time spent together and the strategic areas of board focus; and increasing engagement with the executive and younger talent pools;
- Increasing board visibility of customers' and branches' needs and circumstances;
- Striking the right balance between holding the executive to account and engaging with the future talent pipeline;
- Optimizing the materials delivered to the board and its committees, ensuring the right balance between content and length;
- Continued focus on effective coordination between the board and its committees, ensuring an appropriate distribution of workload; and
- Reviewing scalable processes that could be applied across the Group more effectively, while understanding the changes required for the Group's strategic direction being more effective.

We are confident these actions will have a lasting positive impact on our effective corporate governance. In the future, according to our commitment to continuous improvement, we will review our corporate governance arrangements on an ongoing basis, so as to ensure that they remain fully effective.

1.3 Alignment of executive compensation with the Group's strategy, investors and long-term sustainability

Following the entry into force of the Capital Requirements Directive (CRD V), the board revised the remuneration scheme after five years to align it with strategy, investors' interests and long-term sustainability.

We took action to:

- Introduce stock options as part of variable pay, for greater alignment with shareholder returns;
- Update long-term compensation metrics, prioritizing:
  - Profitability and long-term value creation for Santander, applying return on tangible equity (RoTE);
  - Consistent total shareholder return (TSR), albeit raising the threshold above which executives begin to receive compensation for this metric from 33% to 40%; and
  - Sustainability, embedding an ESG metric that comprises five sub-metrics related to our Responsible Banking agenda.
- Reduce the short-term corporate bonus metrics from four to three: customers (30%), RoRWA (40%) and RoTE (30%) to sharpen focus on the Group's strategic priorities of customer and profitability; and
- Make these amendments to match the Group's strategic priorities:
  - Executive directors' compensation as board members of PagoNxt to be paid in PagoNxt capital instruments.
  - Scope of the Digital Incentive widened to include a PagoNxt component that encourages non-PagoNxt executives to work together towards its success, and the strategic initiatives of the Digital Consumer Bank and One Santander in Europe.

1.4 Engagement with our shareholders in 2021

In 2021, Banco Santander interacted with shareholders under conditions still marked by the covid-19 health crisis. Combining traditional communication channels with virtual meetings and special campaigns was fundamental to remain aligned with their interests and keep their loyalty. By digitalizing to stay at the forefront of both our core activity and shareholder and investor relations, we helped some four million shareholders from all over the world engage Grupo Santander.

We focused our efforts on explaining our governance and sustainability strategy in detail. Because we understand investors are more considerate of ESG performance and the impact our operations can have on society and the environment, we give detailed explanations about how we are helping tackle inequality, climate change and other global challenges. We also engaged in open and constructive dialogue with analysts who provide investors with information about sustainability and assess our risks, actions and impact relating to ESG. We were proactive in sharing developments in our responsible banking agenda, particularly regarding climate change, and considering their feedback in our materiality analysis and work to introduce ESG into our remuneration scheme. By doing things responsibly and creating long-term environmental and social solutions to support inclusive and sustainable growth, we are able to create value for shareholders and earn their lasting loyalty.

As regards the engagement of the shareholders in our corporate governance, in the light of attendance at the entirely virtual general meeting we held in 2020, we repeated the same format in 2021 according to all company obligations and without compromising shareholders' rights. By facilitating remote attendance through a live online broadcast of the general meeting, we ensure shareholders can fully exercise their rights to attend, participate, cast votes, make remarks, make proposals and send messages to the notary public that has been proved fundamental. Figures from the 2021 annual general meeting reveal that participation under this format is very similar to that in hybrid general meetings (see section 3.4 '2021 AGM').

We are convinced that our virtual general meetings provide shareholders the same opportunity to participate as in-person meetings. We proposed to shareholders at the general meeting an amendment to our by-laws to sanction entirely virtual general meetings. The new by-law provides even more extensive protections than the law, as it allows shareholder requests to be addressed (where possible) during general meetings or posted on the corporate website for the general public if they are addressed on a later date. All over the world, shareholders vastly supported making our regulations on general meetings more flexible. Now, they will not need to travel in order to take part in meetings (see section 3.4 '2021 AGM').

1.5 Achievement of our 2021 goals

The 2020 annual report disclosed our corporate governance goals and priorities for 2021. The following chart describes how we delivered on each priority.

2021 goals	How we delivered
Long-term shareholder value	
Focusing on long-term shareholder value as well as supervising and supporting the management team in implementing our strategy, so that shareholder returns appropriately reflect the group's solvency, results, corporate culture and sustainable growth.	In 2021 we created value for our shareholders by focusing on delivering profitable growth in a responsible way. Our approach to ESG is embedded in all we do. In 2021 we generated more than EUR 2 billion in underlying profit every quarter and increased shareholder profitability compared to pre-pandemic levels. A key driver of this performance is our business model, customer focus, global scale and diversification.
Covid-19 crisis governance	
Overseeing our response to the pandemic and our risk management of the economic crisis. It will prioritize the wellbeing of our employees, customers and shareholders by supporting our communities and continuing to build trust, underpinned by the strength of our business model, our strategy and the robust leadership of our teams.	Since the covid-19 crisis began, the Group has focused on devising and implementing measures to mitigate its impact. The Group updated its Special Situations and Resolution rule map with a revised corporate framework that the subsidiaries' boards had adopted in December 2021. The new rules emphasize pre-emptive management of events and streamlined escalation. In particular, we tightened centralized monitoring and oversight of subsidiaries to coordinate their decisions with the Group effectively. We launched several initiatives to financially support customers affected by the pandemic and to safeguard our customers' and employees' health while guaranteeing normal services. To fight the pandemic in the countries where we operate, we took several social actions, such as providing essential health equipment and supplies. See subsection 'Covid-19 and after the pandemic' in section 1.2. Because of the Group and its subsidiaries' robust financial situation, we were able to maintain stable business levels and appropriate capital, liquidity and risk profile levels. We executed our risk management and control processes correctly, and our governing bodies heard regularly about the pandemic's impact and the measures each subsidiary was taking.

2021 goals	How we delivered
Strategic growth initiatives	
Working on the Group's strategic growth priorities, which are critical to becoming the world's best open financial services platform. Our initiatives include One Santander, which is a common operational and business model created to transform the way we serve our customers, providing a simpler and enhanced customer experience; PagoNxt, which is an autonomous global payment platform to combine our payments businesses and banks around the world, accelerating the deployment of payment solutions to our customers globally, and is critical to building One Santander; and the Digital Consumer Bank, integrating our fast-growing consumer lending business, Santander Consumer Finance (SCF), with Openbank to transform our digital proposition.	Our aim to become the world's best open financial services platform, building on our technology to earn customers' lasting loyalty, was helped by the progress we made with three strategic initiatives in 2021: One Santander, PagoNxt and Digital Consumer Bank. We laid the foundations of our transformation in Europe (One Santander), with greater connection between customer segments and higher business activity that resulted in steady growth. In 2022, we will focus on harnessing our scale to roll out a common operational and business model. PagoNxt also became a global payment platform for all Santander customers and the open market. Its acquiring solution is already running in 6 markets, serving 1.2 million merchants; its international trade solution is already in 8 markets. Also, we launched the Payments Hub to support all our customers' payments. Digital Consumer Bank also registered strong financial performance and significantly increased its customer base in its push to become the largest digital consumer credit bank.
Responsible Banking – embedding ESG in all we do	
Driving Santander's efforts to deliver profit with a clear purpose, to help people and businesses prosper in the years ahead, and to build a more responsible bank. Overseeing the implementation of our decisions to support the objectives of the Paris Agreement and focusing on fulfilling our commitment to raising and facilitating EUR 120 billion in green finance and to achieving the financial inclusion of 10 million people by 2025.	We met or exceeded all our 2019-2021 commitments and continued our efforts to make progress on our commitments for 2025. On climate change, we set a goal to achieve net-zero CO2 emissions by 2050 and created our first decarbonization targets for exposures to thermal carbon and electric power generation. We became founder members of the Net Zero Banking Alliance and Santander Asset Management was the first fund manager in Spain to join the Net Zero Asset Managers Initiative with a commitment to reducing emissions from assets under management by 50% by 2030. We also issued our third green bond in the amount of EUR 1 billion to finance wind and solar power projects, and expanded our range of ESG wealth management products. Through Santander finance for all program, we've financially empowered more than 7 million people since 2019. *Euromoney* named us "Best Bank for Sustainable Finance in Latin America" and "Best ESG Private Bank" and "Best Bank for Financial Inclusion". Furthermore, *Great Place To Work* recognized us, for the third time, as one of the top 25 companies to work for. We were also the world's highest scoring bank and the second highest-scoring company in gender equality and diversity according to the Bloomberg Gender-Equality Index (the 2022 index includes 418 companies from 45 countries). For more details, see 'Responsible banking' chapter.
High governance standards	
Maintaining high standards of governance to fulfil our strategy and ensure long-term success. This will help ensure our ongoing effectiveness and alignment with best practice. In particular, it will continue to instil strong governance disciplines as a key enabler to effective oversight and control across the group, making sure our corporate governance framework takes into account supervisory body recommendations as well as national and international guidelines.	In 2021, an in-depth review by an external adviser indicated that Banco Santander's corporate governance is consistent with regulation, industry best practice and the Group's structure, conducive to effective management to implement strategy and sustain sound risk control. Our high rankings by ESG analysts who reviewed our performance in 2021 speak to our commitment to the highest governance standards. Banco Santander also received the highest score in the Spanish Association for Standardisation and Certification's (AENOR) new Good Corporate Governance Index, which checks board structure and dynamics, transparency, sustainability and ESG oversight. As always, this year we followed the recommendations and instructions of supervisors and national and international bodies. We reviewed the EBA's new guidelines on internal governance and remuneration and joint guidelines with the ESMA on the assessment of the suitability of members of the management body and key function holders (released in July 2021) and are taking the measures needed to accommodate them. In 2021 we fully complied with the total 61 recommendations that apply to us in the CNMV's Code of Good Governance (see section '9.3 Table on compliance with, or explanations of, recommendations on corporate governance').

1.6 Priorities for 2022

Our board's priorities for 2022 are:

- **Developing strategic initiatives: One Santander, PagoNxt and Digital Consumer Bank**

  Overseeing those three strategic initiatives we launched in 2020 to help achieve our aim to be the world's best open financial services platform, acting responsibly and earning the trust of our employees, customers, shareholders and broader society:

  - **One Santander**: A common operational and business model created to transform the way we serve our customers and provide a simpler and more enhanced customer experience;
  - **PagoNxt**: This autonomous global payment platform to integrate all Santander customers with open market includes the Payments Hub and our acquiring and international trade businesses. It will roll out payment solutions globally to our customers faster, which is critical to building One Santander; and
  - **Digital Consumer Bank**: Integrating Santander Consumer Finance (SCF) and our fast-growing auto and consumer finance businesses with Santander's digital native bank, Openbank, to boost the technological transformation of the consumer finance business and ensure profitability and growth.

- **Ensuring responsible, profitable growth**

  We will continue to focus on generating profitable growth in a responsible way as a means of creating long-term value for our shareholders and other stakeholders. We will oversee the fulfilment of our ESG commitments to reach net zero emissions by 2050; raise 120 billion euros in green financing by 2025 and 220 billion euros by 2030; and financially empower 10 million people by 2025.

  In 2022, we will set new short- and medium-term climate change objectives that will help us meet our long-term climate commitment.

- **Strengthening governance to ensure we fulfil our long-term vision**

  We will continue to bolster our corporate governance by taking the improvement measures we identified in the 2021 review and enhancing our management bodies' operations to make sure we continue to adhere to national and international best practices and to supervisors' expectations.

- **Maintaining capital discipline and creating shareholder value**

  In 2022, we will prioritize organic growth as part of our capital management, focusing on businesses with high returns on risk-weighted assets (RoRWA) and shareholder remuneration.

  Our shareholder remuneration policy aims to pay out 40% of 2022 underlying profit, split in approximately equal measure between a cash dividend and a share buyback.

2. Ownership structure

→ Broad and balanced shareholder base
→ A single class of shares
→ Authorised capital in line with best practices providing the necessary flexibility

2.1 Share capital

Our share capital is represented by ordinary shares, each with a par value of EUR 0.50. All shares belong to the same class and carry the same rights, including voting and dividends.

There are no bonds or securities that can be converted into shares other than contingent convertible preferred securities (CCPS), which are mentioned in section 2.2 'Authority to increase capital'.

At 31 December 2021, Banco Santander had a share capital of EUR 8,670,320,651 represented by 17,340,641,302 shares.

In 2021, share capital did not change.

At the 2022 AGM, the board of directors submitted three capital reduction resolutions to cancel the shares that were or will be acquired through the two announced share buyback programmes; as well as those that will be acquired as part of any new buyback programmes that the board may initiate or by other means legally permitted. See sections 3.3 'Dividends and shareholder remuneration' and 3.5 'Our next AGM in 2022'.

We have a broad and balanced shareholder structure. At 31 December 2021, Banco Santander had 3,936,922 shareholders, distributed by type of investor, geographic region and number of shares as follows:

TYPE OF INVESTOR

	% of share capital
Board[A]	1.05 %
Institutional	39.63 %
Retail	59.32 %
Total	**100 %**

A. Shares owned or represented by directors. For further details on shares owned and represented by directors, see 'Tenure and equity ownership' in section 4.2 and subsection A.3 in section 9.2 'Statistical information on corporate governance required by the CNMV'.

CONTINENT

	% of share capital
Europe	76.09 %
Americas	22.44 %
Rest of the world	1.47 %
Total	**100 %**

NUMBER OF SHARES

	% of share capital
1-3,000	8.57 %
3,001-30,000	17.30 %
30,001-400,000	12.01 %
Over 400,000	62.11 %
Total	**100 %**

2.2 Authority to increase capital

Under Spanish law, only shareholders at the general meeting have the authority to increase share capital. However, they may delegate the authority to approve or execute capital increases to the board of directors. Our By-laws are fully aligned with Spanish law and do not establish any different conditions for share capital increases.

As of 31 December 2021, our board of directors had received authorization from shareholders to approve or carry out the following capital increases:

- **Authorized capital to 2023:** at our April 2020 AGM, the board was authorised to increase share capital on one or more occasions by up to EUR 4,154,528,645.50 (50% of capital at the time of the April 2020 AGM or approximately 8.3 billion shares representing 47.86% of the share capital at 31 December 2021). The board was granted this authorization for three years (until 3 April 2023).

  Consequently, the board can issue shares for cash consideration with or without pre-emptive rights for shareholders, and for capital increases to back any convertible bonds or securities issued under its authority granted by the April 2020 AGM.

  Shares without pre-emptive rights under this authority can be issued up to EUR 830,905,729 (10% of capital at the time of the April 2020 AGM or approximately 1,661 million shares representing 9.57% of the share capital at 31 December 2021). However, when Law 5/2021 of 12 April, amending the revised Spanish Companies Act and other financial regulation in regard to the fostering of long-term shareholder engagement by listed companies (Act 5/2021) came into force, this limit on issuing shares without pre-emptive rights does not apply to capital increases to convert CCPS (which shall be converted into newly-issued shares when the CET1 ratio falls below a predetermined threshold). To date, this authorization has been used for the three CCPS issues executed in 2021.

  The board of directors is proposing to have this authority renewed at our 2022 AGM. See section 3.5 'Our next AGM in 2022'.

- **Capital increases approved for contingent conversion of CCPSs:** we issued contingent convertible preferred securities that qualify as regulatory Additional Tier 1 (AT1) instruments and would be converted into newly-issued shares if the CET1 ratio fell below a predetermined threshold. Each issue is therefore backed by a capital increase approved under the authorization granted to the board by shareholders. The chart below shows the outstanding CCPSs at the time of this report, with details about the capital increase resolutions that back them. These capital increases are therefore contingent and have been delegated to the board of directors. The board of directors is authorised to issue additional CCPSs and other convertible securities and instruments in accordance with the annual general meeting held on 12 April 2019 resolution that allows convertible instruments and securities to be issued for up to EUR 10 billion or an equivalent amount in another currency (three issues were executed in 2021 under this authorization, as shown in the table below). Any capital increase to allow any such CCPS or other convertible instruments or securities to be converted would be approved under the authority which each issue was executed.

ISSUES OF CONTINGENT CONVERTIBLE PREFERRED SECURITIES

Date of issuance	Nominal amount	Discretionary remuneration per annum	Conversion	Maximum number of shares in case of conversion [A]
25/04/2017	EUR 750 million	6.75% for the first five years	If, at any time, the CET1 ratio of Banco Santander or the Group is less than 5.125%	207,125,103
29/09/2017	EUR 1,000 million	5.25% for the first six years		263,852,242
19/03/2018	EUR 1,500 million	4.75% for the first seven years		416,666,666
08/02/2019	USD 1,200 million	7.50% for the first five years		388,349,514
14/01/2020	EUR 1,500 million	4.375% for the first six years		604,594,921
06/05/2021	USD 1,000 million	4.75% for the first six years		391,389,432
06/05/2021	EUR 750 million	4.125% for the first seven years		352,278,064
21/09/2021	EUR 1,000 million	3.625% for the first eight years		498,007,968

A. The figure corresponds to the maximum number of shares that could be required to cover the conversion of these CCPS, calculated as the quotient (rounded off by default) of the nominal amount of the CCPS issue divided by the minimum conversion price determined for each CCPS (subject to any antidilution adjustments and the resulting conversion ratio).

2.3 Significant shareholders

At 31 December 2021, no shareholder held more than 3% of Banco Santander's total share capital (which is the threshold generally provided under Spanish regulations for a significant holding in a listed company to be disclosed). Even though at 31 December 2021, certain custodians appeared in our shareholder registry as holding more than 3% of our share capital, we understand that those shares were held in custody on behalf of other investors, none of whom exceeded that threshold individually. These custodians were State Street Bank (13.35%), Chase Nominees Limited (9.15%),The Bank of New York Mellon Corporation (5.21%), Citibank New York (3.74%) and EC Nominees Limited (3.34%).

On 24 October 2019 BlackRock Inc., asset manager, reported to the CNMV its significant holding of voting rights in Banco Santander (5.426% of share capital at 24 October 2019). It also specified that it was holding shares on behalf of a number of funds or other investment entities, none of which exceeded 3% individually. In addition, on 21 February 2022, Amundi, S.A., another asset manager, reported to the CNMV its significant holding of voting rights in Banco Santander (3.007% of share capital), while it specifies that the corresponding shares are held by investment funds managed by management entities controlled by Amundi, S.A., none of which exceeds 3% individually. No other changes have been communicated since 31 December 2021. There may be some overlap in the holdings declared by the above mentioned custodians and asset managers.

At 31 December 2021, neither our shareholder registry nor the CNMV's registry showed any shareholder residing in a non-cooperative jurisdictions with a shareholding equal to, or greater than, 1% of our share capital (which is the other threshold applicable under Spanish regulations).

Our Bylaws and the Rules and regulations of the board of directors lay down an appropriate system for analysing and approving related-party transactions with significant shareholders. See section 4.12 'Related-party transactions and conflicts of interest'.

2.4 Shareholders' agreements

In February 2006, various persons linked to the Botín-Sanz de Sautuola y O'Shea family entered into a shareholders' agreement that set up a syndicate for their shares in Banco Santander. CNMV was informed of this agreement and the subsequent amendments the parties made. This information can be found on the CNMV website.

The main provisions of the agreement are:

- **Transfer restrictions:** except when the transferee is also a party to the agreement or the Fundación Botín, any transfer of Banco Santander shares expressly included in the agreement requires prior authorization from the syndicate meeting, which can freely authorise or reject it. These transfer restrictions apply to the shares they expressly cover under the agreement and to shares subscribed for, or acquired by, syndicate members in exercising any subscription, bonus share, grouping or division, replacement, exchange or conversion rights that pertain or are attributed to, or derive from, those syndicated shares.

- **Syndicated voting:** under the agreement, the parties will syndicate and pool the voting rights attached to all their shares in Banco Santander, so that syndicate members may exercise them and, in general, act towards Banco Santander in a concerted manner, in accordance with the instructions and indications and the voting criteria and orientation established by the syndicate. This covers the shares subject to the transfer restrictions mentioned above as well as any voting rights attached to any other Banco Santander shares held either directly or indirectly by the parties to the agreement, and any other voting rights assigned to them by virtue

of usufruct, pledge or any other contractual title, for as long as they hold those shares or are assigned those rights. For this purpose, representation of the syndicated shares is attributed to the chair of the syndicate, who will be the chair of the Fundación Botín (currently, Javier Botín, one of our directors and our Group executive chair's brother).

The agreement initially terminates on 1 January 2056, but will be automatically extended for additional 10-year periods unless one of the parties notifies of their intention not to extend six months before the initial term or extension period ends. The agreement may only be terminated early if all the syndicated shareholders agree unanimously.

At 31 December 2021, the parties to the shareholders' agreement held 100,784,838 shares in Banco Santander (0.58% of its capital), which were therefore subject to the voting syndicate. They include 80,355,819 shares (0.46% of its capital) that are also subject to the transfer restrictions.

Subsection A.7 of section 9.2 'Statistical information on corporate governance required by the CNMV' contains the list of parties to the shareholders´ agreement and the relevant information filed with CNMV.

2.5 Treasury shares

Shareholder approval

The acquisition of treasury shares was last authorized at our April 2020 AGM, for five years and subject to the following provisions:

- Treasury shares held at any time cannot exceed 10% of Banco Santander's share capital, which is the legal limit set under the *Ley de Sociedades de Capital* (Spanish Companies Act).
- The purchase price cannot be lower than the nominal value of the shares nor exceed 3% of the last trading price in the Spanish market for any trades in which Banco Santander does not act on its own behalf.
- The board may establish the purposes for and the procedures through which the authorization may apply.

Treasury shares policy

On 27 October 2020, the board approved the current treasury shares policy, which dictates that treasury share transactions may be carried out for these **purposes:**

- Provide liquidity or supply of securities in the market for Banco Santander shares, which gives this market depth and minimizes any temporary imbalances in supply and demand.
- Take advantage for the benefit of all shareholders of weakness in the share price in relation to its medium-term outlook.
- Meet our obligations to deliver shares to our employees and directors.
- Serve any other purpose authorized by the board within the limits set at the general meeting.

Among other things, the policy also provides for:

- The **principles** to uphold in treasury share trades, which include protecting financial markets' integrity and prohibiting market manipulation and insider trading.
- The **operating rules** on how treasury share trades must be carried out, unless in exceptional circumstances as per the policy. These rules include:
  - **Responsibility for execution** of these trades, which falls on the Investments and Holdings department, kept separate from the rest of Santander.
  - **Venues and types of trades.** Trades must generally be carried out in the orders market of the *mercado continuo* (continuous market) of Spanish stock exchanges.
  - **Volume limits,** which in general must not exceed 15% of the average daily trading volume for Banco Santander shares in the previous 30 sessions in the *mercado continuo*.
  - **Price limits.** In general, (a) buy orders should not exceed the greater of the price of the last trade in the market between independent parties or the highest price in a buy order in the order book and (b) sell orders should not be lower than the lesser of the price of the last trade in the market by independent parties and the lowest price in a sell order in the order book.
  - **Time limits,** including a 15-day black-out period that applies before each quarterly results presentation.
- **Disclosure to the markets** of treasury shares trading.

The policy applies to the discretionary trading of treasury shares. It does not apply to transactions in Banco Santander shares carried out to hedge market risks or provide brokerage or hedging for customers.

The full treasury shares policy is at Banco Santander's corporate website.

First Buyback Programme

On 28 September 2021, the board resolved to execute a treasury shares buyback programme (First Buyback Programme) worth up to 841 million euros (20% of the Group's underlying profit in H1 2021) according to the treasury shares policy and 2021 shareholder remuneration policy. It had based its decision on authorization by the ECB, and by shareholders at the April 2020 AGM.

In the First Buyback Programme (from 6 October to 25 November 2021), we acquired 259,930,273 treasury shares —1.499% of Banco Santander's share capital— at a weighted average price per share of 3.2355 euros.

The purpose of the First Buyback Programme was to reduce Banco Santander's share capital by cancelling the repurchased shares, which the board put to a vote at the 2022 AGM. See section 3.5 'Our next AGM in 2022'.

Second Buyback Programme

Under the same AGM approval, on 24 February 2022 the board resolved that it would execute a new share buyback programme worth 865 million euros (approximately 20% of the Group's underlying attributable profit in H2 2021) as shareholder remuneration charged against 2021 results once it had obtained the required regulatory authorization (Second Buyback Programme).

The purpose of the Second Buyback Programme is to reduce Banco Santander's share capital by cancelling purchased shares (up to the agreed maximum), for which the board submitted a resolution for a vote at the 2022 AGM. See section 3.5 'Our next AGM in 2022'.

As of 31 December 2021, Banco Santander and its subsidiaries held 277.591.940 shares, which represented 1.601% of share capital (compared to 28.439.022 at 31 December 2020, then representing 0.164% of share capital).

Activity in 2021

The chart below summarizes the monthly average proportion of treasury shares to share capital throughout 2021 and 2020.

MONTHLY AVERAGE OF DAILY POSITIONS IN TREASURY SHARES

% of Banco Santander's share capital at month end

	2021	2020
January	0.16%	0.09%
February	0.18%	0.06%
March	0.17%	0.11%
April	0.17%	0.17%
May	0.18%	0.17%
June	0.19%	0.15%
July	0.19%	0.15%
August	0.05%	0.17%
September	0.05%	0.17%
October	0.27%	0.18%
November	1.08%	0.17%
December	1.90%	0.16%

In 2021, the Group's treasury share trades consisted of the following values:

ACQUISITIONS AND TRANSFERS OF TREASURY SHARES IN 2021

	Acquisitions				Transfers				
EUR (except number of shares)	Number of shares	Total par value	Total cash amount	Average purchase price	Number of shares	Total par value	Total cash amount	Average purchase price	Profit (loss) net of taxes
Discretionary trading	68,493,750	34,246,875	198,647,885	2.90	79,271,105[A]	39,635,553[A]	248,288,885[A]	3.13[B]	23,270,000[B]
Client induced trading[C]	195,888,825	97,944,413	605,336,429	3.09	195,888,825	97,944,413	605,336,429	3.09	0
Santander share buy-back	259,930,273	129,965,137	840,999,994	3.235	N/A	N/A	N/A	N/A	N/A
Total	**524,312,848**	**262,156,424**	**1,644,984,308**	**3.08**	**275,159,930[A]**	**137,579,966[A]**	**853,625,314[A]**	**3.11[B]**	**23,270,000[B]**

A. Includes two extraordinary donations totalling 55,750,000 treasury shares to Fundación Banco Santander. For more details, see 'Other programs to support communities' in section 'Support to higher education and other local initiatives' of the 'Responsible banking' chapter.
B. Excluding the donations mentioned in footnote A above.
C. Transactions in Banco Santander shares carried out to hedge market risks or provide brokerage or hedging for customers.

The chart below shows significant changes in treasury shares that required disclosure to the CNMV in the year. Companies must report to the CNMV when purchases of treasury shares exceed 1% of the total voting rights (without discounting sales or transfers) or there is a change in the number of total voting rights.

SIGNIFICANT CHANGES IN TREASURY SHARES IN 2021[A]

	% of voting rights represented by shares		
Reported on	acquired since last notice	transferred since last notice	held at reference date of notice
17/03/2020[B]	0.163%	0.185%	0.156%
14/06/2021	1.001%	0.96%	0.197%
20/10/2021	1.017%	0.916%	0.298%
19/11/2021	1.001%	0.146%	1.153%

A. Percentages calculated with share capital at the date of disclosure.
B. This notice was corrected by disclosure dated 18 March 2021. Data shown as corrected.

Transactions with financial instruments

Below are the details of the transactions we carried out of our own accord for a purpose similar to discretionary treasury share management and with Banco Santander shares as the underlying asset in 2021:

- In Q4, we took an investment position with a Delta (i.e. net exposure to share price changes) equalling 8,000,000 shares worth a total 22,600,000 euros. That was the final position at year end.
- The instruments used were Total Return Equity Swaps, payable exclusively as a cash settlement.

2.6 Stock market information

Markets

Banco Santander shares are listed on Spanish stock exchanges (Madrid, Barcelona, Bilbao and Valencia, under the trading symbol 'SAN'), the New York Stock Exchange (NYSE) as American Depositary Shares (ADS) under the trading symbol 'SAN' (each ADS represents one Banco Santander share), the London Stock Exchange as Crest Depositary Interests (CDI) under trading symbol 'BNC' (each CDI represents one Banco Santander share), the Mexican Stock Exchange under the trading symbol 'SAN', and the Warsaw Stock Exchange under the trading symbol 'SAN'.

Market trends

The global economy came back strong. Vaccination programmes enabled a return to economic activity and mobility amid excess liquidity and expansionary fiscal policies. Despite uncertainties due to the surge of new covid-19 variants, positive trends drove a rise in commodity prices and inflationary pressures, which rebounded to the highest levels in a decade in the US and the eurozone.

Central banks in developed economies began a widespread withdrawal of monetary stimulus. The Bank of England raised interest rates to 0.25% on the back of a strong jobs market and high inflation. The US Federal Reserve announced its intention to start raising rates no later than mid-2022. The ECB is limiting the withdrawal of stimulus to liquidity by scaling back its purchase programmes.

Major global equity indices ended 2021 with significant aggregate gains. The banking industry registered better performance owing to the lifting of restrictions on dividend payments, favourable results of US bank stress tests, and better outlooks for most European banks.

The IBEX 35 in Spain increased 7.9%; the DJ Stoxx 50 in Europe by 22.8%; DJ Banks by 34.0%; and the MSCI World Banks by 22.7%.

Market capitalization and trading

By 31 December 2021, Banco Santander's market capitalization of EUR 50,990 million was the second largest in the eurozone and 24th largest in the world among the financial institutions.

13,484 million Banco Santander shares traded in the year for an effective value of EUR 41,195 million and a liquidity ratio of 78%.

THE BANCO SANTANDER SHARE

	2021	2020
Shares (million)	17,340.6	17,340.6
Price (EUR)		
Closing price[A]	2.941	2.538
Change in the price	16%	-29%
Maximum for the period[A]	3.509	3.799
Date of maximum for the period	3/6/2021	17/2/2020
Minimum for the period[A]	2.375	1.439
Date of minimum for the period	28/1/2021	24/9/2020
Average for the period[A]	3.055	2.288
End-of-period market capitalization (EUR million)	50,990	44,011
Trading		
Total volume of shares traded (million)	13,484	19,080
Average daily volume of shares traded (million)	52.7	74.2
Total cash traded (EUR million)	41,195	45,034
Average daily cash traded (EUR million)	160.9	175.2

A. Data adjusted to the December 2020 capital increase.

3. Shareholders. Engagement and general meeting

→ One share, one vote, one dividend
→ No takeover defences in our Bylaws
→ High participation and engagement of shareholders in our general meetings

3.1 Shareholder communication and engagement

Policy on communication and engagement with shareholders and investors

Banco Santander aims to ensure its interests are in line with shareholders', long-term share value and the long-term confidence of investors and society. We provide information to shareholders and investors that satisfies their expectations and upholds our culture and values. We also communicate and engage with them regularly so that their views will be considered by senior managers and governance bodies.

The principles of Santander's policy on communication and engagement with shareholders and investors are:

- **Protection of rights and lawful interests of all shareholders.** We facilitate their rights to be exercised, provide them with information and give them opportunities to be involved in our corporate governance effectively.
- **Equal treatment and non-discrimination.** We treat investors equally in accordance with status.
- **Fair disclosure.** We make sure our disclosure of information in interactions with investors is transparent, truthful and symmetrical. Any inside or relevant information given to investors will have been previously disclosed except when applicable regulation provides otherwise.
- **Appropriate disclosure of information.** We report the right information to meet our investor's needs and expectations. We make sure to give investors clear, concise and reliable information in a way that is tailored to shareholders.
- **Compliance with our Bylaws and corporate governance rules,** as well as the principles of cooperation and transparency with the competent regulators and supervisors, in accordance with internal guidelines. We adhere closely to the laws and regulations on insider and price-sensitive information in addition to our own Code of Conduct in Securities Markets, the General Code of Conduct and the Rules and regulations of the board of directors.

The policy further describes:

- The **roles and responsibilities** of Banco Santander's main bodies and functions involved in communication and engagement with shareholders and investors.
- The **channels for disclosing information** and communicating with shareholders and investors.
- The **ways Banco Santander engages** with shareholders and investors, which are covered below.

Furthermore, the policy applies to relations with the financial, environmental, social and corporate governance analysts, proxy advisers, rating agencies and other agents whom our shareholders and investors consult and we consider essential.

Our policy on communication and engagement with shareholders and investors can be found in the corporate website.

In addition, Banco Santander has board-approved frameworks on brand and communications, and accounting and financial information and management. They set out the general principles, roles and key processes on the communication of economic-financial, non-financial and corporate information, helping ensure that all our shareholders and other stakeholders are properly informed about our strategy, goals and results, as well as about our culture and values, maximizing the disclosure and quality of the information available to the market.

Engagement with shareholders in 2021

In keeping with our policy, we engaged with our shareholders as follows:

- **The annual general meeting.** The annual general meeting is our most important annual event for our shareholders. We strive to encourage all our shareholders to be informed, attend and participate. See 'Participation of shareholders at general meetings' and 'Right to receive information' in section 3.2.

  At the annual general meeting, the chair reports on the year's most significant changes to the Group's corporate governance, supplementing the corporate governance report. She also addresses any questions raised by shareholders about the matters included in the agenda and the relevant information disclosed to the market since the last general meeting.

  The CEO presents on the Group's business landscape, strategy execution and performance (overall and by region, country and business) and the main priorities for the following year.

  Furthermore, the chairs of the audit, nomination and remuneration committees also report to the annual general meeting on their operations and elaborate on the related information provided in this chapter.

  Our 2021 AGM was fully virtual to protect the health of our shareholders and everyone who organized it. Our general meeting attendance app enables shareholders to exercise their rights to attend and participate in real time and remotely. They can watch

the entire meeting through a live feed, vote, make remarks, propose resolutions and contact the notary public. Such high shareholder turnout and meeting participation proved our remote communication systems are effective.

The outstanding quorum and voting results in our 2021 AGM show the importance we put on shareholder engagement through the annual general meetings. See section 3.4 '2021 AGM'.

Banco Santander's management system for the 2021 AGM received AENOR certification for sustainable events in compliance with the UNE-ISO 20121:2013.

- **Quarterly results presentations.** Every quarter we present our results on the same day we make them public. Our presentation can be followed live, via conference call or webcast. We release the related financial report and presentation material before market open. During the presentation, questions can be asked or emailed to: investor@gruposantander.com.

  Our most recent event was our 2021 Results Presentation on 2 February 2022. In 2021, we gave our first, second and third quarter results presentations on 28 April, 29 July and 27 October, respectively.

- **Investor and strategy days.** We also organise investor and strategy days, where senior managers explain our strategy for investors and stakeholders in a broader context than in results presentations. Investors can also directly interact with senior managers and some directors, which is increasingly important and attests to our strong governance. As recommended by the CNMV, we publish announcements about meetings with analysts and investors and related documentation in advance. We held our last Investor Day on 3 April 2019 in London. The information made available during the investor day is not incorporated by reference in this annual report nor considered part of it.

- **Meetings and conferences.** Our Shareholders and Investors Relations team discusses financial and other issues at meetings with investors at conferences organised by third parties.

Notwithstanding the principle of equal treatment and non-discrimination, we have learned that one size does not fit all when engaging with investors. Therefore, we tailor the following engagements to meet the needs and expectations of especially our institutional investors, but also fixed-income investors, analysts and rating agencies, as well as retail shareholders:

- **Lead independent director engagement with key investors**. Our lead independent director, Bruce Carnegie-Brown, is regularly in contact with investors in Europe and North America, particularly in the months prior to the annual general meeting. We gather their insights and form an opinion about their concerns, especially regarding our corporate governance. In 2021 and early 2022, he met with 20 investors, who accounted for approximately 30% of share capital. In our annual board assessment, board members highly value Mr Carnegie-Brown's role in integrating new international best practices in corporate governance, fostering tailored relations with our institutional investors. The nomination committee considers the feedback received from investors.

- **Investor roadshows**. Our Shareholders and Investors Relations department is constantly in direct contact with institutional investors and analysts to promote all-round discussion on shareholder value, better governance and remuneration schemes, and sustainability matters.

  In 2021 Shareholder and Investor Relations engaged 942 times (mostly virtually) with 469 institutional investors from 136 locations. 85 of those meetings focused on environmental, social and governance aspects. It engaged with 40% of share capital, which is over 67% of the capital held by institutional investors.

  We issued over 800 communications in 2021 to increase dialogue and transparency with shareholders and investors about the group's performance, results and the Banco Santander share.

- **Interaction with retail shareholders**. We also offer other special means of communication for retail shareholders regardless of the size of their stake. In 2021 the Shareholders and Investors Relations team organized 116 events with retail shareholders: 94 virtually; 20 in-person; and two in hybrid format. 5,027 people accounting for 332,063,674 shares (4% of our retail shareholders' capital in Spain) attended. Shareholders engaged with the chief financial officer (CFO) at several events.

  The team also responded to 139,301 queries received via our shareholder and investor helplines, mailboxes, WhatsApp and bilateral meetings on the Virtual Customer Channel. Satisfaction surveys revealed 96% would recommend the attention service.

  Lastly, we received 18,695 shareholder and investor opinions through quality surveys and studies.

Communication with proxy advisors and other analyst and influencers

We have always recognised the value our investors place on open and proactive dialogue with proxy advisors, ESG analysts, and other influential entities. We make sure they understand our corporate governance, responsible banking and sustainability priorities and messages in order to convey them properly to the investors.

In 2021, through our continuous engagement with the main proxy advisers, we duly reported on and explained proposed resolutions submitted for the 2021 AGM so they could make voting recommendations.

Corporate website

Our corporate website enables an effective communication with shareholders and all our global stakeholders. Its design enables us to be transparent and improves the experience of users in obtaining quality information about Santander.

Our corporate website includes information on corporate governance as required by law. In particular, (i) the key internal regulations of Banco Santander (Bylaws, Rules and regulations of the board, Rules and regulations for the general meeting, etc.); (ii) information on the board of directors and its committees as well as directors' professional biographies and (iii) information on general meetings.

The address of our information on corporate governance is: https://www.santander.com/en/shareholders-and- investors/corporate-governance. (It is included for reference purposes only. The content of our corporate website is not incorporated by reference in this annual report or otherwise considered part of it).

Other channels

According to good governance guidelines, we have an app for Android and iOS with vast insight into the Group so all shareholders and investors can stay well informed.

We also post information about Banco Santander regularly on our official Twitter and LinkedIn accounts.

3.2 Shareholder rights

Our Bylaws provide for only one class of share (ordinary shares) and grants all shareholders the same rights. Each Banco Santander share entitles holders to one vote.

Banco Santander's Bylaws do not have any defensive mechanisms and fully conform to the notion of one share, one vote, and one dividend.

This section highlights certain key rights our shareholders have.

No restrictions on voting rights or the free transfer of shares in our Bylaws

The law and the Bylaws only place restrictions on voting rights as a result of violation of regulations, as indicated below.

There are no non-voting or multiple-voting shares, shares giving preferential treatment in dividend pay-outs, shares limiting the number of votes a single shareholder can cast, or quorum requirements or qualified majorities other than those the law dictates.

There are no restrictions on the free transfer of shares other than those the law dictates, as indicated further in this section.

Neither our Bylaws nor any laws or regulations restrict the transferability of shares. Our Bylaws also do not restrict voting rights (except if they were acquired in violation the law or regulations).

Furthermore, our Bylaws do not include any neutralization provisions as defined in the *Ley del Mercado de Valores* (Spanish Securities Market Act), which would apply in tender offers or takeover bids.

Please note that the shareholders' agreement mentioned in section 2.4 'Shareholders' agreements' contains transfer and voting restrictions on shares that are subject to it.

Legal and regulatory restrictions on the acquisition of significant holdings

There are legal and regulatory provisions applicable to the Banco Santander because the banking activity is a regulated sector, which involves that the acquisition of significant holdings or influence is subject to regulatory approval or non-objection. As Banco Santander is a listed company, a tender offer or a takeover bid for its shares must be launched to acquire control and for other similar transactions.

The acquisition of significant ownership interests is regulated mainly by:

- Regulation (EU) 1024/2013 of the Council of 15 October 2013, conferring specific tasks on the ECB relating to the prudential supervision of credit institutions.
- Spanish Securities Market Act.
- Act 10/2014, of 26 June, on the organization, supervision and solvency of credit institutions (articles 16 to 23) and its implementing regulation, Spanish Royal Decree 84/2015, of 13 February.

The acquisition of a significant stake in Banco Santander may also require approval by (i) other domestic and foreign regulators with supervisory powers over Banco Santander or its subsidiaries' operations, shares listings or other actions concerning such regulators or subsidiaries and (ii) other authorities pursuant to foreign investment regulations (including those imposed due to covid-19) in Spain or other countries where we operate.

Shareholder participation at general meetings

All registered holders of shares found on record at least five days prior to the day of general meetings are entitled to attend. Banco Santander allows shareholders to exercise their rights to attend, delegate, vote and participate in general meetings using remote communications systems.

Shareholders can attend general meetings remotely. They can watch it through a live feed, vote, make remarks, propose resolutions and contact the notary public.

The electronic shareholders' forum is another communications channel available on Banco Santander's website at the time of the meeting. Shareholders can post items they propose to add to the agenda in the meeting notice, requests for support for their proposals, initiatives to reach the percentage required to exercise minority shareholder rights legally, as well as offers or requests to act as a voluntary proxy.

Supplement to the annual general meeting notice

Shareholders representing at least 3% of share capital may request the publication of a supplement to the annual general meeting notice stating the names of shareholders exercising this right, the number of shares they hold, as well as any items to be added to the agenda with an explanation or substantiated proposal for resolutions and any other relevant documentation.

Shareholders representing at least 3% of share capital may also propose reasoned resolutions about any matters that have been, or should be, added to the agenda of a called annual general meeting.

To exercise these rights, shareholders must send a certified notice to Banco Santander's registered office within five days after the annual general meeting announcement notice is posted.

Any shareholder can also request that the meeting address non-agenda items for which the law does not require a minimum percentage of share capital for a resolution to be put to a vote (the removal of directors or bringing corporate liability action against any of them).

Right to receive information

From the time the general meeting notice is posted until the fifth day before the general meeting date on first call, shareholders can submit written requests for information or clarification, or any written questions they deem relevant to the items on the meeting agenda. In addition, within the same period, shareholders can submit written requests for clarification about price-sensitive information Banco Santander has furnished for the CNMV since the last general meeting or about auditor's reports. Banco Santander posts any information or answers it provides on its corporate website.

Shareholders may also exercise their right to receive information at the meeting. Even if it cannot be asserted in the course of the meeting, or requests are made by shareholders attending remotely, they will be given the appropriate information in writing within seven days after the general meeting.

Quorum and majorities for passing resolutions at general meeting

The quorum and majorities set out in our Bylaws and Rules and regulations for general meeting in order to hold a valid meeting and adopt corporate resolutions is according to Spanish law.

On first call, shareholders representing at least 25% of subscribed share capital with voting rights must be in attendance (except for certain matters mentioned subsequently). If a sufficient quorum cannot be constituted, general meetings will be held on second call, which does not require a quorum.

In accordance with our Rules and regulations for general meeting, shareholders voting by mail or electronically before the meeting are counted as present in order to determine the general meeting quorum.

With the exception of certain matters mentioned below, general meeting resolutions pass when shareholders in attendance or by proxy cast more votes in favour than against.

The quorum and majorities required to amend the Bylaws, issue shares and bonds, make structural changes and vote on other significant resolutions permitted by law are set out below. Furthermore, laws applying to credit institutions dictate that, if over 50% of the share capital is present at general meetings, a qualified two-thirds majority is required to raise the proportion of variable remuneration components to fixed components for executive directors and other top executives above 100% (up to 200%); otherwise, a three-quarters majority will be necessary.

Our Bylaws do not require shareholder approval at general meetings for any decisions about acquiring core assets, selling them off or transferring them to another company or similar corporate transactions, unless it is required by law.

Rules for amending our Bylaws

The general meeting is the competent body to approve any amendment to the Bylaws. However, only the board can decide to change the registered office within Spain.

The board or, where appropriate, the shareholders who have drafted a proposed amendment to the Bylaws must write it out completely, in addition to a report justifying it; and provide them to shareholders at the time the meeting to debate proposed amendment is announced.

The general meeting notice must clearly state the items to be amended as well as the rights of all shareholders to examine the full text of a proposed amendment and the related report at Banco Santander's registered office, and order these documents delivered or sent to them free of charge.

If shareholders are convened to debate amendments to the Bylaws, the quorum on first call will be constituted if 50% of subscribed share capital with voting rights is present. If a sufficient quorum cannot be constituted, the general meeting will be held on second call, where 25% of subscribed share capital with voting rights must be present.

When less than 50% of subscribed share capital with voting rights are present, resolutions on amendments to the Bylaws can only be validly adopted if two-thirds of shareholders attending the meeting in person or by proxy vote for them. However, when 50% or more of subscribed share capital with voting rights is present, resolutions may validly pass with an absolute majority.

Resolutions to amend the Bylaws that involve new obligations for shareholders must be accepted by those affected.

The Single Supervisory Mechanism (SSM) must authorise us to amend our Bylaws. However, amendments that are exempt from authorization but must still be reported to the SSM include any to change the registered office within Spain, raise share capital, add imperative or prohibitive laws or regulations to the wording of the Bylaws, or change the wording in order to comply with court or administrative rulings and any others the SSM has declared exempt due to a lack of materiality in response to prior consultations.

3.3 Dividends and shareholder remuneration

Distribution charged against 2021 results

ECB Recommendation of 15 December 2020, which asked banks not to pay out dividends charged against 2021 results (ECB Recommendation III), was in force for over half of 2021.

On 23 July 2021, the ECB believed the reasons underpinning ECB Recommendation III to limit dividend payouts were no longer valid and, thus, repealed it effectively on 30 September 2021.

On 28 September 2021, the board announced its 2021 shareholder remuneration policy to pay out an interim distribution from approximately 40% of the Group's underlying profit (half through a cash dividend and half through a shares buyback).

- **Interim remuneration**. Accordingly, it authorized the payment of an interim dividend of 4.85 euro cents per share (i.e. 20% of the Group's underlying profit in H1'21), in cash and charged against 2021 profits; it was paid on 2 November 2021. The board also voted to launch the First Buyback Programme worth 841 million euros (20% of the Group's underlying profit in H1'21) once the ECB approved it on 28 September 2021 (see in 'First Buyback Programme' in section 2.5).
- **Final remuneration**. On 24 February 2022, within the 2021 shareholder remuneration policy, the board of directors voted to:
  - submit a resolution at the 2022 AGM to approve a final cash dividend in the gross amount of 5.15 eurocents per share, worth approximately 865 million euros (approximately 20% of the Group's underlying profit in H2 2021). If approved at the AGM, the dividend would be payable from 2 May 2022. The estimate of 865 million euros is based on the assumption that, once the Second Buyback Programme has taken place, the number of outstanding shares entitled to receiving dividends will be 16,804,353,202. Therefore, the total dividend may be higher if fewer shares than anticipated are acquired in the Second Buyback Programme; otherwise, it will be lower.
  - implement a Second Buyback Programme worth 865 million euros (approximately 20% of the Group's underlying profit in H2 2021), once the necessary regulatory authorization has been obtained. For more details on the programme, see section 2.5 'Treasury shares'.

If shareholders approve the dividend payout resolution and the ECB authorizes the Second Buyback Programme, it will result in a payout of approximately 40% of the Group's underlying attributable profit for 2021. If the buyback reaches the maximum within the programme period, remuneration will be split equally between cash dividends and shares buybacks. This final remuneration will enable Santander to meet the target set in the shareholder remuneration policy disclosed to the market on 28 September 2021.

Shareholder remuneration policy for 2022 results

For the 2022 results the shareholder remuneration policy that the board intends to apply is a total remuneration of approximately of c.40% of the group's underlying profit, split in approximately equal parts between cash dividends and share buybacks, thus continuing the policy applied with respect to 2021 results.

The implementation of the shareholder remuneration policy is subject to future corporate and regulatory decisions and approvals.

3.4 2021 AGM

On 26 March 2021, we held our annual general meeting. In light of Covid-19, it was exclusively virtual. Because of the means shareholders were provided to attend remotely, the meeting had a quorum of 67.674%, just 0.8 percentage points below our highest-ever general meeting quorum in 2019.

Quorum and attendance

The quorum (among shareholders present and represented) was 67.674% broken down as follows:

QUORUM BREAKDOWN	
In person and virtual attendance	0.062 %
By proxy	
Cast by post or direct delivery	6.586 %
By electronic means	58.438 %
Remote voting	
Cast by post or direct delivery	0.547 %
By electronic means	2.041 %
Total	**67.674 %**

Voting results and resolutions

All items on the agenda were approved. Votes in favour of the board's proposals averaged 98.31%. 99.57% of votes approved corporate management for 2020 and 91.59% of votes approved the 2020 annual report on directors' remuneration. None of the agenda items listed in the notice convening the meeting received more than 9.53% of votes against.

The following chart summarizes the resolutions approved and voting results:

	VOTES [A]				
	For[B]	Against[B]	Blank[C]	Abstention[C]	Quorum[D]
1. Annual accounts and corporate management					
1A. Annual accounts and directors' reports for 2020	99.74	0.26	0.04	2.96	67.67
1B. Consolidated statement of non-financial information for 2020	99.71	0.29	0.04	2.83	67.67
1C. Corporate management 2020	99.57	0.43	0.04	3.04	67.67
2. Application of results	99.46	0.54	0.04	2.84	67.67
3. Appointment, re-election or ratification of directors					
3A. Setting of the number of directors	99.64	0.36	0.05	2.87	67.67
3B. Ratification of the appointment of Gina Lorenza Díez Barroso	99.62	0.38	0.05	2.89	67.67
3C. Re-election of Homaira Akbari	99.39	0.61	0.05	2.91	67.67
3D. Re-election of Álvaro Antonio Cardoso de Souza	99.40	0.60	0.05	2.88	67.67
3E. Re-election of Javier Botín-Sanz de Sautuola y O'Shea	97.05	2.95	0.04	2.87	67.67
3F. Re-election of Ramiro Mato García-Ansorena	99.63	0.37	0.05	2.87	67.67
3G. Re-election of Bruce Carnegie-Brown	98.36	1.64	0.05	2.87	67.67
4. Re-election of the external auditor for Financial Year 2021	99.64	0.36	0.04	2.83	67.67
5. Amendment of the Bylaws					
5A. Relating to the issuance of non-convertible debentures	99.23	0.77	0.05	2.89	67.67
5B. Relating to the powers of the general shareholders' meeting (share-based compensation)	98.92	1.08	0.04	2.90	67.67
5C. Relating to the shareholders' participation at the general shareholders' meeting	99.22	0.78	0.04	2.85	67.67
5D. Relating to attending the meeting from a distance by remote means of communication	90.47	9.53	0.04	2.83	67.67
6. Amendment of the Rules and regulations of the general meeting					
6A. Relating to the powers of the shareholders at a general meeting (issuance of debentures)	99.23	0.77	0.04	2.87	67.67
6B. Relating to the powers of the shareholders at a general meeting (share-based compensation)	98.94	1.06	0.04	2.86	67.67
6C. Relating to proxy representation at a general meeting	99.64	0.36	0.04	2.86	67.67
6D. Relating to the means for distance voting	98.51	1.49	0.04	2.83	67.67
6E. Relating to publication of the resolutions approved at the general meeting	99.71	0.29	0.04	2.84	67.67
8. Delegation to the board of the power to issue all kinds of fixed-income securities, preferred interests or similar debt instruments (including warrants) that are not convertible	96.89	3.11	0.04	2.85	67.67
8. Directors' remuneration policy	93.26	6.74	0.04	2.89	67.67
9. Maximum total annual remuneration of directors in their capacity as directors	98.35	1.65	0.04	2.87	67.67
10. Maximum ratio of fixed and variable components in executive directors' total remuneration	99.33	0.67	0.04	2.86	67.50
11. Remuneration plans that include the delivery of shares or share options:					
11A. Deferred multiyear objectives variable remuneration plan	96.61	3.39	0.04	2.86	67.67
11B. Deferred conditional variable remuneration plan	97.66	2.34	0.04	2.86	67.67
11C. Digital Transformation Award	99.51	0.49	0.04	2.86	67.67
11D. Group buy-out policy	98.98	1.02	0.04	2.91	67.67
11E. Plan for employees of Santander UK Group Holdings and other companies of the Group in the UK	99.01	0.99	0.04	2.84	67.67
12. Authorization to implement the resolutions approved	99.56	0.44	0.04	2.82	67.67
13. Annual directors' remuneration report	91.59	8.41	0.04	2.88	67.67
14. Corporate action to demand director liability[E]	0.00	100.00	0.00	0.09	65.09
15 to 29. Dismissal and removal of directors[F]	0.00	100.00	0.00	0.09	65.09

A. Each Banco Santander share grants one vote.
B. Percentage of votes for and against.
C. Percentage of share capital present and attending by proxy at the 2021 AGM.
D. Percentage of Banco Santander's share capital on the date of the 2021 AGM.
E. Item not included on the agenda.
F. Items 15 to 29 (not included on the agenda) were put to a separate vote. Each item refers to the proposal to dismiss and remove each acting director at the 2021 AGM.

The full texts of the resolutions passed at the 2021 AGM can be found on our corporate website and on the CNMV's website, as they were filed as other relevant information on 26 March 2021.

3.5 Our next AGM in 2022

The board of directors agreed to call the 2022 AGM for 31 March on first call or on 1 April on second call, with the following proposed resolutions.

- **Annual accounts and corporate management**. For approval of:
  - The annual accounts and the directors' reports of Banco Santander and its consolidated Group for the financial year ended on 31 December 2021. For more details, see 'Consolidated financial statements'.
  - The consolidated non-financial statement for the financial year ended on 31 December 2021that is part of this consolidated directors' report. See the 'Responsible banking' chapter.
  - The corporate management for the financial year 2021.
  - The application of results obtained during financial year 2021. See section 3.3 'Dividends and shareholder remuneration'.
- **Appointment of directors**.
  - Setting the number of directors at 15, within the maximum and minimum limits set in the Bylaws.
  - Appointing Germán de la Fuente as independent director (see section 1.1 'Board skills and diversity') and re-electing José Antonio Álvarez, Belén Romana, Henrique de Castro, Luis Isasi and Sergio Rial for a three-year period. See section 4.1 'Our directors'.
- **External auditor**. Re-electing the firm PricewaterhouseCoopers Auditores, S.L. as external auditor for financial year 2022. See 'External auditor' in section 4.5.
- **Bylaws**. Approve certain amendments to the Bylaws to:
  - Introduce refinements based on the amended Spanish Companies Act as relates to final beneficiary identification and new share transfers before a capital increase is filed with the *Registro Mercantil* (Commercial Registry).
  - Round off the capital reduction rules to reflect other aims that the law allows.
  - Clarify the powers of the general meeting regarding the issuance of convertible securities.
  - Add technical refinements to the rules on holding general meetings.
  - Allow the board of directors to designate more than one vice-secretary.
  - Contemplate that executives other than the executive chair can have direct reporting lines to the board or its committees.
  - Adapt the audit committee's authority regarding the management report and related-party transactions and increase its coordination with the responsible banking, sustainability and culture committee.
  - Adapt the Bylaws on directors' remuneration to the recent amendments to the Spanish Companies Act.
  - Add technical regulatory refinements regarding dividend payouts in forms other than cash or own funds instruments.
- **Rules and regulations of the general meeting**. Approve the amendment to the Rules and regulations of the general meeting to fully adapt the rule on remote general meeting attendance to the Bylaws; contemplate that more than one vice-secretary may be designated; and include technical refinements regarding resolutions proposed and remarks made by shareholders.
- **Authority to increase share capital**. To authorize the board of directors to increase share capital once or several times over the course of three years. See section 2.2 'Authority to increase share capital'.
- **Share capital reduction** for the following purposes:
  - Cancelling the 259,930,273 treasury shares from the First Buyback Programme.
  - Cancelling a maximum of 1.730.000.000 treasury shares purchased under the Second Buyback Programme.
  - Cancelling a maximum of 1.734.064.130 treasury shares, acquired through one or more share buyback programmes or by other means legally permitted, whereby the board of directors will be authorized to cancel them on one or several occasions in a maximum timescale of one year or by the date of the next annual general meeting.

    See section 2.5 'Treasury shares'.
- **Remuneration policy**. Approving the director remuneration policy for 2022, 2023 and 2024. For further information, see section 6.4 'Directors' remuneration policy for 2022, 2023 and 2024 submitted to a binding shareholder vote'.
- **Director remuneration**. Approving director's fixed annual remuneration. See section 6.4 'Directors' remuneration policy for 2022, 2023 and 2024 submitted to a binding shareholder vote'.
- **Variable remuneration**. Approving a maximum ratio of 200% of variable components to fixed components of total remuneration for executive directors and certain employees belonging to professional categories that have a material impact on the Group's risk profile. For more details, see section 6.4 'Directors' remuneration policy for 2022, 2023 and 2024 submitted to a binding shareholder vote'.
- **Remuneration plans for executive directors**. Approving remuneration plans for executive directors that involve the delivery of shares or share options or are share-value based. For more details, see section 6.4 'Directors' remuneration policy for 2022, 2023 and 2024 submitted to a binding shareholder vote'.
- **Annual directors' remuneration report**. Holding a non-binding vote on the annual directors' remuneration report. For more details, see section 6. 'Remuneration'.

The related documents and information are available for consultation on our corporate website on the date the meeting notice is published. We will also broadcast our 2022 AGM live, as was done for the 2021 AGM.

Since attendance at the general meetings is not paid, a general policy in this regard is not necessary. However, Banco Santander offers shareholders that participate in our general meeting a commemorative courtesy gift, as has been tradition for decades.

4. Board of directors

A balanced and diverse board

- → 15 directors, including 12 non-executive and 3 executive
- → Majority of independent directors (66.67%)
- → Balanced presence of women and men (40%-60%)

Effective governance

- → Specialised committees advising the board
- → The responsible banking, sustainability and culture committee shows the board's commitment to this matter
- → Complementary functions and effective controls: executive chair, CEO and lead independent director



Javier Botín
Member
Non-executive director

Álvaro Cardoso
Member
Non-executive director (independent)
✱

R Martín Chávez
Member
Non-executive director (independent)
■■▲▲P

Homaira Akbari
Member
Non-executive director (independent)
●▲✱

Pamela Walkden
Member
Non-executive director (independent)
●P✱

Gina Díez
Member
Non-executive director (independent)
■

Sergio Rial
Member
Non-executive director

Jaime Pérez Renovales
General secretary and secretary of the board

Sol Daurella
Member
Non-executive director (independent)
■■✱

Luis Isasi
Member
Non-executive director
●■▲

José Antonio Álvarez
Vice chair and CEO
Executive director
●▲

Ana Botín
Executive chair
Executive director
●P▲

Bruce Carnegie-Brown
Vice chair and lead independent director
Non-executive director (independent)
●■P■P▲

Belén Romana
Member
Non-executive director (independent)
●●▲P▲✱

Henrique de Castro
Member
Non-executive director (independent)
●■▲

Ramiro Mato
Member
Non-executive director (independent)
●●▲✱P

- ● Executive committee
- ● Audit committee
- ■ Nomination committee
- ■ Remuneration committee
- ▲ Risk supervision, regulation and compliance committee
- ▲ Innovation and technology committee
- ✱ Responsible banking, sustainability and culture committee
- P Chair of the committee

4.1 Our directors



Ana Botín-Sanz de Sautuola y O'Shea

GROUP EXECUTIVE CHAIR

Executive director

Ms Botín joined the board in 1989.

Nationality: Spanish. Born in 1960 in Santander, Spain.

Education: Degree in Economics from Bryn Mawr College (Pennsylvania, United States).

Experience: Ms Botín joined Banco Santander, S.A. after working at JP Morgan (New York, 1980-1988). In 1992, she was appointed senior executive vice-president. Between 1992 and 1998, she led Santander's expansion into Latin America. In 2002, she was appointed executive chair of Banco Español de Crédito, S.A. Between 2010 and 2014, she was chief executive officer of Santander UK plc and she has been non-executive director until April 2021. She has also been non-executive director of Santander UK Group Holdings plc (2014-2021). In 2014 she was appointed executive chair of Santander.

Other positions of note: Ms Botín is a member of the board of directors of The Coca-Cola Company and president of the European Banking Federation. She is also founder and chair of the CyD Foundation (which supports higher education) and the Empieza por Educar Foundation (the Spanish subsidiary of the international NGO, Teach for All), and sits on the advisory board of the Massachusetts Institute of Technology (MIT).

Positions in other Group companies: Ms Botín is a chair of PagoNxt, S.L, Universia España Red de Universidades, S.A. and Universia Holding, S.L; and a non- executive director of Santander Holding USA, Inc., Santander Bank, N.A.

Membership of board committees: Executive committee (chair), and innovation and technology committee.

Skills and competencies: Extensive international experience in banking, having held the highest executive roles. She has also led the transformational, strategic and cultural change of Grupo Santander. Moreover, she has shown an ongoing commitment to sustainable and inclusive growth, as demonstrated by her philanthropic activities.



José Antonio Álvarez Álvarez

VICE CHAIR & CHIEF EXECUTIVE OFFICER

Executive director

Mr Álvarez joined the board in 2015.

Nationality: Spanish. Born in 1960 in León, Spain.

Education: Degree in Economics and Business Administration. MBA from the University of Chicago.

Experience: José Antonio Álvarez joined Santander in 2002 and was appointed senior executive vice president of the Financial Management and Investor Relations division in 2004 (Group chief financial officer). He served as director at SAM Investments Holdings Limited, Santander Consumer Finance, S.A. and Santander Holdings US, Inc. He also sat on the supervisory boards of Santander Consumer AG, Santander Consumer Bank GmbH and Santander Bank Polska, S.A. He was a board member of Bolsas y Mercados Españoles, S.A.

Positions in other Group companies: Mr Álvarez is non-executive director of Banco Santander (Brasil) S.A. and PagoNxt, S.L.

Membership of board committees: Executive committee, and innovation and technology committee.

Skills and competencies: Mr Álvarez is a highly qualified and talented leader with a distinguished career in banking. He brings significant strategic and international management expertise, in particular financial planning, asset management and consumer finance. He has vast experience and an established reputation with such key stakeholders as regulators and investors.



Bruce Carnegie-Brown

VICE CHAIR & LEAD INDEPENDENT DIRECTOR

Non-executive director (independent)

Joined the board in 2015.

Nationality: British. Born in 1959 in Freetown, Sierra Leone.

Education: Master of Arts in English Language and Literature from the University of Oxford.

Experience: Mr Carnegie-Brown was non-executive chair of Moneysupermarket.com Group plc (2014-2019), non-executive director of Jardine Lloyd Thompson Group plc (2016-2017), non-executive director of Santander UK plc and of Santander UK Group Holdings plc (2019-2021) and non-executive chair of AON UK Ltd (2012-2015). He was the founder and managing partner of the quoted private equity division of 3i Group plc, and president and chief executive officer of Marsh Europe, S.A. He was also lead independent director at Close Brothers Group plc (2006-2014) and Catlin Group Ltd (2010-2014). He previously worked at JP Morgan Chase for 18 years and Bank of America for four years.

Other positions of note: Mr Carnegie-Brown is the non-executive chair of Lloyd's of London and of Cuvva Limited, member of the Investment Committee of Gresham House plc and chair of Marylebone Cricket Club (MCC).

Membership of board committees: Executive committee, nomination committee (chair), remuneration committee (chair), and innovation and technology committee.

Skills and competencies: Mr Carnegie-Brown has a lengthy background in banking (particularly investment banking) and considerable expertise in insurance. He also possesses significant international experience in top management positions in Europe (UK), the Middle East and Asia. His top-management insight provides the board with know-how in regard to remuneration, appointments and risk. As lead independent director, he has also gained an excellent understanding of investors' expectations, as well as managing relations with them and financial entities.



Homaira Akbari

Non-executive director (independent)

Ms Akbari joined the board in 2016.

Nationality: American and French. Born in 1961 in Tehran, Iran.

Education: PhD in Experimental Particle Physics from Tufts University and MBA from Carnegie Mellon University.

Experience: Homaira Akbari was non-executive director of Gemalto NV and Veolia Environment, S.A. She was chair and CEO of SkyBitz, Inc., managing director of TruePosition Inc., non-executive director of Covisint Corporation and US Pack Logistics LLC. She has also held various posts at Microsoft Corporation and Thales Group and she was non-executive chair of WorkFusion, Inc.

Other positions of note: Ms Akbari is chief executive officer of AKnowledge Partners, LLC and an independent director of Landstar System, Inc. and Temenos, AG.

Positions in other Group companies: Ms Akbari is non-executive director of Santander Consumer USA Holdings Inc. and PagoNxt, S.L.

Membership of board committees: Audit committee, innovation and technology committee, and responsible banking, sustainability and culture committee.

Skills and competencies: Ms Akbari brings significant executive experience from technology companies. Her knowledge about digital transformation challenges is an asset to the board. She also has extensive experience in diverse regions and knowledge of water, energy and waste management and treatment, which are of particular value to the Group's sustainability policy.



Javier Botín-Sanz de Sautuola y O'Shea

Non-executive director

Mr Botín joined the board in 2004.

Nationality: Spanish. Born in 1973 in Santander, Spain.

Education: Degree in Law from the Complutense University of Madrid.

Experience: Javier Botín founded JB Capital Markets, Sociedad de Valores, S.A.U in 2008 and has been its executive chair ever since. He was co-founder and executive director of the equities division of M&B Capital Advisers, S.V., S.A. (2000-2008). Previously, he had been a legal adviser within the International Legal Department of Banco Santander, S.A. (1998-1999).

Other positions of note: In addition to the financial sector, Mr Botín works with several not-for-profit organizations. He has been chair of the Botín Foundation since 2014 and is also a trustee of the Princess of Girona Foundation.

Skills and competencies: Mr Botín brings international and managerial expertise to the board, particularly in finance and banking. He also brings a deep understanding of Grupo Santander, its operations and its strategy from his tenure as a non-executive director.



Álvaro Cardoso de Souza

Non-executive director (independent)

Mr de Souza joined the board in 2018.

Nationality: Portuguese. Born in 1948 in Guarda, Portugal.

Education: Degree in Economics and Business Administration from Pontificia Universidade Católica de São Paulo, MBA-Management Program for Executives from the University of Pittsburgh, and a graduate of the Investment Banking Marketing Program at Wharton Business School.

Experience: Álvaro Cardoso has held various roles in Citibank Group, including CEO of Citibank Brazil, as well as senior roles in the US relating to consumer finance, private banking and Latin America. He was a board member at AMBEV. S.A., Gol Linhas Aéreas, S.A. and Duratex, S.A. He was chair of WorldWildlife Group (WWF) Brazil, a board member at WWF International and chair and member of the audit and asset management committees of FUNBIO (Fundo Brasileiro para a Biodiversidade). In addition, he has been non-executive chair of Banco Santander (Brasil) S.A. since 2017 until 2021.

Membership of board committees: Responsible banking, sustainability and culture committee.

Skills and competencies: Mr de Souza possesses broad international experience in banking, particularly in Brazil. He has a solid understanding of strategy and risk management. In addition, his active involvement with several environmental foundations and NGOs brings with him very useful knowledge about sustainability.



Sol Daurella Comadrán

Non-executive director (independent)

Ms Daurella joined the board in 2015.

Nationality: Spanish. Born in 1966 in Barcelona, Spain.

Education: Degree in Business and MBA from ESADE.

Experience: Sol Daurella Comadrán served on the board of the Círculo de Economía and was an independent non-executive director at Banco Sabadell, S.A., Ebro Foods, S.A. and Acciona, S.A. She has also been the honorary consul-general of Iceland in Barcelona since 1992.

Other positions of note: Ms Daurella is chair of Coca-Cola Europacific Partners plc and executive chair of Olive Partners S.A. She also holds several roles at Cobega Group companies and is chair of the board of trustees of the FERO Oncology Research Foundation and vice-president of Instituto de la Empresa Familiar.

Membership of board committees: Nomination committee, remuneration committee, and responsible banking, sustainability and culture committee.

Skills and competencies: Ms Daurella brings to the board excellent strategy and high-level management skills from her international top-executive experience at listed and large privately-held entities, particularly distributors. She has vast knowledge of corporate governance as the former chair of several boards. She also possesses audit experience, having served on several audit committees. In addition, as a trustee at various health, education and environmental foundations, Ms Daurella contributes responsible business and sustainability insight to the board.



Henrique de Castro

Non-executive director (independent)

Joined the board in 2019.

Nationality: Portuguese. Born in 1965 in Lisbon, Portugal.

Education: Degree in Business Administration from the Lisbon School of Economics & Management (Portugal) and MBA from the University of Lausanne (Switzerland).

Experience: Henrique de Castro was an independent director at First Data Corporation and chief operating officer at Yahoo. Previously, he had been the manager of worldwide devices, media and platforms at Google, European sales and business development manager at Dell Inc. and a consultant at McKinsey & Company.

Other positions of note: Mr de Castro is an independent director of Fiserv Inc.

Positions in other Group companies: Mr de Castro is a non-executive director of PagoNxt, S.L.

Membership of board committees: Audit committee, remuneration committee, and innovation and technology committee.

Skills and competencies: Due to his executive roles in the world's top technology companies, Mr de Castro brings valuable experience in technological and digital strategy from a wide range of geographies.



Gina Díez Barroso

Non-executive director (independent)

Ms Díez joined the board in 2020.

Nationality: Mexican. Born in 1955 in Mexico City, Mexico.

Education: Degree in Design from Centro de Diseño, Mexico City.

Experience: She has over 20 years' experience in the real estate and education sectors. Until April 2020, she was an independent director of Banco Santander México, S.A. and several Grupo Santander companies in Mexico. She has been member of the board of directors of Americas Society and Council of the Americas, Laurel Strategies and Qualitas of Life Foundation. She has also been a founder and a trustee of the Pro-Educación Centro and Diarq foundations.

Other positions of note: She is the founder and president of Grupo Diarq, S.A. de C.V. and Centro de Diseño y Comunicación, S.C. (Universidad Centro). In addition, she is a member of the board of Dalia Women, S.A.P.I de C.V. (Dalia Empower), member of Comité de 200 (C200) and represents Mexico at the W20, the G20 womens' initiative.

Membership of board committees: Nomination committee.

Skills and competencies: Ms Díez possesses vast experience in the real estate and education sectors, and has extensive knowledge of responsible business and sustainability as a result of having been a charter member and trustee of foundations focusing on education, gender diversity and social support.



Luis Isasi Fernández de Bobadilla

Non-executive director (*)

Mr Isasi joined the board in 2020.

Nationality: Spanish. Born in 1956 in Jerez de la Frontera, Spain.

Education: Degree in Economics and Business Administration and MBA from Columbia Business School.

Experience: With broad experience in the financial and securities market sectors, Mr Isasi began his career at Abengoa, before holding various executive positions at JP Morgan in New York and First National Bank of Chicago in London. In 1987, he joined Morgan Stanley as managing director of investment banking for Europe and, from 1997 to February 2020, held the role of chair and country head for Spain. He is now a senior adviser there. He has also been director of Madrileña Red de Gas, S.A. and Sociedad Rectora de la Bolsa de Madrid, S.A., as well as an independent director of Grifols, S.A.

Other positions of note: Mr Isasi is a non-executive chair of Santander España and an independent director of Compañía de Distribución Integral Logista Holdings, S.A. (Logista).

Membership of board committees: Executive committee, remuneration committee, and risk supervision, regulation and compliance committee.

Skills and competencies: Mr Isasi has vast experience in a wide range of sectors and international markets (in particular, finance and investment banking) as well as a strong institutional network within Spain.

(*) In the opinion of nomination committee and board of directors, Mr Isasi meets the requirements to be considered independent, despite being categorized as other external based on a standard of prudence. For more information, see subsection 'Other external directors', section 4.2.



Ramiro Mato García-Ansorena

Non-executive director (independent)

Mr Mato joined the board in 2017.

Nationality: Spanish. Born in 1952 in Madrid, Spain.

Education: Degree in Economics from the Complutense University of Madrid and graduate of Harvard Business School's Management Development Programme.

Experience: Ramiro Mato held several roles in Banque BNP Paribas, including chair of BNP Paribas Group in Spain. Previously, he had held several top roles in Argentaria. He sat on the board of the Spanish Banking Association (AEB, representing Banque BNP Paribas) and Bolsas y Mercados Españoles, S.A. (BME), and was a member of the board of trustees of Fundación Española de Banca para Estudios Financieros (FEBEF).

Other positions of note: Mr Mato is chair of Ansorena, S.A. and vice-chair of the board of trustees of Fundación Esperanza y Alegría.

Membership of board committees: executive committee, audit committee, risk supervision, regulation and compliance committee, and responsible banking, sustainability and culture committee (chair).

Skills and competencies: Mr Mato has had an extensive career in banking and capital markets. He has held senior executive and non-executive roles and brings considerable expertise in top management, audit, risk and strategy, mainly within the financial sector. He has also been active on the boards of trustees of several education foundations.



R Martín Chávez Márquez

Non-executive director (independent)

Mr Chávez joined the board in 2020.

Nationality: American. Born in 1964 in Alburquerque, New Mexico (US).

Education: A.B. *magna cum laude* in Biochemical Sciences and Master of Computer Science from Harvard University. PhD in Medical Information Sciences from Stanford University.

Experience: Mr Chávez was Chief technology officer (CTO) and co-founder of Quorum Software Systems (1989-1993), global head of energy derivatives at Credit Suisse Financial Products (1997-2000) and CEO and co-founder of Kiodex (2000-2004). In 2005, he joined Goldman Sachs, where he was a partner from 2006 to 2019 and where he held various executive positions, including global co-head of the securities division, Chief information officer (CIO) and CFO. He was also member of the management committee from 2012 until 2019, when he left the firm. Furthermore, he has been director of PNM Resources, Inc., the International Swaps and Derivatives Association (ISDA) of The Santa Fe Opera, of Mount Sinai Genomics, Inc. DBA Sema4 and of Paige.AI, Inc., as well as member of the Harvard University Board of Overseers and member of the board of trustees of amfAR (the Foundation for AIDS Research) and of the Institute for Advanced Study of Princeton (New Jersey).

Other positions of note: Mr Chávez is senior executive vice-chair of Sixth Street Partners Management Company, L.P. and non-executive chair of Recursion Pharmaceuticals, Inc. He is also member of the board of trustees of the Los Angeles Philharmonic and member of the Stanford University School of Medicine Board of Fellows. Likewise, he is a senior advisor of Cambrian Biopharma, Earli, Block.one, Ketch Kloud and Abacus.AI.

Positions in other Group companies: Mr Chávez is a non-executive director of PagoNxt, S.L.

Membership of board committees: Nomination committee, remuneration committee, risk supervision, regulation and compliance committee and innovation and technology committee (chair).

Skills and competencies: Mr Chávez brings extensive experience in the global financial and IT sectors, which will enhance the board's digital capabilities. His membership on the governing and advisory bodies of prestigious academic institutions and healthcare entities will contribute considerable value to the Group's sustainability strategy development .



Sergio Rial

Non-executive director (*)

Mr Rial joined the board in 2020.

Nationality: Spanish and Brazilian. Born in 1960 in Rio de Janeiro, Brazil.

Education: Degree in Law and Economics and postgraduate studies from the Instituto Brasileiro do Mercado de Capitais, Insead, Harvard Business School and Wharton Business School.

Experience: Mr Rial joined the Group as chair of the board of Banco Santander (Brasil) S.A. in 2015, a position he held until 2016, and has been serving as chief executive officer (CEO) and vice-chair of the board from 2016 to 2021. He has also been regional head for South America of the Group (2019–2021). He held various executive positions at ABN Amro group between 1982 and 2004, including CEO for Asia and member of the global ExCo. He also held various executive positions at Cargill Inc. between 2004 and 2012, including executive vice-chair, member of the board of directors and global CFO. He has also been CEO at Seara Foods and Marfrig Global Foods and a director of Mosaic Fertilizers and non-executive director of SAM Investment Holding, S.L., Banco Santander International (USA) and PagoNxt, S.L.

Other positions of note: Mr Rial is an independent director of Delta Airlines Inc. and non-executive chair of Ebury Partners Limited.

Positions in other Group companies: Mr Rial is the non-executive chair of Banco Santander (Brasil) S.A.

Skills and competencies: Mr Rial brings extensive executive experience in banking and finance. He also has a deep understanding of Latin American markets, especially Brazil. His previous experience in multinational groups across geographical areas and sectors increases the board's diversity and gives it a valuable perspective on environmental and social issues.



Belén Romana García

Non-executive director (independent)

Belén Romana joined the board in 2015.

Nationality: Spanish. Born in 1965 in Madrid, Spain.

Education: Degree in Economics and Business Administration from Universidad Autónoma de Madrid and State Economist.

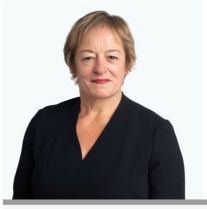
Experience: Belén Romana was formerly senior executive vice-president of Economic Policy, director-general of the Treasury of the Spanish Ministry of Economy, and director at Banco de España and the CNMV. She was also a director at the Instituto de Crédito Oficial and other entities on behalf of the Spanish Ministry of Economy. She served as a non-executive director at Banco Español de Crédito, S.A. and as executive chair of Sociedad de Gestión de Activos Procedentes de la Reestructuración Bancaria, S.A. (SAREB).

Other positions of note: Non-executive director of Aviva plc, London and independent director of SIX Group AG and Bolsas y Mercados Españoles, Sociedad Holding de Mercados y Sistemas Financieros, S.A.U. Furthermore, she is co-chair of the Global Board of Trustees of the Digital Future Society and member of the advisory board of Rafael del Pino Foundation, of Inetum and of TribalData and senior advisor of Artá Capital.

Membership of board committees: Executive committee, audit committee, risk supervision, regulation and compliance committee (chair), innovation and technology committee, and responsible banking, sustainability and culture committee.

Skills and competencies: Given her background as a government economist and overall executive and non-executive experience in finance (particularly from serving on the audit committees of listed companies), Ms Romana is a recognised financial expert. Having held key positions in credit institutions and the regulatory and supervisory bodies of the financial industry and securities markets in Spain, she also provides strategic insights into banking, financial regulations and government relations in Spain and Europe.

(*) Until 31 December 2021 as executive director. See section 4.2 'Board composition'.



Pamela Walkden

Non-executive director (independent)

Mrs Walkden joined the board in 2019.

Nationality: British. Born in 1960 in Worcester, England.

Education: Master's Degree in Economics from Cambridge University.

Experience: Pamela Walkden has had an extensive career in banking. She has served in a number of senior management positions at Standard Chartered Bank, including as Group Head of Human Resources, Chief Risk Officer, Group Treasurer, Group Head of Asset and Liability Management and Regional Markets, Group Head of Internal Audit, Group Head of Corporate Affairs and Group Manager of Investor Relations. In addition, she served as an independent member of the UK Prudential Regulation Authority (PRA) Regulatory Reform Panel as member of the European Banking Authority Stakeholder Group and a lay member of the Welfare and Ethics Committee of the Royal Veterinary College.

Other positions of note: Mrs Walkden is a member of the advisory board of JD Haspel Limited.

Positions in other Group companies: She is an independent non-executive director of Santander UK plc and of Santander UK Group Holdings plc.

Membership of board committees: Audit committee (chair) and risk supervision, regulation and compliance committee.

Skills and competencies: Ms Walkden is a recognised financial expert in view of her broad, international experience in banking and auditing.



Jaime Pérez Renovales

General secretary and secretary of the board

Jaime Pérez Renovales joined the group in 2003.

Nationality: Spanish. Born in 1968 in Valladolid, Spain.

Education: Degree in Law and Business Administration from Universidad Pontificia de Comillas (ICADE E-3) and state attorney.

Experience: Jaime Pérez Renovales was director of the office of the second deputy prime minister for Economic Affairs and Minister of Economy, deputy secretary to the Spanish Prime Minister, chair of the Spanish State Official Gazette and the committee for Government Reform. Previously, he had been vice general counsel and vice-secretary of the board. He was also head of Grupo Santander's legal department, general counsel and secretary of the board at Banco Español de Crédito, S.A. and deputy director of legal services at the CNMV. He is the representative of Banco Santander in the Board of Trustees the Foundation Princess of Asturias and member of the jury of the Social Sciences Awards of the Foundation and chair of the ICADE Business Club.

Mr Pérez is the secretary of all board committees.

4.2 Board composition

Size

At 31 December 2021, the board of directors was made up of the 15 members whose profile and background are described in section 4.1 'Our directors'. The Bylaws allow it to have between 12 and 17 members.

Composition by type of director

The composition of the board of directors is balanced between executive and non-executive directors, most of whom are independent. Each director's status has been verified by the nomination committee and submitted to the board.

Executive directors

- Ana Botín, Group Executive Chair
- José Antonio Álvarez, Group Vice-Chair and Chief Executive Officer

Section 4.3 provides a more detailed description of their roles and duties under 'Group executive chair and chief executive officer'.

Independent directors

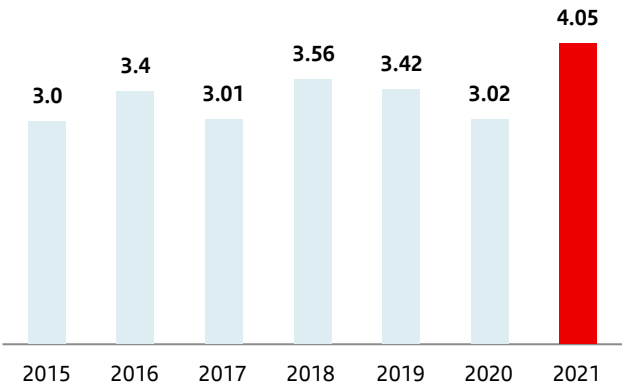
- Bruce Carnegie-Brown (lead independent director)
- Homaira Akbari
- Álvaro Cardoso
- R. Martín Chávez
- Sol Daurella
- Henrique de Castro
- Gina Díez
- Ramiro Mato
- Belén Romana
- Pamela Walkden

Every year, the nomination committee verifies the independence of the board members in this category and informs the board of its findings. It takes all pertinent circumstances into account, particularly possible significant business relations that could affect their independence. This analysis is described further in section 4.6 'Nomination committee activities in 2021' and in subsection C.1.3 in section 9.2 'Statistical information on corporate governance required by the CNMV'.

Independent non-executive directors account for 66.7% of board members. This conforms to best corporate governance practices as well as the board's Rules and regulations, which require that the board be predominantly made up of non-executive directors with at least 50% independent directors.

At the end of 2021, the average term of independent non-executive directors was 4.05 years.

TERM OF INDEPENDENT DIRECTORS



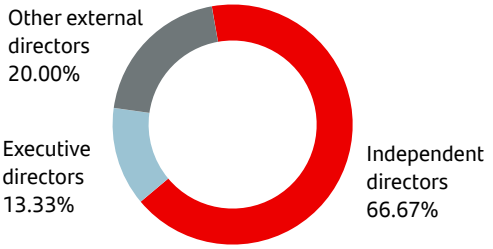
Other external directors

- Javier Botín
- Luis Isasi
- Sergio Rial

These directors cannot be classified as independent directors for the following reasons:

- Mr Botín has been director for over 12 years.
- Mr Isasi as, although the nomination committee and the board believe that he meets the requirements to be classed as an independent director - in view of his remuneration as non-executive chair of Santander España, his entitlements as a director and the special nature of this body as supervisor of a business unit without its own corporate identity separate to Banco Santander, under prudent criteria it is considered preferable to classify him as an external director.
- Mr Rial, as a former executive director of Banco Santander as CEO of Banco Santander (Brasil) S.A. and Regional head of South America until 31 December 2021.

OUR BOARD COMPOSITION



TENURE AND EQUITY OWNERSHIP[A]

Board of directors		Tenure			Banco Santander shareholding[D]				
		Date of first appointment[B]	Date of last appointment	End date[C]	Direct	Indirect	Shares represented	Total	% of share capital
Executive chair	Ana Botín	04/02/1989	03/04/2020	03/04/2023	1,395,980	29,112,074		30,508,054	0.176%
Vice chair and chief executive officer	José Antonio Álvarez	25/11/2014	12/04/2019	12/04/2022	1,984,677			1,984,677	0.011%
Vice chair	Bruce Carnegie-Brown	25/11/2014	26/03/2021	26/03/2024	59,940			59,940	0.000%
Members	Homaira Akbari	27/09/2016	26/03/2021	26/03/2024	67,826	45,913		113,739	0.001%
	Javier Botín	25/07/2004	26/03/2021	26/03/2024	5,502,083	19,468,444	154,412,223[E]	179,382,750	1.034%
	Álvaro Cardoso	23/03/2018	26/03/2021	26/03/2024	0			0	0.000%
	R. Martín Chávez	27/10/2020	27/10/2020	27/10/2023	0			0	0.000%
	Sol Daurella	25/11/2014	03/04/2020	03/04/2023	149,483	476,837		626,320	0.004%
	Henrique de Castro	12/04/2019	12/04/2019	12/04/2022	2,982			2,982	0.000%
	Gina Díez	22/12/2020	22/12/2020	03/04/2023	0			0	0.000%
	Luis Isasi	03/04/2020	03/04/2020	03/04/2023	0			0	0.000%
	Ramiro Mato	28/11/2017	26/03/2021	26/03/2024	256,860			256,860	0.001%
	Sergio Rial	03/04/2020	30/05/2020	03/04/2023	236,413			236,413	0.001%
	Belén Romana	22/12/2015	12/04/2019	12/04/2022	208	4		212	0.000%
	Pamela Walkden	29/10/2019	03/04/2020	03/04/2023	2,608			2,608	0.000%
	Total				**9,659,060**	**49,103,272**	**154,412,223**	**182,666,501**	**1.052%**
General secretary and secretary of the board	Jaime Pérez Renovales								

A. Figures from 31 December 2021.
B. The date of first appointment referred herein may not match with the date of acceptance of the position.
C. For more details, see 'Election, renewal and succession' in section 4.2. The periods provided do not take into account the additional period that may apply under article 222 of the Spanish Companies Act nor the annual renewal of one-third of the board established in article 55.1 of the Bylaws.
D. Banco Santander' shareholding policy aims to align our executive directors and shareholders' long-term interests. It includes the obligation for each executive director to maintain a significant investment in Banco Santander's shares while performing executive duties, equivalent to twice their annual salary. Executive directors have five years from the time they were appointed to reach the required level of investment. Until they do so, any shares they receive as remuneration are subject, in addition to the regulatory obligation not to sell them for one year from delivery, which applies to all cases, to a mandatory three-year holding period from their date of delivery, unless they already hold the mentioned investment equivalent.
E. Includes shares owned by Fundación Botín (chaired by Javier Botín) and syndicated shares. It includes shares corresponding to Ana Botín that are also included within their direct or indirect shareholdings, but excluding Javier Botín's syndicated shares. In subsection A.3 of section 9.2 'Statistical information on corporate governance required by the CNMV', we adapted this information to the CNMV's format and, therefore, added all the syndicated shares as Javier Botín's shareholdings. See 2.4 'Shareholders' agreements'.
For more details, see section 9.2 'Statistical information on corporate governance required by the CNMV'.

Diversity

A diverse board of directors is essential to its effectiveness. The combination of skills and experiences creates an environment with varied points of view that improves the quality of decision-making. Thus, we seek to achieve a sound balance of technical skills, expertise and points of view.

Our policy on the selection, suitability assessment and succession of directors helps make our board more diverse from different perspectives, for instance, in terms of gender, age, geographical provenance, experience and knowledge. It was amended in July 2018 in line with European legislation on the disclosure of non-financial and diversity information and the European Banking Authority (EBA) and the European Securities and Markets Authority (ESMA) joint guidelines on suitability assessments of board members and key functions holders.

In 2019, the new gender equality target of 40%-60% representation of either gender in the board, was included. The policy was later amended in April 2020, at the time of the general review of the succession process for directors and other executive positions, and in December 2020, after the CNMV amended the Spanish Corporate Governance Code in June 2020 to include age diversity as a factor to take into account. Banco Santander applies this policy to select candidates for any vacancy on the board.

Our selection policy aims to diversify the board of directors in different terms. In particular:

- **Country of origin or international education**: selection considers cultural diversity and international education and experience, especially in the Group's main geographies.
- **Gender equality:** the nomination committee and the board of directors understand the importance of fostering equal opportunity between men and women as well as the need for women board members who possess the necessary skills, suitability and commitment to the role. They make a conscious effort to find women candidates with the required profile. Our policy fosters a selection of directors which maintains a balanced presence of women and men on the board.

  On 26 February 2019, the board changed its minority gender target, set at 30% in 2016 by the nomination committee, to a gender target in the board by 2021, which implies a minimum and maximum representation of either gender of 40% to 60%. By November 2019, the board met this target and, at year-end, women already accounted for 40% of board members.

The board's number of women members is above the average for large listed companies in Spain and Europe. According to figures published by the CNMV in May 2021, based on the annual corporate governance reports for 2020, the percentage of female directors in IBEX 35 companies in Spain was on average 31.26%. Furthermore, according to the last Gender Diversity Index Report published by European Women on Boards (an association which cooperates with the European Commission) in October 2021 the percentage of female directors in large listed companies was, on average, 35%.

- **Age**: the selection policy on the selection, suitability assessment and succession of directors also considers that selection processes must promote age diversity. There are no age limits for becoming a director or holding any role on the board, including the chair and the chief executive officer.

- **Education and career**: selection ensures that candidates are qualified and suitable to understand our Group's businesses, structure and geographies individually and collectively; and that they fit within the Santander culture. The appointment process ensures that candidates will have skills and expertise in such areas deemed important for the Group. It takes into account education and work experience. In addition to professional experience, it considers their academic education.

- Our policy has no implicit bias that could lead to discrimination due to **race, disability and/or ethnicity**.

Board skills and diversity matrix

The board's skills matrix reflects the balance of the knowledge, skills, qualifications, diversity and experience required to design and pursue our long-term strategy in an ever-changing market.

We updated it in 2018 to make it simpler, more transparent and comprehensive. It contains more information for our investors and other stakeholders, who demand that certain skills be more visible on our board. We also took into account recommendations from the EBA and ESMA guidelines on the suitability assessment of board members and key functions holders, and also ECB Guide to fit and proper assessments. It has been further updated in October 2020 to disclose information on board's diversity in terms of age, on the back of the CNMV's approval of the revised version of the Spanish Corporate Governance Code.

This year's matrix (below) follows the structure introduced last year:

- We distinguish **thematic** and **horizontal skills**.

- We include a separate **diversity section** that details diversity in terms of gender, country of origin and/or education abroad, and age. Finally, we also show **board tenure**.

In line with last year, the skills matrix discloses each board member's skills and competence as a sign of our commitment to transparency. Section 4.1 'Our directors' includes a paragraph on each director's skills and competence to more clearly substantiate the matrix.

We also include an additional chart (entitled 'Committees skills and diversity matrix') that shows the balanced diversity of skills on the board as a whole and on each board committee. That enables the board committees' overall effectiveness to be evaluated as it refers to the significant presence of the skills relevant to each committee's scope.

This year's matrix (below) shows that there are no substantial gaps with regard to the qualitative composition of the board and its committees, although we remain focused on ensuring a robust board skills diversity. In particular, the ongoing need for coverage of strategic markets for Banco Santander as well as for technology, digital strategy, banking, finance and regulatory and ethics experience and expertise remains important, as evidenced by our most recent board appointments. The appropriateness of board skills and diversity will continue to be monitored on an ongoing basis.

BOARD SKILLS AND DIVERSITY MATRIX

		Executive		Independent										Other external		
		Ana Botín (chair)	José Antonio Álvarez (vice chair - CEO)	Bruce Carnegie-Brown (vice chair and lead independent director)	Homaira Akbari	R. Martín Chávez	Sol Daurella	Henrique de Castro	Álvaro Cardoso	Gina Díez Barroso	Ramiro Mato	Belén Romana	Pamela Walkden	Javier Botín	Luis Isasi	Sergio Rial
SKILLS AND EXPERIENCE																
THEMATIC SKILLS																
Banking (93.3%)		•	•	•	•	•	•		•	•	•	•	•	•	•	•
Other financial services (66.7%)		•	•	•	•					•	•	•		•	•	•
Accounting, auditing and financial literacy (100%)		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Retail (86.7%)		•	•	•	•		•	•	•		•	•	•	•	•	•
Digital & information technology (53.4%)		•	•	•	•	•		•			•					•
Risk management (86.7%)		•	•	•	•	•	•		•		•	•	•	•	•	•
Business strategy (100%)		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Responsible business & sustainability (80%)		•	•	•	•	•	•		•	•	•	•		•		•
Human resources, culture, talent & remuneration (93.3%)		•	•	•	•	•	•	•	•	•	•	•	•		•	•
Legal and regulatory (13.3%)						•						•				
Governance and control (86.7%)		•	•	•	•	•	•		•		•	•	•	•	•	•
International experience	Continental Europe (80%)	•	•	•	•	•	•	•			•	•		•	•	•
	US/UK (93.3%)	•	•	•	•	•	•	•	•		•	•	•	•	•	•
	Latam (73.3%)	•	•		•	•		•	•	•	•			•	•	•
	Others (46.7%)			•		•	•	•			•		•			•
HORIZONTAL SKILLS																
Top management (100%)		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Government, regulatory and public policy (6.7%)												•				
Academia and education (46.7%)		•		•	•	•	•			•	•					
Significant directorship tenure (86.7%)		•	•	•	•		•	•	•	•	•	•		•	•	•
DIVERSITY																
Female (40%)		•			•		•			•		•	•			
Country of origin / international education	Continental Europe (60%)	•	•				•	•			•	•		•	•	•
	US/UK (80%)	•	•	•	•	•			•	•	•	•	•		•	•
	Latam (20%)								•	•						•
	Others (6.7%)				•											
Age (years old)	Less than 55 (6.7%)													•		
	From 55 to 65 (73.3%)	•	•	•	•	•	•	•				•	•		•	•
	More than 65 (20%)								•	•	•					
BOARD TENURE																
0 to 3 years (46.7%)						•		•	•	•			•		•	•
4 to 11 years (40%)			•	•	•		•				•	•				
12 years or more (13.3%)		•												•		

COMMITTEES SKILLS AND DIVERSITY MATRIX

		Executive committee	Audit committee	Nomination committee	Remuneration committee	Risk supervision, regulation and compliance committee	Innovation and technology committee	Responsible banking, sustainability and culture committee
SKILLS AND EXPERIENCE								
THEMATIC SKILLS								
Banking		100%	80%	100%	80%	100%	85.7%	100%
Other financial services		100%	60%	50%	40%	60%	71.4%	60%
Accounting, auditing and financial literacy		100%	100%	100%	100%	100%	100%	100%
Retail		100%	100%	50%	80%	80%	85,7	100%
Digital and information technology		66.7%	60%	50%	60%	40%	85.7%	40%
Risk management		100%	80%	75%	80%	100%	85.7%	100%
Business strategy		100%	100%	100%	100%	100%	100%	100%
Responsible business and sustainability		83.3%	60%	100%	60%	60%	85.7%	100%
Human resources, culture, talent and remuneration		100%	100%	100%	100%	100%	100%	100%
Legal and regulatory		16.7%	20%	25%	20%	40%	28.6%	20%
Governance and control		100%	80%	75%	80%	100%	85.7%	100%
International experience	Continental Europe	100%	80%	75%	100%	80%	100%	80%
	US/UK	100%	100%	75%	100%	100%	100%	100%
	LatAm	66.7%	60%	50%	60%	60%	71.4%	60%
	Others	33.3%	60%	75%	80%	60%	42.9%	40%
HORIZONTAL SKILLS								
Top management		100%	100%	100%	100%	100%	100%	100%
Government, regulatory and public policy		16.7%	20%	–	–	20%	14.3%	20%
Academia and education		50%	40%	100%	60%	40%	57.1%	60%
Significant directorship tenure		100%	80%	75%	80%	60%	85.7%	100%
DIVERSITY								
Female		33.3%	60%	50%	20%	40%	42.9%	60%
Country of origin / international education	Continental Europe	83.3%	60%	25%	60%	60%	57.1%	60%
	US/UK	100%	80%	75%	60%	100%	85.7%	80%
	Latam	–	–	25%	–	–	–	20%
	Others	–	20%	–	–	–	14.3%	20%
Age (years old)	Less than 55	–	–	–	–	–	–	–
	From 55 to 65	83.3%	80%	75%	100%	80%	100%	60%
	More than 65	16.7%	20%	25%	–	20%	–	40%
BOARD TENURE								
0 to 3 years		16.7%	40%	50%	60%	60%	28.6%	20%
4 to 11 years		66.7%	60%	50%	40%	40%	57.1%	80%
12 years or more		16.7%	–	–	–	–	14.3%	–

Election, renewal and succession of directors

Election of directors

Our directors are appointed for three-year terms. However, one-third of board members are renewed each year in order of their tenure, based on when they were appointed. Outgoing directors may be re-elected. Each appointment, re-election and ratification is submitted to a separate vote at the general meeting.

Procedures for appointing, re-electing, evaluating and removing directors

Our internal policy for the selection, suitability assessment and succession of directors dictates standards for the board's quantitative and qualitative composition, how it is revised and how new candidates are identified, selected and appointed.

Shareholders appoint and re-elect directors at the general meeting. If directors step down during the term of office, the board of directors may provisionally designate another director by co-option until the general meeting confirms or revokes the appointment at the earliest subsequent meeting.

The nomination committee must issue a report and a reasoned opinion in advance of any proposal the board will make to shareholders to appoint, re-elect and ratify any category of director, as well as in advance of any board resolution about co-option.

Proposals must include a duly substantiated report prepared by the board containing an assessment of the qualifications, experience and merits of the proposed candidate. Re-election and ratification proposals will provide an assessment of the work and dedication to the position during the last period in which the proposed director held office. If the board disregards the nomination committee's opinion, it must explain its decision and record its reasons in meeting minutes.

Directors must meet specific requirements dictated by laws for credit institutions and our Bylaws. Upon taking office, they must formally undertake to fulfil the obligations and duties prescribed therein and in the Rules and regulations of the board.

Our directors must be of renowned business and professional integrity, and have the knowledge and experience needed to perform their role and exercise good governance. Director candidates will also be selected on the basis of their professional contribution to the entire board.

For more details, see section 4.1 'Our directors' and the 'Board skills and diversity matrix' in section 4.2.

The board of directors will endeavour to have significantly more external or non-executive directors than executive directors, and for the number of independent directors to make up at least half of all members.

Our directors shall cease to hold office when the term for which they were appointed ends (unless they are re-elected); when the general meeting so resolves; or when they resign. When a director ceases to hold office prior to the end of his or her term (i.e. by general meeting resolution or by resignation), the director shall sufficiently explain the reasons for the resignation or, in the event of non-executive directors, their opinion on the reasons for their cessation in office by the general meeting in a letter to the other board members. In addition, when appropriate, Banco Santander will publicly disclose the cessation in office, including sufficient information on the director's reasons or circumstances provided by the director.

Directors must tender their resignation to the board and formally step down from their position if the board, on recommendation of the nomination committee, deems it appropriate in cases that may adversely affect the board's functioning or Banco Santander's credibility or reputation. In particular, they must resign if they find themselves in a circumstance of ineligibility or prohibition provided by law, irrespective of Royal Decree 84/2015, which implements Act 10/2014 on the organization, supervision and solvency of credit institutions, and on the honourability requirements for directors and the consequences of directors who subsequently fail to meet them.

Directors must notify the board, as soon as possible, of any circumstances affecting them (whether or not they are related to their performance in Banco Santander) that might damage Santander's credibility or reputation, especially when under criminal investigation; and of the developments of any criminal proceedings. When the board is informed, or becomes aware in another way, of any such situations, it will examine them as soon as possible and, based on the particulars, will decide, following a report from the nomination committee, any measures to adopt, such as opening an internal investigation, calling on directors to resign or proposing their dismissal.

Proprietary non-executive directors must also tender their resignation when the shareholder they represent sells off or significantly reduces its equity holding.

Succession planning

Succession planning is a key element of our good governance as it ensures orderly role transitions, as well as board continuity and stability and its adequate refreshment and independence. It is a yearly cycle with a well-defined methodology and timelines, and a clear allocation of responsibilities. Our aim is to boost diverse talent pipelines across functions.

Santander's policy on director selection, suitability assessment and succession focuses on:

- Quantitative and qualitative board and committee composition criteria that are set by the Bylaws, the Rules and regulations of the board of directors and the board itself and include suitability and diversity standards and targets.
- A periodic review of the quantitative and qualitative composition of the board of directors and its committees that includes an overall suitability assessment of the board.
- Identification of potential candidates to join the board of directors.
- A robust board member selection, suitability and nomination process.

This policy has specific core performance indicators, reviewed each year, for such aspects as succession effectiveness (replacements fulfilled by identified candidates); the number of internal and external candidates immediately available to succeed executive directors; training and development plans for potential candidates to succeed executive directors in one to three years; gender diversity and country of origin or international education; updated board member tenure; the strength of the list of successors to executive directors, committee chairs and the lead independent director; and

the percentage of candidates to succeed directors who are immediately available (or candidates for a one-to-three year period).

The nomination committee and the board prioritize member succession planning, with sound and appropriate plans in place that are regularly revisited. Given the importance that the Group places in succession planning, in 2020 an external opinion was sought in relation to our succession policy and associated succession processes concluding that our succession arrangements and framework meet regulatory requirements and align with industry best practice.

4.3 Board functioning and effectiveness

The board is the highest decision-making body and focuses on supervision

Banco Santander's board of directors is our highest decision-making body, except in matters reserved to shareholders at the general meeting. It performs its duties with unity of purpose and independent judgement.

The board's policy is to designate executive bodies and managers to run Group's day-to-day operations and apply its strategy. It focuses on general supervision and other functions it cannot delegate by law, under the Bylaws and the Rules and regulations of the board, including:

- General policies and strategies (including capital and liquidity, new products, operations and services; culture and values including policies on responsible business and sustainability, in particular, on environmental and social matters; risk control; remuneration policy; and compliance).
- Financial and non-financial reporting, and information reported to shareholders, investors and the general public, as well as the processes and controls that ensure full disclosure.
- Policies on reporting and communication with shareholders, markets and public opinion, and supervision of the disclosure of information and communications about Group.
- Internal audit plan.
- Selection, succession and remuneration of directors, senior management and other key positions.
- Effectiveness of the group's corporate and internal governance system.
- Significant corporate transactions and investments.
- Calling the general shareholders' meeting.
- Governance-related matters in general (including the approval of non-delegable related-party transactions, which are not subject to the general meeting's authority).
- Banco Santander and Group's corporate and internal governance, including the GSGM, corporate frameworks and internal regulations.

Structure of the board

The board's governance structure ensures that it discharges its duties effectively. This section provides further details about this structure, which can be split into four dimensions:

- **Group executive chair and chief executive officer,** who are the most senior executives in the Group's strategic and ordinary management, which the board is responsible for overseeing, ensuring that their roles are clearly separated and complementary. The respective roles and responsibilities have been updated as at the date of this report. Further details are shown below.
- **A lead independent director** who is responsible for coordinating non-executive directors effectively and making sure they serve as an appropriate counter- balance to executive directors.
- **A board committee structure,** which supports the board in:
  - Managing Group by exercising decision-making powers in the executive committee.
  - Formulating strategy for core areas in the responsible banking, sustainability and culture committee, and in the innovation and technology committee.
  - In supervision and taking important decisions the audit, nomination, remuneration and risk supervision, regulation and compliance committees.
- **A board secretary,** who supports the board, its committees and our chair, and is also general secretary of the Group.

Rules and regulations of the board

The board is governed by the rules set out in the Bylaws and the Rules and regulations of the board, both of which are available at our corporate website.

- **Bylaws.** Dictate the basic rules that apply to the composition and operation of the board and its members' duties and are supplemented and implemented by the Rules and regulations of the board. They can be amended only by the general meeting. See 'Rules for amending our Bylaws' in section 3.2.
- **Rules and regulations of the board.** Set the rules for running and internally organizing the board of directors and its committees through the development of applicable laws and Bylaws' provisions. They set out the principles governing the actions of the board and its committees and the duties of its members.

In 2021 the board amended its Rules and regulations on two occasions:

On 27 April, to allow the possibility to appoint more than one vice-secretary of the board to assist with the duties of the secretary of the board and, where appropriate, to replace him in the event of absence, inability to act or illness. This possibility was subject to the Bylaws so providing, so their amendment will be proposed for approval at the next 2022 AGM. See section 3.5 'Our next AGM in 2022'.

On 27 July, to adapt them to, and ensure their consistency with Act 5/2021 and to make technical improvements and other minor changes. The main amendments adapting to Act 5/2021 were to:

- In relation to the approval and oversight of related-party transactions:
  - Introduce the delegation of the board's power to approve related-party transactions and an internal reporting and regular control procedure for any transactions that it has delegated its power to approve.

- Lay out the audit committee's report about related-party transactions that will be subject to approval at the general meeting or by the board, as well as its duties in overseeing the procedure for reporting on, and regularly controlling, any transactions the board has delegated.
- Align the internal rules for related-party transactions to the new legal provisions.

- In relation to the directors' remuneration scheme:
  - Adapt the rules on approval, entry into force and maximum duration of the directors' remuneration policy to the new legal provisions.
  - Amend the minimum content of the remuneration policy to the Spanish Companies Act.
  - Clarify that, if the annual remunerations report is rejected at the general meeting, the policy in force can only apply until the next annual general meeting.

Lastly, on 24 February 2022 the board changed its Rules and regulations to introduce fundamentally technical amendments and:

- Acknowledge that the board may establish that executives other than the chair report directly to the board or its committees. In this connection, on 24 February 2022 the board established that the chief executive officer will report exclusively to the board in line with governance best practice as further described below.
- Bolster coordination mechanisms between the audit and the responsible banking, sustainability and culture committees.
- Coordinate the wording of the Rules and regulations with the wording of the Bylaws provisions which amendment is proposed to the 2022 AGM.

The Rules and regulations of the board adhere to all legal requirements as well as the principles set out in the Spanish Corporate Governance Code, revised in June 2020; Corporate Governance Principles for Banks of the Basel Committee on Banking Supervision of July 2015; and the guidelines established by the EBA in Guidelines on internal governance that came into force on 31 December 2021.

Our rules on the audit committee also adhere to the recommendations and good operating practices established in Technical Guide 3/2017 of the CNMV, on Audit Committees of Public Interest Entities. It also complies with the US regulations because our shares are listed as ADS on the NYSE, in particular, with Rule 10A-3 under the Securities Exchange Act (SEA) on standards relating to audit committees pursuant to the Sarbanes-Oxley act of 2002 (SOX).

Our rules on the nomination and the remuneration committees also adhere to the recommendations and good operating practices set out in the CNMV's Technical Guide 1/2019 on Nomination and Remuneration Committees.

Group executive chair and chief executive officer

Our executive chair is Ana Botín and our chief executive officer is José Antonio Álvarez. Their respective roles and responsibilities were updated as at the date of this report in order to accelerate the execution of the Group´s strategy and operations and to align with governance best practices.

The roles of our Group executive chair and chief executive officer are clearly separated, and can be summarized as follows:

ROLES OF THE EXECUTIVE CHAIR AND THE CHIEF EXECUTIVE OFFICER

Executive chair	Chief executive officer
• The chair is the highest-ranking executive in Grupo Santander and its main representative with regulators, authorities and other major stakeholders. • The chair is responsible for the long-term strategy of the Group, including new tech digital growth engines, namely PagoNxt and the Digital Consumer Bank. • The chair is also responsible for other corporate functions and units that help drive the Group´s long-term strategy and transformation, comprising Technology and Data & Architecture, Human Resources (including Talent), Financial Accounting & Control, Strategy and Corporate Development, General Secretariat and Communications & Corporate Marketing. • Risk, Compliance and Internal Audit functions have free and unfettered access to the board and its committees in order to preserve their full independence, without prejudice to the regular reporting lines to the chair and chief executive officer of the CAE and CRO. • The chair also leads the appointment and succession planning of the senior management of Santander Group, to be submitted for approval to the nomination committee and board.	• The chief executive officer is entrusted with the day-to-day management of the business with the highest executive functions and exclusively reports to the board in this regard. • Accordingly, the chief executive officer's direct reports are the senior managers in charge of the business units such as the regional heads (Europe, North America and South America) and those in charge of the global businesses (Wealth Management & Insurance, Corporate & Investment Banking, Cards & Digital Solutions), encompassing the relevant support & control functions. • As responsible for day-to-day management, the CFO and Investment Platforms & Corporate Investments also report to the CEO. • Additionally, the chief executive officer is responsible for Regulatory & Supervisory Relations and for embedding the sustainability policy of the Group in the day-to-day management of Group businesses and the support & control functions.

The duties of the group executive chair, the chief executive officer, the board, and its committees are clearly separated. Various checks and balances properly balance Grupo Santander's corporate governance structure. In particular:

- The board and its committees supervise both the group executive chair and the chief executive officer.
- The board of directors has delegated all its powers to the executive chair and the chief executive officer, except for those that cannot be delegated by law and under the Bylaws and the Rules and regulations of the board. The board directly exercises those powers to perform its general supervisory function.
- The lead independent director leads the group executive chair's succession and appointment.
- The audit committee is chaired by an independent director who is considered a 'financial expert' as defined in Regulation S-K of the Securities and Exchange Commission (SEC).
- The group executive chair may not simultaneously act as Banco Santander's chief executive officer.
- The corporate risk, compliance and internal audit functions report as independent units to a committee or a member of the board of directors, and have direct, unfettered access to the board.

Lead independent director

The role of the lead independent director is key to our governance and makes sure that non-executive directors serve as an appropriate counter-balance to the executive directors.

The following chart illustrates the functions and their application of the lead independent director in 2021:

DUTIES OF THE LEAD INDEPENDENT DIRECTOR AND ACTIVITIES DURING 2021

Duties	Activities in 2021
Facilitate discussion and open dialogue among independent directors, including coordinating private meetings of non-executive directors without the executive present; and proactively engage with them to consider their views and opinions.	Held eight meetings with non-executive directors without executive directors present, where they were able to voice views and opinions. The meetings were also a valuable opportunity to discuss other matters such as, among others, board training topics, executive director and key management performance; reflections on areas for continuous improvement with regard to the operation of the board and its committees; and progress with externally facilitated Governance and Effectiveness reviews.
Direct the periodic evaluation of the chair of the board of directors and coordinate her succession plan.	Led the annual evaluation of the chair in order to determine her variable pay. Furthermore, played a key coordination role with regard to ongoing succession planning activity, as additionally facilitated through his chairmanship of the nomination committee.
Engagement with shareholders and other investors with the purpose of gathering information on their concerns, in particular, with regard to Banco Santander´s corporate governance.	See section 3.1 'Shareholder communication and engagement' for full details of the lead independent director's activities.
Replace the chair in the event of absence with key rights such as the ability to call board meetings under the terms set down in the Rules and regulations of the board.	Although lead independent director did not have to replace the chair of the board in any board meetings he remained fully committed with its proper functioning.
Request that a meeting of the board of directors be called or that new items be added to the agenda for a meeting of the board.	While the lead independent director did not need to request additional board meetings to be called, he remained fully engaged and informed on board meeting agendas and encouraged constructive challenge on the same.

The board currently has seven committees and one international advisory board with the following characteristics:

	Mandatory committees (required by Law, under Bylaws or under the Rules and regulations of the board)			Voluntary committees
	Decision-making powers	Supervision, information advice and recommendations regarding functions in risk, financial reporting and audit, nomination and remuneration matters		Support and proposal in strategic areas
Board committees	Executive committee	Audit committee	Nomination committee	Responsible banking, sustainability and culture committee
		Risk supervision, regulation and compliance committee	Remuneration committee	Innovation and technology committee
External advisory board				International advisory board (members are non-directors)

Secretary of the board

Jaime Pérez Renovales is the secretary of the board. He assists the chair and ensures the formal and substantial legality of all the board's actions. He also makes sure good governance recommendations and procedures are observed and regularly reviewed.

The board's secretary is also general secretary of Banco Santander. He acts as the secretary of all board committees and thus facilitates a fluid and effective relationship between the committees and the different units of the Group that must collaborate with them. It is not necessary to be a director to be secretary.

The nomination committee must issue an opinion before submitting proposals to appoint or remove the secretary to the board.

The board has three vice-secretaries. They assist the secretary with his duties on the board and its committees, and replace him in the event of absence, inability to act or illness. In April 2021, the board of directors appointed F. Javier Illescas Fernández-Bermejo (head of Group Corporate Legal), Julia Bayón Pedraza (head of Group Business Legal) and Adolfo Díaz-Ambrona Moreno (general secretary of Santander España) as vice-secretaries, replacing Óscar García Maceiras (who left the Group in March).

Board meetings

The board of directors held 15 meetings in 2021, including 13 ordinary meetings and 2 extraordinary meetings. The Rules and regulations of the board dictate that it must hold at least nine annual ordinary meetings and one quarterly meeting.

Although board meetings follow an annually set calendar and a provisional agenda of items to discuss, new items can be added to the agenda and additional meetings can be called in accordance with new business needs. Directors may also propose items to be added to the agenda and are duly informed of changes to the calendar and meeting agendas.

The board also keeps a formal list of matters only it can address. It prepares a plan to distribute them among the ordinary meetings scheduled in the provisional calendar it has approved.

Directors are given relevant documents sufficiently in advance of each meeting of the board. This information sent to them via secure electronic means is specifically for preparing meetings and, in the board's opinion, it is thorough and sent sufficiently in advance.

The Rules and regulations of the board of directors also expressly recognise directors' right to request and obtain information on anything related to Banco Santander and its domestic and foreign subsidiaries. They also recognise their right to inspect the books, files, documents and any other records of corporate transactions, in addition to premises and facilities. Furthermore, directors can request and obtain any information and advice they deem necessary from the secretary in order to perform their duties.

The board meets at the chair's discretion or at the request of at least three directors.

The lead independent director is also authorised to request a board meeting or that new items be added to the agenda for a meeting that has already been called.

Directors must attend meetings in person and make sure to limit absences to cases of absolute necessity. The nomination committee checks that no less than 75% of directors attend board and committee meetings. For further information, see 'Board and committee attendance' in this section 4.3.

If directors are unable to be present at meeting, they can designate another director as their special proxy for each meeting in writing to act on their behalf. Proxies are granted with instructions. Non-executive directors may only be represented by other non-executive directors. One director can hold more than one proxy.

The board may meet in various rooms at the same time, provided that interactivity and communication among them in real time can be secured by audio-visual means or by telephone to hold the meeting concurrently.

Board meetings are validly quorate when more than half of its members attend in person or by proxy.

Resolutions are adopted by absolute majority of directors in attendance. The chair has the casting vote in the event of a tie. The Bylaws and the Rules and regulations of the board only require qualified majorities according to the law.

The board secretary keeps the board's documents on file. He records the content of meetings in meeting minutes. Meeting minutes of the board and committees include statements members expressly request to be put on record.

The board may hire legal, accounting or financial advisers and other experts at Banco Santander's expense for assistance with their duties.

The board should encourage communication between its committees, especially the risk supervision, regulation and compliance committee and the audit committee. It should also promote dialogue between the risk supervision, regulation and compliance committee and the remuneration committee and the responsible banking, sustainability and culture committee, given the relevance of their respective work with each other.

Some committees hold joint meetings throughout the year. Although they cannot vote, any director can attend and participate in meetings of committees on which they do not serve if invited by the chair of the board and the chair of the respective committee, after having asked the chair of the board. Furthermore, all board members who are not executive committee members may attend executive committee meetings at least twice a year, for which they are to be called by the chair.

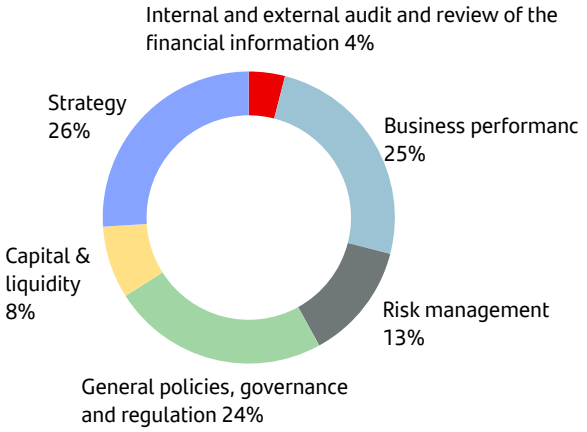
COMPARISON OF NUMBER OF MEETINGS HELD[A]

	Santander	Average Spain	US average	UK average
Board	15	12.8	9.4	11.6
Executive committee	40	10.7	—	—
Audit committee	14	8.8	8.4	5.5
Nomination committee	12	7	4.7	4.3
Remuneration committee	12	7	6.2	5.5
Risk supervision, regulation and compliance committee	6	NA	NA	NA

Source: Spencer Stuart Board Index 2021 (Spain, United States and United Kingdom).
NA: Not available.

The following chart shows the board's approximate time allocation to each function in 2021.

APPROXIMATE ALLOCATION OF THE BOARD'S TIME IN 2021



Committee meetings

Board committees follow a meetings calendar that includes at least four meetings (except for the innovation and technology committee, which holds at least three meetings) and an annual work plan established yearly. Each committee meets as often as is required to fulfil its duties.

Committee meetings will be quorate if more than half of committee members are present in person or by proxy. Committee resolutions pass with a simple majority of votes. In the event of a tie, the committee chair has the casting vote. Committee members may grant a proxy to another member; however, non-executive directors can only be represented by other non-executive directors.

Committee members are given relevant documents sufficiently in advance of each meeting to ensure effectiveness.

Committees have the authority to summon executives, who will appear at meetings at the invitation and under the terms dictated by the chair. Furthermore, committees may also submit a request to the general secretary to hire legal, accounting or financial advisers or other experts to assist with their duties at Banco Santander's expense.

The role of committee secretary is non-voting and falls on the general secretary and secretary of the board. This fosters a fluid and efficient relationship with the units that must work with, and report to, committees.

Committee chairs report on committees' meetings and activities at all board meetings. Furthermore, all board members are given a copy of committees' meeting minutes and all documents provided for meetings.

Board and committee attendance

The table below shows the attendance rate of board and committee meetings.

ATTENDANCE TO THE BOARD AND COMMITTEE MEETINGS IN 2021

		Committees						
Directors	Board	Executive	Audit	Nomination	Remuneration	Risk supervision, regulation and compliance	Innovation and technology	Responsible banking, sustainability and culture
Average attendance	99%	94%	100%	97%	98%	96%	96%	100%
Individual attendance								
Ana Botín	15/15	39/40	_	_	_	_	4/4	_
José Antonio Álvarez	15/15	40/40	_	_	_	_	4/4	_
Bruce Carnegie-Brown	15/15	32/40	_	12/12	12/12	_	3/4	_
Homaira Akbari	15/15	_	14/14	_	_	_	4/4	6/6
Javier Botín	15/15	_	_	_	_	_	_	_
Álvaro Cardoso[A]	13/15	_	_	_	_	4/4	_	6/6
R Martin Chávez	14/15	_	_	11/12	11/12	15/16	4/4	_
Sol Daurella	15/15	_	_	12/12	12/12	_	_	6/6
Henrique de Castro	15/15	_	14/14	_	12/12	_	4/4	_
Gina Díez[B]	15/15	_	_	_	_	_	_	_
Luis Isasi	15/15	39/40	_	_	12/12	15/16	_	_
Ramiro Mato	15/15	40/40	14/14	_	_	16/16	_	6/6
Sergio Rial	15/15	_	_	_	_	_	_	_
Belén Romana[C]	15/15	35/40	14/14	_	_	16/16	4/4	6/6
Pamela Walkden[D]	15/15	_	14/14	_	_	10/11	_	_

Note: The table details directors' attendance whenever they personally attended meetings of the board or its committees. For this purpose, absent directors who were represented are not counted among attendees. The nomination committee was informed of, and declared its satisfaction with, directors' reasons for not being present

A. Stepped down as chair and member of the risk supervision, regulation and compliance committee on 1 April 2021.
B. Member of the nomination committee since 22 December 2021.
C. Appointed chair of the risk supervision, regulation and compliance committee on 1 April 2021.
D. Member of the risk supervision, regulation and compliance committee since 1 of May 2021.

This table shows the average dedication of our directors to the board and committees:

AVERAGE DEDICATION OF DIRECTORS TO THE BOARD AND COMMITTEES

	Meetings per year	Average of hours per member[A]	Average of hours per chair[A]
Board	15	156[B]	312[B]
Executive committee	40	200	400
Audit committee	14	140	280
Nomination committee	12	48	96
Remuneration committee	12	48	96
Risk supervision, regulation and compliance committee	16	160	320
Responsible banking, sustainability and culture committee	6	30	60
Innovation and technology committee	4	16	32

A. Includes hours of meeting preparation and attendance.
B. Of the 13 ordinary meetings held.

On average, each director dedicated approximately 58 days per year to their role (including their participation in committees), and 5 days to each board meeting, working 8 hours daily.

Directors must report any professional activity or post for which they will be nominated to the nomination committee so it can assess the time commitment to the group and check for possible conflicts of interest.

The annual suitability reassessment our nomination committee conducts every year (see in section 4.6 'Nomination committee activities in 2021') allows us to keep all information on the estimated time dedicated by directors to other roles and/or professional activities up to date and confirm their capacity to exercise good governance as directors of Banco Santander. Therefore, any necessary travel time taken to attend in-person board meetings is considered for reference purposes.

Overall, Banco Santander is able to verify compliance with the maximum number of company boards on which the law allows our directors to serve at once (i.e., up to one executive and two non-executive roles, or four non-executive roles; roles in the same group are considered a single role and roles in not-for-profit or non-commercial organizations are not included).

Director training and induction programmes

The board promotes its directors' continued training through an annual board training programme. Its contents are chosen by the board based on its performance reviews as well as technological, risk management and regulatory issues.

In 2021, programme workshops (held, as usual, after board meetings) addressed these topics:

- Regulatory compliance regarding conflicts of interest, market abuse, competitors and other types of risk.
- Risk Appetite Statement annual review covering material risks, calibration of limits and implementation across the Group and future enhancements proposed for 2022.
- Credit risk management regarding provisions calculations (e.g. covid-19 overlay, scenarios and impacts, and management of vulnerable industries).
- The transition from the IBOR to alternative benchmark rates as well as identification of key risks (especially legal, business, financial and accounting risks).
- Regulatory requirements regarding financial crime and best practice guidance (including anti money laundering and sanctions).
- The building and measurement of risk regulatory models.
- New special situations and resolution framework and governance bodies' roles and responsibilities in special situations.
- Cloud migration, system changes and expectations for 2022.

In addition, the board has sound induction and development programmes so new directors can better understand Santander's business and governance rules. They normally run for six to twelve months from the time the board appoints a new director. They involve key group managers who provide detailed information on their areas of responsibility, and address the special needs found in a director's suitability assessment.

In 2021, these directors completed induction programmes with additional areas of focus:

- R Martín Chávez, who attended specific deep-dive workshops on the Single Supervisory Mechanism (SSM) and on Spain's regulatory framework because he had developed his career in the US. Mr Chávez's induction plan ended in January 2021.
- Gina Díez, who attended additional deep-dive workshops on and on the Single Supervisory Mechanism (SSM) and regulatory framework because she had developed her career in Mexico. Also, she received additional training in auditing, accounting and financial risk management. Ms Díez's induction plan ended in July 2021.

Those programmes were tailored to their experience and particular induction needs found in their suitability assessments

Board assessment in 2021

The board undergoes a yearly assessment of its performance and effectiveness, composition, quality of its work and individual performance of its members. The assessment includes its committees and is conducted at least every three years by an external independent consultant, whose independence is assessed by the nomination committee. In 2020, the assessment was conducted by an external independent expert and complemented by a wider external review of our governance arrangements in 2021, with the aim of assessing its overall functioning and adherence to regulations, supervisors' expectations, and industry best practice. In addition to the above-mentioned structured reviews, we conducted an internally facilitated review of the effectiveness of our board practices. For more details, see 'Board assessment and actions to continuously improve its functioning' in section 1.2.

The resultant actions and associated outcomes of the reviews have been the subject of further work in 2021 and have supported our continued priority focus on effective governance.

4.4 Executive committee activities in 2021

Composition

Position		Category	Appointed on
Chair	Ana Botín	Executive	11/12/1989[A]
Members	José Antonio Álvarez	Executive	03/01/2015
	Bruce Carnegie-Brown	Independent	12/02/2015
	Luis Isasi	Other external	20/05/2020
	Ramiro Mato	Independent	28/11/2017
	Belén Romana	Independent	01/07/2018
Secretary	Jaime Pérez Renovales		

A. Committee chair since 10 September 2014.

Functions

The executive committee is a key governance body in Banco Santander and the Group. The board delegated to it all its powers except those that cannot be delegated by the law or under the Bylaws and Rules and regulations of the board. The executive committee generally meets once a week to ensure key decision-making in a timely and efficient manner, so the board can focus on general supervision. It regularly reports to the board on its core matters, providing all directors with the minutes and documents from its meetings.

Committee performance

The board, supported by its nomination committee, sets the executive committee's size and qualitative composition, focused on overall effectiveness while keeping with the board composition guidelines. Although the executive committee does not exactly mirror the qualitative composition of the board of directors, it is consistent with an external director majority, including three independent directors. This composition ensures a balance of opinions as well as internal and external perspectives. It also complies with Recommendation 37 of the Spanish Corporate Governance Code, which recommends to have at least two non-executive directors, including one independent director. The secretary of the board is also the secretary of the executive committee.

The executive committee can meet as many times as its chair convenes it, however, it generally meets once a week.

Main activities in 2021

In 2021, the executive committee addressed a breadth of matters relating to the business of the Group and its main subsidiaries, risk management, corporate transactions and main proposals subsequently submitted to the board of directors.

The key topics covered in the year were:

- **Results**: The committee was kept up to date on the Group´s results and their impact on investors and analysts.
- **Business performance**: The committee was kept continuously and fully informed of the performance of the Group's business areas, through management reporting or reports on specific matters.
- **Information reported by the chair**: The board´s chair, who also chairs the executive committee, regularly reported on key matters relating to the Group´s management, strategy and institutional issues.
- **Information reported by the CEO**: The CEO reported on key matters relating to the Group´s performance, budget and strategic business plans execution.
- **Corporate transactions:** The committee analysed and (where appropriate) approved some corporate transactions (e.g. investments and divestments, joint ventures and capital transactions).
- **Covid-19:** The committee was kept informed of the pandemic and was active in decision-making to mitigate its impact on the Group and the global economy, to preserve the health of employees and customers and to provide healthcare and financial resources to public and private institutions fighting the pandemic.
- **Risks**: The committee was regularly informed about the risks facing the Group. Within the framework of the risk governance model, it made decisions about transactions that it had to approve due to their materiality. It was also kept informed on specific risk matters such as the Group's leveraged finance, distribution risk and credit evolution in certain industries.
- **Subsidiaries:** The committee received reports on the performance of the various units and business lines. In particular, it was kept duly informed about Santander España´s headcount and distribution model restructuring, specific regional projects (such as the One Europe App), strategic initiatives the board had approved during the year affecting subsidiaries and the appointments of key positions there.
- **Capital and liquidity:** The committee reviewed regulatory plans and exercises (e.g. EBA stress test) and received regular reports on capital ratios and the measures taken to optimize them; pricing (originations) and portfolio profitability.
- **Supervisors and regulatory matters: T**he committee was regularly informed of regulatory developments, the supervisory agenda for the year and projects to ensure compliance with supervisory recommendations and regulatory changes.
- **Governance models**: The committee discussed the new governance and strategy models for new units (such as the Investment Platforms) before they were submitted to the board for approval.
- **Issuances**: By virtue of the board's delegation, the committee issued non-convertible debentures.

In 2021, the executive committee held 40 meetings. 'Board and committee attendance' in section 4.3 provides information on members' meeting attendance and the estimated average time each one spent on preparing for and participating in meetings.

2022 priorities

- Ensuring at all times the committee's effectiveness with consideration for all areas for continuous improvement and an overall review of its operations.
- Continuing to ensure proper coordination with the board and its committees (including other executive committees.)
- Monitoring the performance of strategic initiatives that affect the Group's many global businesses and subsidiaries.

4.5 Audit committee activities in 2021

'Our fundamental responsibility is the effective oversight of the financial information process and internal controls, ensuring the effectiveness of our internal audit function and maintaining a professional and open relationship with the external auditors. We must remain flexible and adapt priorities to the new challenges that may not have been foreseen at the beginning of the year. 2021 proved no different as we faced the second year of managing through a global pandemic, supporting our customers and staff, while maintaining the appropriate controls.

The committee benefited from a good mix of experience and skills of our members. Each provided appropriate advice and challenge to the management. We also took views from all three key lines of defence (management, risk and audit) to oversee the progress in key global initiatives. Communication with executives and non-executives globally became even more important, given the travel restrictions around the world, as it allowed us to share with them our concerns and thoughts with them.

In the coming year, we will progress some exciting and large strategic projects in which we will try to strike the delicate balance of supporting management and ensuring an appropriate level of control for a Group of our size'.

Pamela Walkden
Chair of the audit committee



This section is the report the audit committee prepared on 21 February 2022 regarding its activities. The board of directors approved it on 24 February 2022.

Composition

Position		Category	Appointed on
Chair	Pamela Walkden	Independent	29/10/2019[A]
Members	Homaira Akbari	Independent	26/06/2017
	Henrique de Castro	Independent	21/10/2019
	Ramiro Mato	Independent	28/11/2017
	Belén Romana	Independent	22/12/2015
Secretary	Jaime Pérez Renovales		

A. Committee chair since 26 April 2020.

The board of directors appointed the committee's members based on their expertise, skills and experience regarding the matters it handles.

For more details, see section 4.1 'Our directors' and 'Board skills and diversity matrix' and 'Committees skills and diversity matrix' in section 4.2.

According to SEC Regulation S-K, committee chair, Pamela Walkden is considered a financial expert based on her training and experience in accounting, auditing and risk management, her past leadership positions at entities where accounting expertise and risk management were essential, and her international experience - primarily in the UK and Asia.

External auditor

Our external auditor is PricewaterhouseCoopers Auditores, S.L. (PwC). Its registered office is at Paseo de la Castellana, 259 B, Madrid, and its Tax ID Code is B-79031290. It is registered with the *Registro Oficial de Auditores de Cuentas* (Official Registry of Account Auditors) of the *Instituto de Contabilidad y Auditoría de Cuentas* (Accounting and Audit Institute or ICAC) of the Ministry of Economic Affairs and Digital Transformation under number S0242.

Lead partner Julián González, assumed Alejandro Esnal's role in 2021. Mr González has experience as a global groups' audit partner (mainly in Spain and the UK) and a strong background in the Spanish financial sector. He also participates in various international banking supervisory and regulatory forums.

Report on the independence of the external auditor

The audit committee verified the external auditor's independence, on 21 February 2022 and prior to the issuance of the 2021 auditor's report on the financial statements in line with the terms established under section 4.f) of Article 529 *quaterdecies* of the Spanish Companies Act, and Article 17.4.c) (iii) of the Rules and regulations of the board, concluding that, in its opinion, it had no objective reason to question the external auditor's independence.

In assessing the auditor's independence the committee considered personal circumstances and the financial relationship the auditor or persons performing the audit have with the Group; analysed possible threats; and established the appropriate safeguarding measures.

The committee also considered the information included in subsection 'Duties and activities in 2021' in section on the auditor's remuneration for audit and other services as well as written confirmation from the external auditor regarding its independence from Banco Santander in accordance with European and Spanish law, SEC rules and the rules of the Public Company Accounting Oversight Board (PCAOB).

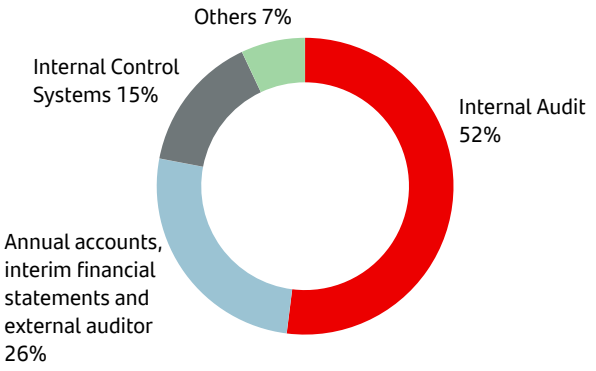
Proposed re-election of the external auditor for 2022

As indicated in section 3.5 'Our next AGM in 2022', the board of directors will submit a resolution to re-elect PwC as external auditor for 2022 at our 2022 AGM, following the proposal the audit committee had issued in November 2021. If PwC is re-elected, Mr González will continue as lead partner in auditing the accounts in accordance with the Spanish Account Auditing Act.

Time allocation

In 2021, the audit committee held 14 meetings. 'Board and committee attendance' in section 4.3 provides information on members' attendance and the estimated average time each one spent on preparing for and participating in meetings.

The chart below shows the committee's approximate time allocation to each function in 2021.



Duties and activities in 2021

This section summarizes the audit committee's activities in 2021.

Duties	Actions taken
Financial statements and other financial and non-financial information	
Review the financial statements and other financial and non-financial information	• Reviewed the individual and consolidated financial statements and the 2021 directors' reports and submitted it prior to their approval by board of directors, monitoring compliance with legal requirements and the proper application of accounting principles and that the external auditor issued the corresponding report with regard to the effectiveness of the Group's system of internal control over financial reporting (ICFR). • Reviewed quarterly financial information (dated 31 December 2020, 31 March, 30 June and 30 September 2021, respectively), prior to its approval by the board of directors, and they were subsequently released to the market and supervisory bodies. • Reviewed other financial information such as: the annual corporate governance report; shares registration document filed with the CNMV; Form 20-F with 2020 the financial information, filed with SEC; the half-yearly financial information filed with CNMV and with SEC as Form 6-K. • Oversaw and assessed the preparation and reporting of non-financial information in accordance with applicable regulations and international benchmarks. In particular, reviewed the annual 'Green Bond' report that covers the investments for each green bond issuance before the board approved it.
Report to the board about applied tax policies	• Received information on the tax policies applied, in compliance with the Code of Good Tax Practices; and submitted it to the board of directors, clearly stating that, as part of the cooperation the code advocates, the Tax transparency report for the 2020 fiscal year had been filed with the *Agencia Estatal de Administración Tributaria* (Spanish Tax Authority or "AEAT").
Relations with the external auditor	
Receive information on the audit plan	• Obtained confirmation from the external auditor that it had full access to all information to conduct the audit. • Discussed improvements to financial reporting in light of new accounting standards and best international practices. • Received information on the planning, progress and execution of the audit plan. • Analysed audit reports about the annual financial statements before the external auditor submitted them to the board of directors.
Relations with the external auditor	• The external auditor attended all committee meetings held in 2021, serving as a channel of communication between the external auditor and the board. • The committee met with the external auditor two times in 2021 to discuss the audit work without the presence of the executives. • Oversaw the change of the lead partner during 2021 and made certain that rotation rules were followed.
Assessment of the auditor's performance	• Performed the external auditor's final evaluation and its contribution to financial reporting integrity on account of its work and the opinions of units and the audit committees chairs of Group's entities. During that assessment, the auditor informed the committee of the findings of regulators' inspections of PwC, which the committee analysed along with details about any relevant investigations involving PwC.

Duties	Actions taken
External auditor's independence	
PwC's remuneration for audit and non- audit services	• Monitored PwC's remuneration, including these fees for audit and non-audit services provided to the Group:

EUR million

	2021	2020	2019
Audit	103.7	99.4	102.4
Audit-related services	6.0	6.0	7.8
Tax advisory services	0.7	0.8	0.7
Other services	2.4	1.2	2.3
Total	**112.8**	**107.4**	**113.2**

The 'Audit' heading mainly includes audit fees for the individual and consolidated financial statements of Banco Santander, S.A., and of some of its subsidiaries; the integrated audits prepared in order to file Form 20-F for the annual report with the SEC in the US regarding any entities subject to it; the internal control audit (SOx) for Group's entities subject to it; the audit of the consolidated financial statements as of 30 June; and the regulatory auditor's reports on Grupo Santander's geographies.

Tax advisory services provided by PwC totalled EUR 75,840 for Spain and EUR 575,122 for other Group subsidiaries.

The main fees under 'Audit-related services' include, amongst others, comfort letters, verifying financial and non-financial information (as required by regulators), and reviews of the documents to be submitted to domestic or foreign securities market authorities that due to their nature are provided by the external auditor.

The 'Audit fees' and 'Audit-related fees' caption includes the fees corresponding to the audit for the year, regardless of the date on which the audit was completed. In the event of subsequent adjustments, which are not significant in any case, and for purposes of comparison, they are presented in note 47.b) in the 'Notes to the consolidated financial statements' in the year to which the audit relates. The rest of the services are presented according to their approval by the audit committee.

The fees paid for non-audit services and their proportion to all fees invoiced to Banco Santander and/or its group are as follows:

	Company	Group companies	Total
Amount of non-audit work (thousands of EUR)	556	2,567	3,123
Amount of non-audit work as a % amount of audit work	0.5%	2.5%	3.0%

In 2021, Santander arranged for services provided by audit firms other than PwC EUR 263.8 million (EUR 172.4 and 227,6 million in 2020 and 2019, respectively).

Non-audit services. Assess threats to the independence and protective measures	• Reviewed services rendered by PwC and confirmed its independence. For those purposes, it: • Verified that all services rendered by the Group's auditor, including audit and audit-related services, tax advisory services (mainly on tax and compliance tax advice and tax compliance services) and other services detailed in the section above, met the independence requirements set out in the applicable regulation. • Verified the 2021 ratio non-audit services fees to total fees received by the auditor for all services provided to the Group, with stood at 3.0%. • Average fees paid to auditors in 2021 for non-audit and related services account for 8% of total fees paid as a benchmark according to available information on the leading listed companies in Spain. • Verified the ratio of fees paid for all items relating to the services provided to the Group to total fees accrued in 2021 by PwC as a firm. The Group's total fees paid are less than 0.30% of PwC's total revenue worldwide. • Reviewed banking transactions performed with companies related to PwC and concluded that none that could compromise PwC's independence have been detected. • Since the publication of the (EU) Regulation 537/2014 of the European Parliament and of the Council of 16 April 2014 on specific requirements regarding statutory audit of public-interest entities, Banco Santander meets the requirement that, for three or more consecutive years, total fees received for non-audit services do not exceed 70% of the average fees paid in the last three consecutive years for the audit of the Group's entities.
External auditor independence report	• After considering the information above, the committee issued its 'Report on the independence of the external auditor', which is described at the beginning of this section 4.5.
Re-election of the external auditor	
Re-election of the external auditor	• Proposed to the board, for subsequent submission to the 2022 AGM, the re-election of PwC as the external auditor of Banco Santander and its consolidated Group for 2022.

Duties	Actions taken
Internal audit function	
Oversight of the Internal audit function	• Supervised the internal audit function and ensured its independence and effectiveness in 2021. • Continued monitoring Covid-19's impact on internal audit activities on a regular basis. • Reported on progress made with the internal audit plan, with exhaustive control over internal audit recommendations and ratings of corporate units and functions. The chief audit executives (CAEs) of the core corporate units and divisions reported at least once to the committee in 2021. • Held its meetings in 2021 with the CAE and representatives of the Internal Audit division in attendance; and held private meetings with the CAE without other executives or the external auditor present. • Proposed the 2021 Internal audit function budget, ensuring that it had the physical and human resources needed to perform its function effectively; and was kept apprised of the progress and timetable of the Audit hubs being created, as well as of digital initiatives relating to the Internal Audit division. • Reviewed the strategic audit plan for 2021-2024 based on a comprehensive risk assessment and submitted it to the board for approval. • Received regular information on the internal audit activities carried out in 2021, highlighting an overall improvement in audit ratings, in part, due to continued focus on building a stronger control environment; and conducted an additional review of issued audit reports, requiring that relevant business areas present action plans. • Increased first-line management's involvement in internal audit recommendations and related documents about 2021. • Received holistic reviews of internal audit coverage of key topics to ensure proper oversight, with second line of defence representatives invited to provide it with additional feedback. • Reviewed and recommended to the board the 2021 objectives for the CAE; and assessed the Internal audit function's preparedness and effectiveness when fulfilling its duty, as well as the CAE's performance in 2021 (which was reported to the remuneration committee and the board to determine his variable remuneration). • Required that an external assessment of the Internal audit function be performed in 2022 according to the best practices of International Internal Audit Standard 1312 to ensure compliance with regulation and international practices.
Internal control systems	
Monitoring of the evaluation of the internal control systems	• Received information on the evaluation and certification the Group's internal risk control system (IRCS) for 2020 and assessed its effectiveness, in compliance with regulatory requirements with from the CNMV (ICFR-Internal Control over Financial Reporting) and the SEC Sarbanes-Oxley Act (SOx). Its main priority was the reduction of risk in the risk control system and actions in certain geographies.
Whistleblowing channel (Canal Abierto)	• Received the annual update about Canal Abierto (the whistleblowing channels in the Group) in a joint meeting with risk supervision, regulation and compliance committee, helping ensure that the Group´s culture is embedded in the working environment is conducive to employees' talking straight and being truly listened to.
Coordination with Risk	• Developed different activities to ensure that the internal audit plan is properly coordinated with the Group's relevant risks. • Held three joint meetings with the risk supervision, regulation and compliance committee in order to share information and discuss topics of mutual interest including the group risk control environment assessment, model risk, financial crime compliance, whistleblowing and third-party supplier risk management. • Held monthly meetings with the chairs of both the audit committee and the risk supervision, regulation and compliance committee. As detailed in section 1.1 'Board skills and diversity', Pamela Walkden was appointed to the risk supervision, regulation and compliance committee. The CRO was also invited to all 2021 committee's meetings.
Other activities	• Was engaged in the appointment of any new CAE at subsidiaries in line with Group's internal regulation ensuring their proper oversight and control. • Continued its collaboration with the responsible banking, sustainability and culture committee to supervise and evaluate the preparation of non-financial information.
Related-party and corporate transactions	
Creation of special-purpose vehicles or entities based in countries considered non-cooperative jurisdictions	• Was informed by the head of Tax of the Group's offshore entities in accordance with Spanish regulations. See note 3.c) in the 'Notes to the consolidated financial statements'.
Approval and oversight of related party transactions	• Reviewed transactions carried out by Banco Santander to ensure they satisfied the Rules and regulations of the board and relevant legislation in relation to related parties and seeking board approval where required. The committee has examined the financial statements in regard to regarding related party transactions. See section 4.12 'Related-party transactions and conflicts of interest'. • Was informed of the amendments on related-party transactions in the Spanish Companies Act through Act 5/2021 and informed the board of its endorsement of the recommendation that it delegate to competent bodies, committees, proxies and executives approval of their own related-party transactions in the ordinary course of business; approval of the internal disclosure; and regular control of any transactions it has delegated to the committee to approve.
Transactions involving structural or corporate changes	• Reviewed the corporate transactions that the Group planned in 2021 prior to the submission to the board of directors, analysing their economic conditions, accounting and internal audit impact.

Duties	Actions taken
Information for general meetings and corporate documents	
Shareholders information	• At our 2021 AGM (held remotely), board secretary Jaime Pérez Renovales, and substituting Pamela Walkden as committee chair, reported to shareholders on the matters and activities within the committee's scope in 2020.
Corporate documents for 2021	• Prepared this report on its activities in 2021, which includes a performance review of its assigned functions and key priorities for 2022 based on the assessment of the effectiveness of the board and its committees.

Annual assessment of the committee and its achievement of 2021 objectives

In 2021, to follow up on the external review in 2020, an internal effectiveness review of our board practices was conducted and areas for improvement were identified. For more details about the internal review and its findings see 'Board assessment in 2021' in section 4.3.

The committee took the actions planned for 2021. In particular, it:

- Reinforced the coordination and sharing of information with other committees, especially with the risk supervision, regulation and compliance committee. The audit committee chair was appointed as member of the latter. In addition, the Group CRO was invited to all committee meetings in 2021 and three joint meetings were held to ensure ongoing coordination and raise awareness of mutual areas of interest.
- Strengthened coordination and information exchange with the core units and divisions through the reciprocal participation of the committee chair in the meetings of the audit committees of the different countries and the chairs of the audit committees of the different countries at committee meetings.
- Held another Audit Committee Chairs Convention to raise awareness of global initiatives and expectations and to create an opportunity to collectively discuss relevant issues, putting the focus on key areas: model risk, climate change and trends in non-financial information, compliance and financial crime, provision of credit risk and areas for improvement, among others.
- Reviewed a committee activity interim report to ensure that the committee's responsibilities were being adequately fulfilled and that the expectations of the committee members were met, compliance with the applicable rules and alignment of meeting planning with business needs and promotion of a continuous feedback environment.
- Remained focused on, and debated, such critical aspects as the supervision of the internal audit function and the internal control systems and, in particular, control environment risk assessment, execution of the internal audit plan, model management, anti money laundering and relationships with third party suppliers.
- Promoted a greater presence of the first line of defence, for which it required the presence of the country head/local CEO during the local CAE's updates on internal audit on a significant number of occasions.

2022 priorities

The committee set these priorities for 2022:

- Continuing to focus on its size and composition, particularly regarding the accounting, financial, risk management and audit expertise it needs, as well as any other areas that will enhance its effectiveness.
- Continuing to focus on key judgements that are made in preparing the Group's financial statements.
- Monitoring internal audit plan execution, especially in terms of how management identifies and measures emerging risks from the covid-19 crisis and overseeing the Group's response to its environmental ambitions.

4.6 Nomination committee activities in 2021

'The committee continued its work on overseeing the process on key appointments to the board and senior management roles, supported by its work on robust succession planning. Focus remained on the collective skills and experience of the board and ensuring that gender and broader diversity remain front of mind in our succession planning.

Given our commitment to continuous improvement and to fully adhering to the best industry standards, evolving supervisory expectations and to stakeholders' best interests (clients, employees, shareholders and, more generally, the community in which Banco Santander operates), we continued our work on improving our overall effectiveness through commissioning an external evaluation to holistically review our governance model.

An appropriate mix of members' skills, further reinforced by the appointment of Gina Díez as a member, helped the committee to address these tasks and to operate effectively, offering appropriate challenge and support to management'.

Bruce Carnegie-Brown
Chair of the nomination committee



This section is the report the nomination committee prepared on 21 February 2022 regarding its activities. The board of directors approved it on 24 February 2021.

Composition

Position		Category	Appointed on
Chair	Bruce Carnegie-Brown	Independent	12/02/2015[A]
Members	R Martín Chávez	Independent	22/12/2020
	Sol Daurella	Independent	23/02/2015
	Gina Díez Barroso	Independent	22/12/2021
Secretary	Jaime Pérez Renovales		

A. Committee chair since 12 February 2015.

The board of directors appointed the committee's members based on their expertise, skills and experience regarding the matters it handles.

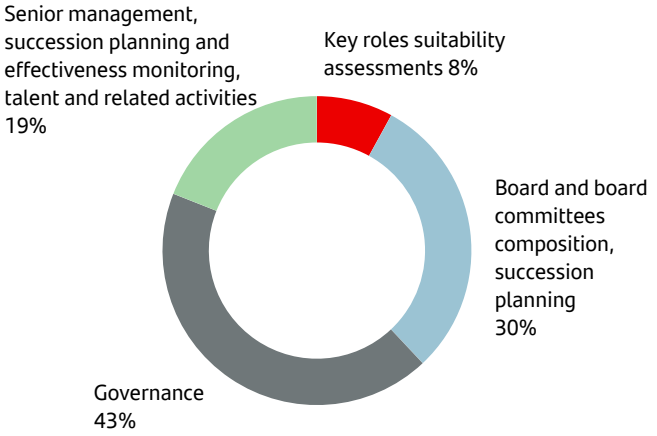
For more details, see section 4.1 'Our directors' and 'Board skills and diversity matrix' and 'Committees skills and diversity matrix' in section 4.2.

The only change in the committee composition in 2021, was Gina Díez appointment on 22 of December 2021.

Time allocation

In 2021, the nomination committee held 12 meetings. 'Board and committee attendance' in section 4.3 provides information on members' attendance and the estimated average time each one spent on preparing for and participating in meetings.

The chart below shows the committee's approximate time allocation to each function in 2021.



Duties and activities in 2021

This section summarizes the nomination committee's activities in 2021.

Duties	Actions taken
Composition of the board and its committees	
Selection, suitability assessment and succession policy and renewal of the board and its committees	• Ensured board member selection procedures guaranteed directors' individual and collective suitability; fostered diversity of gender, experience and skills; and conducted the necessary analysis of the required expertise, skills and time commitment for effective board membership. • Continued playing a leading role in the appointment of board and committee members and senior managers, and planning their succession. • Assessed the composition of the board committees and the international advisory board in order to ensure they had the right skills and experience to perform their duties successfully. • Continued monitoring the board of directors' overall skills and competencies, including the need to cover Banco Santander's strategic markets and such areas as technology, digital strategy, banking, finance, regulation and ethics. • Continuously oversaw appointments of key positions and the regular strategic review of leadership succession plans. • Ensured candidate pool selection for any nomination, interviews and appointment decisions actively took into account diversity in its broadest sense.
Appointment, re-election, confirmation and removal of directors and committee members	• Verified that the overall composition and skills of the board of directors and its committees are appropriate and identified, utilizing the skills matrix and the 2020 board effectiveness review, desired areas of expertise and experience in recruitment. • Recommended the board nominate Germán de la Fuente as a new board member for subsequent approval at the AGM. He will contribute significant auditing, accounting and technical banking expertise. • Submitted proposals to the board to make changes to certain committees' composition in order to strengthen their performance and support to the board in their areas of authority. • Gina Díez was appointed a new committee member 12 months after being appointed a board member in December 2020. She had been nominated to join the committee in consideration of her skills, qualifications and experience (especially in corporate governance, strategic analysis and evaluation of human resources, selection of senior officers, the performance of senior management duties, and other tasks the committee usually discharges).
Succession planning	
Succession planning for executive directors and senior managers	• Reviewed the information it received regularly on senior executive succession planning (which included key positions in subsidiaries) and made sure it is being implemented to ensure the orderly succession of senior managers through a rigorous, transparent, merit-based and objective process, that promotes diversity in its broadest sense. • Reviewed an external expert's report that concluded Banco Santander's succession arrangements and framework for the board and critical roles throughout the Group are consistent with regulatory requirements and best industry practice.
Director status verification	
Annual verification of the status of directors	• Verified each director category (i.e. executive, independent and other external) and submitted its proposal to the board of directors that it be confirmed or revised in the annual corporate governance report and at the AGM. See section 4.2 'Board composition'. • Assessed directors' independence, verifying no significant business ties between the Group and companies in which they are or have been significant shareholders or directors, in particular regarding financing extended by the Group to such companies. In all cases, the committee concluded that the existing ties were not significant because (i) financing (a) did not create economic dependence for such companies because it could be replaced by different bank-based or other sources of funding, and (b) was consistent with the Group's share of the relevant market; and because (ii) business ties did not reach comparable materiality thresholds used in other jurisdictions as benchmarks (e.g. NYSE, Nasdaq and Canada's Bank Act), among other reasons.
Regular assessment	
Annual suitability assessment of directors and key officers	• Assessed the suitability of the members of the board, senior management members, those responsible for internal control functions and those holding key positions of the Group, ensuring their business and professional probity and appropriate knowledge and experience to perform their duties. • Concluded that board members can carry out good governance of Banco Santander after reviewing board meeting attendance and noting that, on average, directors attend 98.67% of board meetings and that it was not compelled to take any action against any director for under 75% attendance. • During 2021,the committee, based on the information it had received from the directors, was not aware of any circumstance or situation that could harm the Group's credibility and reputation.
Directors' potential conflicts of interest and other professional activities	• Examined the information the directors had given about their other professional activities or positions to which they had been proposed and the related time commitment; and concluded those commitments did not interfere with that required of them as Banco Santander directors and did not put them in any conflict of interest.

Duties	Actions taken
Board assessment	• Oversaw the holistic review of our governance model by an external adviser to determine if it accommodated the characteristics of our global operations, supervisors' expectations and industry best practice. • Reviewed the 2022 action plan to address the areas for improvement revealed in the 2020 and 2021 board effectiveness reviews.
Senior management	

Appointment of key officers	• Issued favourable opinions on the following appointees, approved by the board:
	  • Carlos Rey as new regional head for South America to replace Sergio Rial, who assumed the non-executive chair role at Santander Brazil with effect from 1 January 2022.
	  • Nathan Bostock as head of Investment Platforms.
	  • Javier Roglá as new chief talent officer to replace Roberto di Bernardini.
	• Issued favourable opinions on directors and members of senior management appointments at the Group's core subsidiaries.

Talent and director training	• Received information about the initiatives in Human Resources to make Santander an employer of choice in three ways: by putting the employee at the centre of everything we do; by securing the right talent and skills; and by aligning with the business to deliver value and our strategy. • Reviewed the Group's director induction, information, training, development and knowledge refreshment programmes in line with the Rules and regulations of the board, the ESMA and EBA's joint guidelines, and the Spanish Governance Code so that they would be designed according to each director's own circumstances and needs. • Assessed the Group's director induction and training programmes and recognized areas for improvement.
Internal governance and corporate governance	
Internal governance oversight	• Assessed the suitability of certain nominees at the subsidiaries subject to the Group's appointments and suitability procedure; and oversaw subsidiary board composition to ensure a consistent selection and suitability approach across the Group. • Received explanations regularly about new governance regulation, trends, best practices and implications for the Group; closely reviewed amendments to Act 5/2021 (especially in regard to new related-party regulation); and amendments to corporate governance codes that apply to the Group and subsidiaries. • Verified that subsidiary boards, committees and their duties aligned governance structures were consistent with the Group-Subsidiary Governance Model (GSGM) guidelines and best practice; and tracked subsidiaries' actions and progress in implementing internal regulation dictated by the Group. • Endorsed lead director nominations for subsidiary boards to ensure board members representing the Group as significant shareholder are appropriate and will correctly perform their duties.
Corporate governance	• Received an overview of the highlights and results from the 2021 AGM, especially, its virtual only nature. • Reviewed the joint work of the lead independent director and the Shareholder and Investor Relations team and investors' and shareholders' feedback on the Group's corporate governance arrangements. • Reviewed the independence of the external advisers hired by the nomination and remuneration committees in 2021 in line with the CNMV Technical Guide 1/2019 on nomination and remuneration committees, analysing, inter alia, the services the advisers provided and the amounts they received. • Reviewed the annual corporate governance report to verify that information to be published conforms to the law and that the corporate governance system promotes corporate interests and considers the legitimate interests of all stakeholders.
Information for general meetings and corporate documents	
Shareholders information	• At our 2021 AGM (held remotely), board secretary Jaime Pérez Renovales, substituting Bruce Carnegie-Brown as committee chair, reported to shareholders on the matters and activities within the committee's scope in 2020.
Corporate documents for 2021	• Prepared this report on its activities in 2021, which includes a performance review of its assigned functions and key priorities for 2022 based on the assessment of the effectiveness of the board and its committees.

Annual assessment of the committee and its achievement of 2021 objectives

In 2021, to follow up on the external review in 2020, an internal effectiveness review of our board practices was conducted and areas for improvement were identified. For more details about the internal review and its findings see ´Board assessment in 2021' in section 4.3.

The committee took the actions planned for 2021. In particular, it:

- Reviewed information it received regularly on senior executives succession planning (which included key positions in subsidiaries); ensured plans were in place for the orderly succession of senior management positions and that there was a rigorous and transparent procedure based on merit and objective criteria and that promotes diversity in its broadest sense; and reviewed an external expert's report that concluded Banco Santander's overall succession arrangements and framework for the board and critical roles throughout the Group are consistent with regulatory requirements and best industry practice.
- Monitored the skills and training needs of the Group's directors and reviewed an overview of the Group's director induction and training programmes at the subsidiaries to coordinate them across the Group. The committee's review showed subsidiaries' high level of adherence to the GSGM. All GSGM subsidiaries have induction and training programmes and offer structured programmes for directors to develop and enhance skills, when needed.

- Oversaw the holistic reviews by external advisers of our governance model and functioning. When Egon Zehnder conducted an effectiveness review of the board of directors and its committees in 2020, its report concluded that Banco Santander's board is highly effective. When another external adviser performed a holistic review of our governance arrangements to assess its functioning and conformity with regulations, supervisors' expectations and industry best practices in 2021, it concluded Banco Santander has a sophisticated governance model that suits its group-wide characteristics and requirements and acknowledged our board members' high profile and diversity of the board in terms of gender, national origin, age and background.
- Reviewed the action plan for such key governance objectives as ensuring continued clarity of the role and the responsibilities of the most senior executives (including the executive chair and CEO); that checks and balances remain appropriate and effective; and that the independence of control functions remains fully preserved according to the external reports' findings and our commitment to constant improvement.
- Focused on reviewing corporate governance matters and reports and oversaw engagement with shareholders and investors about governance.

2022 priorities

The committee set these priorities for 2022:

- Continuing to focus on the review of the senior executive and board member succession plans according to the Group's current and future strategy and to potential challenges the business may face when identifying future leadership needs.
- Continuing to ensure that gender and broader diversity remains a key priority in our succession policy, appreciating that a more diverse and inclusive workforce is critical to a sustainable and successful business.
- Continue to monitor board members' skills and experience, in particular, training needs and ongoing training and development for the whole board.
- Ensuring the actions recommended in external advisers' governance reviews are introduced into the action plan and correctly executed.
- Keeping the corporate governance arrangements under constant review to make sure it continues to consider all stakeholders' interests with strategic relevance for the Group by closely monitoring shareholder engagement and, together with the lead independent director, by taking into account their feedback and insight.

4.7 Remuneration committee activities in 2021

'In 2021, we maintained oversight of the application and implementation of remuneration policies and frameworks for the Group and focused on simplifying executive remuneration within regulatory parameters. This included shaping compensation schemes consistent with the Group's values of 'Simple, Personal and Fair', meeting stakeholders' expectations. In particular, the committee conducted a comprehensive review of the Group's long term variable compensation which has been in place for five years, to see what enhancements could be implemented, and proposed simplifying the metrics, amending the key metrics to align with the Group's evolving strategy and introducing an ESG metric for the first time. This review included consultation with the Group's significant institutional shareholders.

We addressed the importance of the gender pay gap and equal pay by overseeing the implementation of the diversity and inclusion strategy on remuneration, including progress against gender targets, acknowledging diversity as a key pillar for succeeding in the Group's long-term strategy.

An appropriate mix of committee members' skills helped the committee address those tasks and operate effectively, offering appropriate challenge and support to management. We also made sure we coordinated with our core subsidiaries' remuneration committees constantly and were aware of subsidiary teams' point of view so corporate remuneration policies would be applied consistently'.

Bruce Carnegie-Brown
Chair of the remuneration committee



This section is the report the remuneration committee prepared on 21 February 2022 regarding its activities. The board of directors approved it on 24 February 2022.

Composition

Position		Category	Appointed on
Chair	Bruce Carnegie-Brown	Independent	12/02/2015[A]
Members	R. Martín Chávez	Independent	27/10/2020
	Sol Daurella	Independent	23/02/2015
	Henrique de Castro	Independent	29/10/2019
	Luis Isasi	Other external	19/05/2020
Secretary	Jaime Pérez Renovales		

A. Committee chair since 12 February 2015.

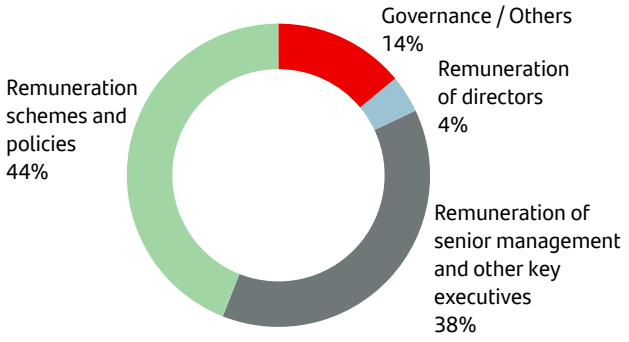
The board of directors appointed the committee's members based on their expertise, skills and experience regarding the matters it handles.

For more details, see section 4.1 'Our directors' and 'Board skills and diversity matrix' and 'Committees skills and diversity matrix' in section 4.2.

Time allocation

In 2021, the remuneration committee held 12 meetings. 'Board and committee attendance' in section 4.3 provides information on members' attendance and the estimated average time each one spent on preparing for and participating in meetings.

The chart below shows the committee's approximate time allocation to each function in 2021.



Duties and activities in 2021

This section summarizes the remuneration committee's activities in 2021.

Duties	Actions taken
Remuneration of directors, senior management and other key executives	
Individual remuneration of directors in their capacity as such	• Analysed and proposed adjustments to the remuneration of directors in their capacity as such, based on the positions they held on the collective decision-making body, their membership on and attendance at the meetings of the committees, and any other objective circumstances evaluated by the board.
Individual fixed remuneration for executive directors	• Reviewed the adequacy of executive directors' fixed remuneration to market rates and their responsibilities, which resulted in no quantity adjustments.
Individual variable remuneration for executive directors	• Proposed to the board immediately payable and deferred amounts of variable remuneration of the preceding year. • Submitted a proposal, as part of the directors' remuneration policy, on the annual performance indicators and targets used to calculate 2022 variable remuneration, subject to board approval. • Proposed the achievement scales and weightings for annual and multi-year performance targets.
Share plans	• Submitted a proposal to the board, for vote at the 2021 AGM, regarding the approval of remuneration plans that involve the delivery of shares or share options (deferred multiyear targets variable remuneration plan; deferred and conditional variable remuneration plan; application of the Group's buy-out policy). • Analysed and submitted to the board a proposal, for approval at the AGM, regarding the 2021 Digital Transformation Award, which was designed and implemented to attract and retain key talent to drive long-term share value creation through the achievement of key digital milestones.
Propose the annual directors' remuneration report to the board	• Drafted and proposed to the board the annual directors' remuneration report for an advisory vote at the 2021 AGM. • Assisted the board of directors in overseeing compliance with the director remuneration policy. • Received information from the lead independent director about engagement with key shareholders and proxy advisers regarding executive director remuneration issues. • Held a joint session with the risk supervision, regulation and compliance committee to verify that remuneration schemes factor in risk, capital and liquidity, and do not offer incentives to assume risks that exceed Banco Santander's tolerance, thus promoting and being compatible with adequate and effective risk management.

Duties	Actions taken
Remuneration policy for senior management and other key executives	• Focused on simplifying executive remuneration, shaping remuneration schemes consistent with Banco Santander's Simple, Personal and Fair values, and including long term ESG related metrics in coordination with the responsible banking, sustainability and culture committee. • Proposed to the board the global annual variable remuneration for 2020 payable immediately and the deferred remuneration of the main executive segments, in line with the achievement of previously set quantitative and qualitative targets; proposed to the board the individual remuneration of members of senior management, based on each one's achievement of the annual performance targets and their weightings as set by the board. • Reviewed the results of top executives' performance review calibration in coordination with non-executive directors for the executive chair, the executive directors and the chief financial officer; the risk supervision, regulation and compliance committee for the chief risk officer and chief compliance officer; and the board audit committee for the chief audit executive. • Submitted proposals to the board to determine or amend the annual fixed and variable remuneration of certain senior management members. • Established the annual performance indicators to calculate variable remuneration for 2022 in order to simplify the bonus pool scorecard, with a focus on customers, risk, capital and profitability. • Set the achievement scales for the annual and multi-year performance targets and weightings for submission to the board.
Remuneration of other executives whose activities may have a significant impact on the Group's risk profile (Identified Staff)	
Remuneration for other executives who are Identified Staff but not senior management	• Reviewed the fixed and variable remuneration ratios for control functions to ensure consistency with regulation and their control objectives. • Set key remuneration components for Identified Staff (Material Risk Takers) in coordination with the risk supervision, regulation and compliance committee. • Maintained close coordination with the board and its committees to ensure that risks are correctly controlled and mitigated. • Submitted a proposal to the board, for subsequent submission to the 2021 AGM, regarding the approval of maximum variable remuneration of up to 200% of the fixed component for Group employees whose activities have a material impact on Banco Santander or the Group's risk profile, including executive directors. • Reviewed certain remuneration schemes to support the attraction and retention of key talent to help drive digitalization, the application of incentives implemented in the Group, and the achievement of the long-term metrics associated with deferred remuneration.
Assist the board of directors in supervising compliance with remuneration policies	• Reviewed director remuneration schemes to ensure they considered the Group's results, culture and risk appetite, and that there were no incentives to assume risks that exceed Banco Santander's tolerance, thus promoting effective risk management. • Informed the board of a report issued by an external adviser that assessed the remuneration policy according to Ley 10/2014, CRD IV and EBA guidelines, which establish that credit institutions' remuneration policies will be subject to a central and independent internal assessment to verify compliance with the remuneration guidelines and procedures adopted by the board of directors as part of its supervisory function. The review concluded that the Group's policies, procedures and practices comply with the prudential requirements applicable to credit institutions. • Reviewed Group remuneration policies and practices and assessed their effectiveness prior to their review by the board of directors. • Reviewed and favourably assessed the simplification of the remuneration policy, to facilitate its effective use and understanding as well as the inclusion of CRD V amendments (i.e. gender neutrality, ESG objectives, use of variable remuneration instruments, adjustments in criteria for identifying MRTs, minimum deferral period of four years and an amendment to the limitations on business objectives for control functions according to regulation).
Gender and equal pay	
	• Continued to monitor application of diversity policies, including the achievement of targets to reduce gender pay gap and equal pay gap. • Reviewed gender pay gap data in absolute terms and regarding "equal pay for equal work" in the Group; compared them to the previous year and to targets; and focused on measures to enhance them in every country.
Governance	
Governance	• Monitored the actions subsidiaries took to reduce their board members' remuneration in line with the initiative of the Group's board in light of the pandemic. • Took up certain remuneration oversight tasks for Santander London Branch according to requirements from the UK's Prudential Risk Authority (PRA) which expects "third-country branches" in the UK to have independent oversight.
Information for general meetings and corporate documents	
Reporting to shareholders	• At our 2021 AGM (held remotely), board secretary Jaime Pérez Renovales, and substituting Bruce Carnegie-Brown as committee chair, reported to shareholders on the matters and activities within the committee's scope in 2020.
Corporate documents for 2021	• Prepared this report on its activities in 2021, which includes a performance review of its assigned functions and key priorities for 2022 based on the assessment of the effectiveness of the board and its committees.

Annual assessment of the committee and its achievement of 2021 objectives

In 2021, to follow up on the external review in 2020, an internal effectiveness review of our board practices was conducted and areas for improvement were identified. For more details about the internal review and its findings see 'Board assessment in 2021' in section 4.3.

The committee took the actions planned for 2021. Among the salient actions, it:

- Kept incentives under regular review to ensure they continue to align with our strategy and drive the right culture and behaviours; and made changes to simplify remuneration schemes to ensure they are effective and fair within regulation.
- Reviewed proposals to continue to enhance our employee value proposition to attract and retain key talent, maintaining strong shareholder support as well as investors and proxy agencies' appreciation for our thorough approach and disclosures.
- Strengthened coordination and communication with the remuneration committees of the Group's subsidiaries, monitoring the application of corporate remuneration policies to ensure a consistent approach. The presentations from Santander UK and Santander Brasil's Human Resources functions provided the committee with an overview of local market practices and challenges.
- Prioritized gender pay measurement across the Group and how it compared to the previous year and set targets; and reviewed internal tools to calculate the gender equality metrics more accurately and action plans to reduce the gender pay gap for the Group and its core subsidiaries.

The director remuneration policy report

Pursuant to section 2 of Article 529 *novodecies* of the Spanish Companies Act, the remuneration committee issues this report on the resolution regarding the directors' remuneration policy for 2022, 2023 and 2024 that will be submitted by the board of directors at the 2022 AGM as a separate item on the agenda and is an integral part of this report. See section 6.4 'Directors' remuneration policy for 2022, 2023 and 2024 submitted to a binding shareholder vote' and section 6.5 'Preparatory work and decision-making for the remuneration policy; remuneration committee involvement'.

Banco Santander's Remuneration function prepares the directors' remuneration policy based on requests, observations and suggestions it receives from the human resources committee, remuneration committee, board of directors and external advisers throughout the year (the policy for 2022, 2023 and 2024 includes suggestions from Willis Towers Watson). The remuneration committee receives a first draft of the policy every January to review and debate. During the meeting, it considers the inputs the chair and lead independent director receive through shareholder and stakeholder engagement during the year. It also considers any recommendations from regulators, legal requirements or regulation that has come to light since the last time the policy was submitted for approval at the annual general meeting. The committee also makes sure the policy is consistent with the Group's culture and Simple, Personal and Fair values. The Remuneration function then prepares the final draft for the remuneration committee to submit to the board of directors for approval in February.

The remuneration committee believes the directors' remuneration policy for 2022, 2023 and 2024 included under section 6.4 is consistent with the Group's remuneration policy and with the remuneration scheme in the Bylaws.

The directors' remuneration policy has been reviewed, introducing several new features. It includes share options as variable remuneration instruments (along with shares) to align executive pay with shareholders' interests. It has updated long term metrics to cover ESG aspects, RoTE and relative TSR (which was already included, but increasing the minimum threshold for pay) to be consistent with best practice and our shareholders' and investors' interests. Furthermore, it has reduced our annual pool metrics from four to three (i.e. customers, RoRWA and RoTE), with qualitative adjustments for risk, capital adequacy, competitor analysis, sustainable results and responsible banking commitments to sharpen our strategic focus.

2022 priorities

The committee set these priorities for 2022:

- Keeping incentive measures under continuous review to ensure they continue to align with our strategic aims, focus on customers and sustainable profitability and drive the right culture and behaviours, balancing the needs of our people, customers, communities, shareholders and regulators.
- Continuing to enhance our employee value proposition with a view to attracting and retaining key talent for the Group, ensuring meritocracy through a proper correlation between pay and performance, and considering the changing environment, new ways of working and the digital transformation.
- Keeping the focus on the continuous improvement and simplification of our variable remuneration schemes to maintain strong shareholder support and investors' and proxy advisers' appreciation.
- Increasing its coordination with the Group subsidiaries' remuneration committees and HR teams to ensure the consistent application of corporate policies as well as mutual awareness of the Group's trends and challenges.
- Continue focusing on accelerating pay equality across the Group.

4.8 Risk supervision, regulation and compliance committee activities in 2021

'2021 was a challenging year in terms of risks. Because of the challenges posed by covid-19 and the uncertain macroeconomic conditions, the committee closely oversaw the actions to manage and mitigate them. The committee also closely monitored both everyday and more strategic, non-traditional emerging risks in all subsidiaries, in full coordination with the board and other committees.

Inspired by our previous chair, we remain focused on long-term strategic risks that could ultimately compromise Banco Santander's business and risk profile. The second strategy meeting we held in June 2021 served as another forum to examine and debate such relevant emerging risks as crypto assets, new areas of business, and property and other market segments in the wake of the pandemic. The committee will pay close attention those risks and remain closely vigilant of any that emerge in the future to ensure they are properly and evenly managed in daily operations'.

Belén Romana
Chair of the risk supervision, regulation and compliance committee



This section is the report the risk supervision, regulation and compliance committee prepared on 18 February 2022 regarding its activities. The board of directors approved it on 24 February 2022.

Composition

Position		Category	Appointed on
Chair	Belén Romana	Independent	28/10/2016[A]
Members	R. Martín Chávez	Independent	27/10/2020
	Luis Isasi	Other external	19/05/2020
	Ramiro Mato	Independent	28/11/2017
	Pamela Walkden	Independent	01/05/2021
Secretary	Jaime Pérez Renovales		

A. Committee chair since 1 April 2021.

The board of directors appointed the committee's members based on their expertise, skills and experience regarding the matters it handles.

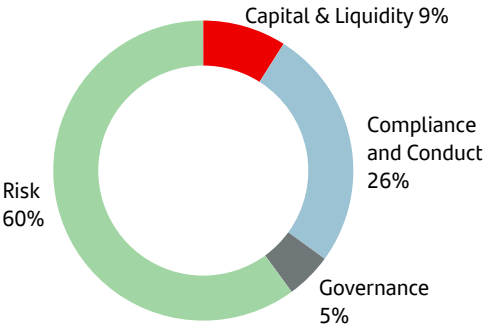
For more details, see section 4.1 'Our directors' and 'Board skills and diversity matrix' and 'Committees skills and diversity matrix' in section 4.2.

On 1 April 2021 Álvaro Cardoso stepped down as the risk committee chair and member, being replaced by Belén Romana.

Time allocation

In 2021, the committee held 16 meetings including one strategy session in June. 'Board and committee attendance' in section 4.3 provides information on members' attendance and the estimated average time each one spent on preparing for and participating in meetings.

The chart below shows the committee's approximate time allocation to each function in 2021[A].



A. All regulatory and supervisory relations matters discussed in 2021 are included in each relevant category in the above chart.

Duties and activities in 2021

This section summarizes the risk supervision, regulation and compliance committee's activities in 2021.

Duties	Actions taken
Risk	
Assist the board in (i) defining the Group's risks policies, (ii) determining the risk appetite strategy and culture and (iii) supervising their alignment with the Group's corporate values	• Carried out an overview of the Group's risks, conducted specific analyses by unit and risk type; assessed proposals, issues and projects relating to risk management and control and received updates on risks from the Group's main subsidiaries and businesses. • Discussed the regular monitoring of the risk appetite and its metrics, and reviewed the annual risk appetite statement proposal (including an analysis of new metrics proposed and any breaches occurred throughout the year) before it was submitted to the board for approval. Checked compliance with risk appetite limits every quarter and reviewed new proposed metrics and any breach in the year. • Reviewed compliance with the new EBA Guidelines 2021/05 on internal governance. • Oversaw the update of our social and environmental policies (in coordination with the responsible banking, sustainability and culture committee), which set out the financing criteria and prohibited actions in specific industries such as energy, mining and soft commodities. • Reviewed the 2021 recovery plan, assessed the Group's resilience to severe stress scenarios and submitted it to the board of directors for approval. • Reviewed and challenged the key processes of the Group, such as the internal capital adequacy assessment process (ICAAP) and internal liquidity adequacy assessment process (ILAAP), the Strategic Plan, the 3-year strategic financial plan, the annual budget and the Recovery and Resolution plans. Reviewed and challenged the identified risks and mitigating factors associated with those key processes, their consistency, and their overall alignment to the Group' risk appetite.
Risk management and control	• Received regular updates on the top risks under management and the appropriateness of mitigating controls. • Reviewed the robustness of the Group's risk control management, most notably the risk profile assessment (RPA), and the risk control self-assessment (RCSA), two of the main tools for risks control. • Conducted regular reviews of the Group's risks as well as the specific reviews by units and risk types. Assessed proposals, issues and projects relating to risk management and control. • Analysed risks and opportunities associated with emerging risks and how they affect the different geographies and businesses. • Supervised the risks associated with the main corporate transformation programmes and their risk mitigation measures. In particular, it monitored the risks and controls associated with PagoNxT and Openbank, among others. • Supported the board in conducting stress tests of Banco Santander through the assessment of scenarios and assumptions, analysing the results and the measures proposed by the Risk function. Ensured that the stress test programme was aligned with the EBA Guidelines 2018/04 on institutions' stress testing. • Continued to focus on non-performing loans and non-performing assets performance during 2021, in particular considering the evolution of the portfolios under moratoria and their effect on credit provisions. • Received and challenged periodic market and structural risk updates and counterparty risk reviews. • Engaged on non-financial risks including legal risk, environmental and social risks (including climate), and vendor risk management, which remained key areas of focus. • Monitored, in full coordination with the innovation and technology committee, risks stemming from technological obsolescence and cybersecurity. Received reports on major IT developments and projects. • Monitored the post-Brexit situation including its risk effects over the UK and the Group, and the status of preparedness to reduce and mitigate such risks. • Reviewed, supervised and challenged any strategic project before its submission to the board of directors. • Coordinated with the responsible banking, sustainability and culture committee in the supervision and evaluation of (i) the alignment of risk appetite and limits with corporate culture and values; and (ii) the non-financial risks.
Supervise the risk function	• Ensured the independence and efficacy of the Risk function. • Assessed the Risk function (including its staffing and resourcing suitability) as well as the performance of the CRO in coordination with the remuneration committee, with the purpose of informing the board in order to set his variable pay. • Reviewed new appointments for key positions for the Group and relevant subsidiaries for the Risk and Compliance and Conduct functions, in coordination with the nomination committee. • Reviewed and supervised the annual Group CRO objectives.
Collaboration to establish rational remuneration policies and practices	• Held a joint session with the remuneration committee to confirm that remuneration schemes factor in risk, capital and liquidity, and do not offer incentives to assume risks that exceed the level tolerated by Banco Santander in line with appropriate and effective risk management. The joint session also assessed the performance of the CRO and CCO. • Analysed the factors used to determine the ex-ante risk adjustment of total variable remuneration assigned to the units, based on how previously assessed risks actually materialized, in conjunction with the remuneration committee. • Reviewed the 2021 bonus pool and results of the exercise carried out annually to identify employees whose professional activities had a material impact on the Group´s risk profile.

Duties	Actions taken
Capital and liquidity	
Assist the board in reviewing and approving capital and liquidity strategies and supervising their implementation	• Reviewed and challenged the annual ICAAP prepared by the Finance department and challenged by the Risk function in accordance with industry best practices and supervisory guidelines and submitted this report to the board for approval. Drew up a capital plan according to the scenarios envisaged over a three-year period. • Endorsed the Pillar III disclosures report, which was submitted to the board for approval. The report described various aspects of the Group's management of capital and risk and provided an overview of the function; base capital and prescribed capital requirements; policies for managing the various risks undertaken by Banco Santander in regard to capital consumption; composition of the Group's portfolio and its credit quality (measured in terms of capital) and the roll-out of advanced internal models. • Reviewed and challenged the ILAAP, developed in line with the Group's business model and submitted to the board for approval. • Performed continuous monitoring of capital levels, and capital management and tools, including the 2021 securitizations plan and the analysis of the portfolio profitability versus the risk undertaken.
Compliance and conduct	
Supervise the Compliance and conduct function	• Ensured the independence and efficacy of the Compliance and conduct function. • Assessed the Compliance and conduct function (including its staffing and resourcing suitability) as well as the performance of the CCO (in coordination with the remuneration committee) to inform the board in order to set her variable pay. • Reviewed and supervised the annual CCO objectives. • Reviewed and followed up on the 2021 Compliance programme, including efforts to continuously improve the Compliance and conduct function. • Reviewed and challenged the status of the compliance and conduct strategy. • Received monthly reports on compliance and conduct matters as part of the risk and compliance monthly report, which cover regulatory issues, product governance and consumer protection, reputational risk, internal and external events, notifications and inspections by supervisors, updates on the One Financial Crime Compliance (*One FCC*) programme, among other matters. • Held bi-annual specific private sessions with the CCO (in addition to other informal meetings) to discuss strategic compliance topics as well as to report independently and directly to the committee on any material issue relating to the compliance and conduct function, if needed.

Regulatory compliance	• Monitored compliance with regulatory requirements regarding:
	  • The Dodd Frank Title VII update.
	  • Adaptation of the Volcker Rule compliance programme in line with recent amendments introduced, continuing the oversight of this regulation.
	  • The status of data protection under the GDPR, the contribution to determining the Euribor and the Code of Conduct.

Supervise the whistle-blowing channel (*Canal Abierto*)	• Received, in a joint meeting with the audit committee, the annual report on Canal Abierto, Santander's ethical channel model that helps consolidate the Group's "Speak up" culture through a work environment where employees can talk straight without fear of reprisal.

Financial crime compliance (FCC)	• Oversaw the Group´s observance with FCC regulations as well as the activities carried out by the function. In particular:
	  • Provided a quarterly update on progress with One FCC implementation strategy in Banco Santander and its subsidiaries.
	  • Received recommendations and observations stemming from the annual independent expert report on Banco Santander in accordance with the Spanish Law 10/2010 and Royal Decree 304/2014 (on anti-money laundering and terrorism financing).

Product governance and consumer protection	• Received an update on the status of customers' complaints and associated action plans in place to address identified deficiencies. • Reviewed an update about progress made on subsidiary action plans for internal sales force pay in the Group and a general overview of conduct risk from the external sales force, at a joint meeting with the remuneration committee. • Received information on risk management and main risks identified, concerns, priorities and actions taken by the Product Governance and Consumer Protection (PGCP) function regarding the management and mitigation of conduct risk with retail customers, including product governance activity.
Governance	
Corporate governance and internal governance	• Received quarterly updates on the matters discussed at the responsible banking, sustainability and culture committee by the chair of this committee. Furthermore, the CRO provided updates on the work of the risk control committee in his capacity as chair of that committee. • In a joint session with the audit committee, reviewed the status of the internal audit plan and of the main recommendations of Santander, and an update on the internal audit works performed in relation to the risk corporate division.
Regulators and supervisors	
Regulatory and supervisory relations	• Received regular updates on regulatory and supervisory relations and maintained focus on the most relevant developments related to the SSM, the Single Resolution Board (SRB), the supervisors of all the Group's subsidiaries and the Supervisory Review and Evaluation Process (SREP).

Duties	Actions taken
Information for general meetings and corporate documents	
Reporting to shareholders	• At our 2021 AGM (held remotely), board secretary Jaime Pérez Renovales, and substituting Alvaro Cardoso de Souza as committee chair, reported to shareholders on the matters and activities within the committee's scope in 2020.
Corporate documents for 2021	• Prepared this report on its activities in 2021, which includes a performance review of its assigned functions and key priorities for 2022 based on the assessment of the effectiveness of the board and its committees.

Annual assessment of the committee and its achievement of 2021 objectives

In 2021, to follow up on the external review in 2020, an internal effectiveness review of our board practices was conducted and areas for improvement were identified. For more details about the internal review and its findings see 'Board assessment in 2021' in section 4.3.

The committee took the actions planned for 2021. Among the salient actions, it:

- Prioritized oversight of the Group's top risks, impacts and mitigation actions to ensure risks were appropriately managed and would remaining within the board-approved risk appetite limits.
- Examined emerging and non-traditional risks to anticipate key strategic changes in the business as discussed at its strategic meeting held in June 2021.
- Contributed to the role the Group played in proactively supporting economic recovery after the covid- 19 crisis, by overseeing the Group's credit - related policies to help our customers, while maintaining the strength of Banco Santander's capital and liquidity.
- Supervised core business units, geographies and new businesses (including new digital platforms), with an additional focus on emerging business that are relevant for the Group's strategy.
- Heightened coordinated action with other board committees to examine matters that concerned them holistically.
- Checked that the Risk and Compliance and conduct functions had effective and appropriately resources.

2022 Priorities

The committee set these priorities for 2022:

- Continuing to monitor the post-covid-19 landscape, especially macroeconomic conditions and their effect on loans, provisions and conduct or reputational risk.
- Overseeing the risks associated with certain strategic projects, especially ones relating to financial crime and money laundering prevention, cyber security, climate change, model risk, PagoNxt, Investment Platforms, Digital Consumer Bank and One Santander.
- Continuing to monitor the Group's top risks, early warning indicators, and mitigation actions in order to ensure risks are appropriately managed according to the Group's risk profile and remain with the board-approved risk appetite limits.
- Continuing to identify emerging and non-traditional risks in order to anticipate potential impacts on our business model. Those risks will be a topic of debate at the committee's annual strategic meeting, which follows up on its strategic meetings in 2020 and 2021.
- Maintaining close coordination with the board and its committees to ensure that risks are closely controlled and mitigated.
- Continuing to work on the committees' effectiveness to make sure it is discharging its duties with utmost efficacy.

4.9 Responsible banking, sustainability and culture committee activities in 2021

'The committee continued to drive the responsible banking agenda in 2021 by assisting the board with oversight of strategy in sustainability.

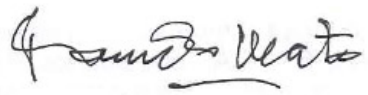
In 2021 the committee assisted the board with setting the climate change strategy, a key enabler to achieve the net zero carbon strategy ambition by 2050. The committee continued to monitor Banco Santander's response to covid-19, focusing on the social impact of the pandemic and supporting employees, customers (especially the most vulnerable) and society as a whole.

Sustainable finance and the green agenda remained key topics for the committee, which reviewed the measures being taken by Santander's main regions and businesses. The committee continued to oversee the core initiatives, targets and proposed metrics to drive the commitments on diversity and inclusion, ethical behaviour and responsible supplier practices. It revised environmental and risk management policies and standards on financing sensitive industries. It devoted time to reviewing annual report documents on responsible banking; revised ESG metrics proposals for the long-term incentives programme, LTIP; and made progress with the development of an internal taxonomy and data quality.

To improve awareness and effective execution of global initiatives, the Group held an inaugural responsible banking chairs' Convention in 2021 for the subsidiaries' responsible banking committee chairs to collaborate and share thoughts with a view to driving local traction on action plans aligned with Group expectations and goals. The Convention focused specifically on our ambition to be net zero in carbon emissions by 2050.

The committee has continued to work closely with the board of directors and main board committees to ensure that its work was fully coordinated and effective. I would like to take this opportunity to thank the committee members for their invaluable contributions during the year'.

Ramiro Mato
Chair of the responsible banking, sustainability and culture committee



This section is the report the responsible banking, sustainability and culture committee prepared regarding its activities on 21 February 2022. The board of directors approved it on 24 February 2022.

Composition

Position		Category	Appointed on
Chair	Ramiro Mato	Independent	01/07/2018[A]
Members	Homaira Akbari	Independent	01/07/2018
	Álvaro Cardoso	Independent	24/07/2018
	Sol Daurella	Independent	01/01/2018
	Belén Romana	Independent	01/07/2018
Secretary	Jaime Pérez Renovales		

A. Committee chair since 1 July 2018.

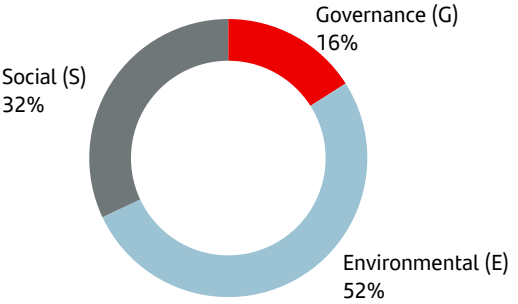
The board of directors appointed the committee's members based on their expertise, skills and experience regarding the matters it handles.

For more details, see section 4.1 'Our directors' and 'Board skills and diversity matrix' and 'Committees skills and diversity matrix' in section 4.2.

Time allocation

In 2021, the responsible banking, sustainability and culture committee held six meetings. 'Board and committee attendance' in section 4.3 provides information on members' attendance and the estimated average time each one spent on preparing for and participating in meetings.

The chart below shows the committee's approximate time allocation to each ESG criteria in 2021.



Duties and activities in 2021

This section summarizes the responsible banking, sustainability and culture committee's activities in 2021 based on ESG criteria.

Duties	Actions taken
Environmental (E)	
Sustainable banking	
Environmental and climate change	• Considered the Group's climate change strategy in terms of how Banco Santander would deliver on its external commitments to align its portfolio with the Paris Agreement. Reviewed the proposed alignment of the electric power generation portfolio, the thermal coal targets and the proposed approach to creating a net zero carbon roadmap. • Challenged the Group's public commitment to be net zero carbon by 2050. Reviewed progress made on climate projects, including the ambition to be net zero by 2050 and participation in the Net Zero Banking Alliance. • Received presentations on the Climate Finance Report from the regional heads for Europe, North America and South America and from Santander Consumer Finance, Santander Wealth Management & Insurance and Santander Corporate Investment Banking (SCIB). The report, published in July 2021, highlighted key milestones and progress with the Group's climate ambitions. • Reviewed and made observations on business proposals on climate change submitted by our entities in Europe, North America and South America and by Santander Consumer Finance, Santander Wealth Management & Insurance and Santander Corporate Investment Banking (SCIB).
Green finance	• Reviewed the green finance strategy and challenges and opportunities in Europe, North America and South America. Green finance is the increase in financial flows (banking, micro-credit, insurance and investment) from the public, private and not-for-profit sectors to address sustainable development priorities. Aligned business strategies with objectives, commitments and regulatory requirements focusing on aiding customers' transition to carbon neutrality. • Endorsed the main priorities for 2021, including our ambitions to be net zero, aid our customers' green transition and promote a green culture. • Monitored the green bond issuances, the annual disclosure requirements regarding the use of proceeds and impacts achieved from assigned projects and endorsed the Banco Santander´s 2020 Green Bond Report.
Internal Emission Offsetting Project	• Reviewed the 2021 emissions´ offsetting corporate plan which enables the Group to continue being a carbon neutral organization through the offsetting of the emissions caused by its own activity. • Monitored the carbon footprint compensation projects being implemented across the Group to ensure alignment with agreed commitments.
Regulatory landscape	• Continued to monitor the main regulatory initiatives of the sustainable finance framework that are relevant to Banco Santander, with a particular focus on Europe, due to heightened regulatory activity. The European sustainable finance framework has evolved rapidly in recent years to drive funds and investment to support the transition to a low carbon economy in 2050 and increase transparency on corporate business models and activities.
Social (S)	
Inclusive banking	
Sustainable finance	• Provided feedback on the Sustainable Finance Classification System to identify, measure and manage the volume of sustainable green and social financing activities. The Sustainable Finance Classification System aligns with regulatory reporting requirements. Approved guidelines for its implementation within the business. • Reviewed SCIB´s sustainable finance proposition, business opportunities and challenges, for customers interested in financing green and social projects. The significant progress on sustainable finance and notable transactions for SCIB were reviewed.
Support for higher education	• Reviewed the strategy, objectives and KPIs relating to Banco Santander' support for education, employability and entrepreneurship at universities. Banco Santander has become a leader in supporting higher education and intends to continue making it its flagship programme for investing in communities.
Governance (G)	
Responsible banking strategy	
Governance	• To ensure effective controls will be in place to mitigate risks and enhance opportunities regarding sustainability and responsible banking practices, the committee reviewed with other board committees matters concerning the corporate culture and values, responsible banking practices and sustainability within the board-approved guiding principles of responsible banking governance. • Provided through regular read-outs an overview of the responsible banking agenda to other committees (like the board risk supervision, regulation and compliance committee) and to the board. • Received regular updates on the responsible banking agenda from several units and corporate functions, to improve communication and ensure best practices are shared on a global basis.

Duties	Actions taken
Materiality assessment and Responsible Banking commitments	• Considered the outcomes of the 2021 ESG Materiality assessment, an annual assessment conducted by the Responsible Banking team in coordination with other teams and an external consultant, that helps identify the most relevant ESG topics for the Group. Its results will ensure consistency between the Group's responsible banking priorities and public commitments. • Continued to monitor developments in the Amazon and the associated actions being taken by the Group to mitigate negative environmental consequences therein. • Reviewed the proposed responsible banking agenda for 2022-2025 and the associated commitments for 2025, to ensure they remain aligned with expectations.
Responsible Banking initiatives	• Oversaw the restructuring of One Santander in Europe, so subsidiaries could share best responsible banking practices in downsizing. • Monitored and assessed the Group´s progress on its 11 public commitments to ensure that its KPIs remained relevant and aligned with committee expectations. • Monitored and challenged ESG and responsible banking metrics in coordination with the remuneration committee to ensure alignment with market practice and increasing shareholder interest. Assisted the board in making sure the responsible banking objectives, metrics and commitments were embedded in the Group's remuneration schemes.
Culture and values	
Corporate culture	• Coordinated with the remuneration committee on its review of the alignment of remuneration schemes with corporate culture and values. • With the risk supervision, regulation and compliance committee, supervised and assessed (i) the alignment of risk appetite and limits with corporate culture and values and (ii) non-financial risks. • Reviewed The Santander Way, which is our global culture approved by the board in January 2015, aligned with the Group's strategy and complementing Banco Santander's ambition to build a more responsible bank. Since 2015, a common language and behaviour has translated into our values of Simple, Personal and Fair (SPF) shared by all units. Our corporate policy is an important factor in developing consistent initiatives and enabling us to measure our values impact. Significant progress continues both globally and locally, with tangible results for our people, customers, shareholders and communities. • Assisted the board in promoting and embedding corporate culture and values across the Group, monitoring adherence and ensuring that the corporate culture is consistent with the Group's purpose and values.
SPF with employees	• Worked with the remuneration committee to advise the board on the design and implementation of the responsible banking scorecard (which forms part of the qualitative assessment of the bonus pool) to ensure that responsible banking targets, metrics and commitments were effectively embedded across the Group. • Considered the Group´s diversity and inclusion strategy and initiatives, together with the related targets for 2025 and discussed the action plan and approach towards each of the diversity dimensions relevant to the Group and provided feedback on Banco Santander's position in global rankings. • Received an update on the talent management programme and wellbeing of employees throughout the Group. • Ensured an overview of the 2021 global engagement survey included recommended actions. The purpose of the survey, now in its seventh year, is to garner employees' opinions on the best things about working at Banco Santander and areas of improvement. It enables the Group to draw up actions and initiatives to improve Banco Santander´s employee engagement and ways of working.
SPF with customers	• Received an update on the social impact of covid-19 on the Group´s key stakeholders, especially its vulnerable customers. Considered the potential reputational risks associated to covid-19 and the proposed recommendations for dealing with customers.
SPF with suppliers	• Reviewed the supplier action plan to include ESG standards in hiring procedures.
SPF with general society	• Monitored the progress made with responsible banking communications and determined whether the four key responsible banking communication pillars of diversity and inclusion, financial empowerment, climate change and Santander Universities remained relevant. Shared priorities and analysed a common responsible banking approach. Considered opportunities to expand sustainable finance activities, with a strong focus on financial inclusion.
Ethical considerations	• Reviewed and provided feedback on the proposed definition and scope of ethical behaviour within the Group to ensure ongoing fair business conduct. • Agreed an action plan to ensure continuous improvement of our ethical behaviour governance and the application of best practices in our internal processes. • Monitored the status of *Canal Abierto* whistleblowing channel, which contributes to the Group's cultural transformation by providing an anonymous way for employees to speak up, thus promoting our corporate behaviours. *Canal Abierto* (or a similar anonymous channel) is available in all Group units. • Reviewed the internal artificial intelligence (AI) ethical principles which aim to foster using AI responsibly in a Simple, Personal and Fair way, ensuring the Group has common guidelines to abide by.
Policies and frameworks	• Reviewed the environmental, social and climate change risk management policy, the general sustainability policy and other relevant responsible banking policies. • Reviewed and endorsed a new responsible banking corporate framework for board approval that was established to promote a consistent approach across the Group.

Duties	Actions taken
Stakeholder engagement	
Non-financial information	• Coordinated with the audit committee on its supervision and assessment of the preparation and presentation of non-financial information according to the applicable regulations and leading international standards. • Reviewed the 2021 Group´ statement of non-financial information, including the independent expert's report, which can be found in the 'Responsible banking' chapter of this annual report.
Stakeholder engagement - indexes and ratings	• Considered Banco Santander´s positioning in global sustainability indexes. • Challenged the strengths, gaps and focus points in relation to Banco Santander´s ranking with ESG rating providers. Reviewed the action plan after engaging with investors on ESG matters.
Information for general meetings and corporate documents	
Corporate documents for 2021	• Prepared this report on its activities in 2021, which includes a performance review of its assigned functions and key priorities for 2022, based on the assessment of the effectiveness of the board and its committees.

Annual assessment of the committee and its achievement of 2021 objectives

In 2021, to follow up on the external review in 2020, an internal effectiveness review of our board practices was conducted and areas for improvement were identified. For more details about the internal review and its findings see 'Board assessment in 2021' in section 4.3.

The committee took the actions planned for 2021. In particular, it:

- Assisted the board in setting the climate change strategy, by endorsing a net zero carbon ambition for 2050, and continued to monitor risks and opportunities to develop sustainable finance proposals for a low-carbon economy.
- Continued to oversee responses to the covid-19 crisis, including the status of payment holidays upon expiry, vulnerable customers and the Recovery and collection functions, ensuring responsible banking practices were embedded in Banco Santander´s customer-centric strategy.
- Continued to monitor and provide feedback on the initiatives, targets and metrics to fulfil the public commitments on diversity and inclusion, financial inclusion, talent management and ethical behaviour.
- Focused on promoting diversity and inclusion and continued to oversee how Banco Santander´s culture, including SPF values, were embedded throughout the Group.
- Monitored the announcements of the Group's progress and achievements that enhance our reputation as one of the world's most sustainable banks.

2022 Priorities

The committee set these priorities for 2022:

- Continuing to advise the board on the climate change strategy and Banco Santander's ambition to be net zero by 2050. The committee will oversee the proposed actions to align with the Task Force on Climate - Related Financial Disclosure (TCFD) recommendations, including the introduction of targets to reduce its exposure to certain climate-intensive industries and the decarbonization strategy and commitments.
- Maintaining assistance to the board in monitoring the development of green and sustainable finance propositions across the Group, aiding our customers' transition to a low-carbon economy and helping fulfil our public responsible banking commitments and regulatory requirements.
- Continuing to assist the board in monitoring the development of the *Banco Santander Finance for All* proposition, which aims to foster financial empowerment among the unbanked, underbanked and vulnerable customers.
- Overseeing the implementation of the strategic diversity and inclusion plan; progress with embedding our culture across the Group; and improvements in conduct, ethical behaviour, customer experience and satisfaction.
- Continuing to assist the board in monitoring the implementation of enablers to further embed ESG in the business and business-as-usual, including Banco Santander's performance of our public responsible banking commitments and KPIs.
- Focusing on ensuring the new corporate Responsible Banking framework is effectively embedded throughout the Group.
- Overseeing the work undertaken with regulators on the stress test exercises relevant to the committee's remit especially climate risk.
- Becoming leaders in ESG to support our customers in the transformation to a more sustainable business model.

4.10 Innovation and technology committee activities in 2021

'Throughout 2021, the committee oversaw the IT Strategy, which aims to integrate key digital capabilities in a new operating model based on global products definition and a common architecture. Its main focus has been to ensure that the strategy enables business initiatives by partnering with global businesses and supporting functions, reducing risks and improving cost efficiency.

Cybersecurity strategy has also remained a top priority for the committee, covering Banco Santander's cyber progress and position, key trends and threat horizon and key strategic cyber-security pillars and initiatives for the Group, which gained significance due to the pandemic and emerging cyber trends.

Additionally, the committee oversaw the update on the Models & Data unit, in order to maximize the potential from information with advanced analytics models to generate business value, manage risks and support innovation across the Group in a responsible way'.

R Martín Chávez
Chair of the innovation and technology committee



This section is the report on the activities of the innovation and technology committee, as approved by the board of directors on 24 February 2022.

Composition

Position		Category	Appointed on
Chair	R Martín Chávez	Independent	27/10/2020[A]
Members	Ana Botín	Executive	23/04/2007
	Homaira Akbari	Independent	27/09/2016
	José Antonio Álvarez	Executive	23/02/2015
	Bruce Carnegie-Brown	Independent	23/02/2015
	Henrique de Castro	Independent	23/07/2019
	Belén Romana	Independent	19/12/2017
Secretary	Jaime Pérez Renovales		

A. Committee chair since 22 December 2020.

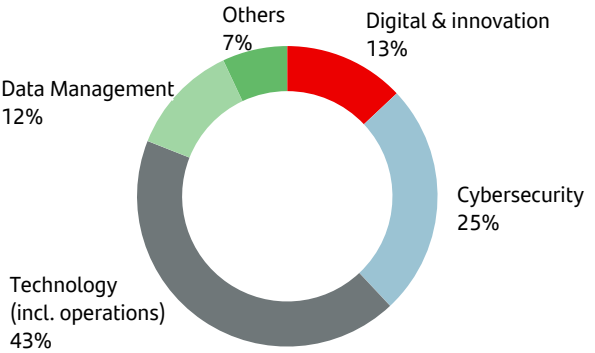
The board of directors appointed the committee's members based on their expertise, skills and experience regarding the matters it handles.

For more information, see section 4.1 'Our directors' and 'Board skills and diversity matrix' and 'Committees skills and diversity matrix' in section 4.2.

Time allocation

In 2021, the innovation and technology committee held four meetings. 'Board and committee attendance' in section 4.3 provides information on members' attendance and the estimated average time each one spent on preparing for and participating in meetings.

The chart below shows the committee's approximate time allocation to each function in 2021.



Duties and activities in 2021

This section summarizes the innovation and technology committee's activities in 2021.

Duties	Actions taken
Innovation	
Innovation framework	• Reviewed the implementation of the Group's strategic technology plan and innovation agenda; and identified the Group's main challenges and capabilities in innovation. • Identified opportunities for faster innovation across the Group and increased the likelihood of success in new business models, technologies, systems and platforms.
Cybersecurity	
Cybersecurity	• Supervised defences against the increasing threat environment, reviewed security controls and automated security processes. • Analysed the high-profile cyber incidents in Banco Santander and other well-known companies. • Received quarterly updates on cybersecurity risks, with a special focus on internal data leakage protection and such external threats as ransomware, in coordination with both the board of directors and the risk supervision, regulation and compliance committee. Assisted the board in the supervision of technological risks and cybersecurity. • Reviewed Santander's cyber vision for 2025, focusing on three pillars, namely: levelling the "cyber battlefield" with criminals through deterrence, offensive disruption and deception techniques; defending the hyper-connected bank of the future to protect the distributed digital platforms and ecosystems; and generating value and trust for stakeholders, customers and society through commercial cyber solutions, customer engagement and collective response. • Analysed the systems supporting core financial crime compliance processes to satisfy new regulation and align them with Banco Santander´s business strategy based on best practices and standards. • Received updates about employee training, internal and external cyber awareness campaigns and other related key areas.
Digital	
Digital	• Boosted collaboration between subsidiaries, business units and the Technology and Operations (T&O) function on digital initiatives, which it oversaw. • Monitored metrics in connection with the digital evolution and associated transformation, as operations outflows, cost-to-income ratio, number of applications, cost per transaction, digital technical transaction, machine learning impact, number of application programming interfaces (BaaS APIs) and tech talent. • Reviewed core digital strategies to transform business and accelerate the growth of new businesses.
Technology and operations	
Technology and operations	• Reviewed the global technology strategy plan and reported to the board on technology and operations (T&O) planning and activities. • Endorsed the Group's core strategic technology priorities, especially in terms of '*agile*', cloud, core system evolution, deep technology skills (APIs, AI, and other matters); oversaw the roll-out of a new operating model and a common architecture, and reduced technology risk. • Ensured T&O strategy properly focused on the Group's relevant issues and priorities. • Received updates on the international advisory board's deliberations about technological, innovation, cyber, talent and new financial trends.
Data management	
Data management	• Received updated information on the Models & Data unit's priorities for the year, to stay fully appraised on the models and data value chain for business growth and customer experience, risk control improvement, model and data development and data and artificial intelligence ethical principles definition and use. • Assessed the adequacy of the resources of the Data function and possible new regulations, validating their appropriateness and readiness for the Group and at local level.

Annual assessment of the committee and its achievement of 2021 objectives

In 2021, to follow up on the external review in 2020, an internal effectiveness review of our board practices was conducted and areas for improvement were identified. For more details about the internal review and its findings see 'Board assessment in 2021' in section 4.3.

The committee took the actions planned for 2021. Among the salient actions, it:

- Continuously reviewed the Group's innovation strategy, especially in regard to a business-oriented T&O transformation model.
- Prioritized digital strategy through the implementation of multidisciplinary projects for the Group.
- Continue to strengthen response measures and innovation to react to an environment of ever-changing threats.
- Reviewed and discussed new trends and regulations on data management and analytical capabilities in the Group's businesses, based on the international advisory board's feedback.

2022 Priorities

The committee set these priorities for 2022:

- Assisting the board of directors with the Group's innovation strategy, and with trends arising from new business models, technology and products.

- Reviewing the effectiveness of data management and analytics, as enablers for the Group to fulfil strategic priorities.
- Supervising activities to continue strengthening the Group's cyber response and constant innovation to manage the changing threats.
- Continuing to assess and provide suggestions on initiatives, targets, commitments, KPIs, and proposed metrics on cross-projects relating to the Group's digital strategy, which will remain a key priority.

4.11 International advisory board

Members

The members are all external and not members of the board.

Composition		Positions
Chair	Larry Summers	Former Secretary of the US Treasury and president emeritus of Harvard University
Members	Sheila C. Bair	Former chair of the Federal Deposit Insurance Corporation and former president of Washington College
	Mike Rhodin	Supervisory board member of TomTom and director of HzO. Former IBM Watson senior vice president
	Francisco D'Souza	Director of General Electric. Former CEO of Cognizant
	James Whitehurst	Special advisor to IBM. Former chair and CEO of Red Hat, former chief operating officer of Delta Air Lines and former partner of The Boston Consulting Group
	George Kurtz	CEO and co-founder of CrowdStrike. Former chief technology officer of McAfee
	Nadia Schadlow	Former deputy National Security Advisor for Strategy and former Assistant to the President of the United States
	Andreas Dombret	Former board member of Deutsche Bundesbank, former vice chair of Bank of America in Europe and former director of Bank for International Settlements
Secretary	Jaime Pérez Renovales	

Functions

Banco Santander's international advisory board was formed in 2016 to provide strategic insight into future challenges and opportunities for the group's businesses, particularly in respect of innovation, digital transformation, cybersecurity and new technologies, capital markets, corporate governance, brand and reputation and regulation and compliance.

Its members are prominent and respected leaders who possess extensive experience with strategic challenges and opportunities, particularly in terms of innovation, digital transformation and the US and European markets.

Meetings

The international advisory board meets at least twice a year. In 2021, it met in February, May and October.

Rationale

The international advisory board affords the Group structured and recurrent insights from international leaders who, due to other commitments, are not able to support it as board members.

4.12 Related-party transactions and conflicts of interest

Related-party transactions

Directors, senior managers and significant shareholders

This subsection includes the report on related-party transactions mentioned under recommendation six of the Spanish Corporate Governance Code.

On 27 July 2021, the board amended the Rules and regulations of the board to adapt them to the new provisions on related-party transactions in Act 5/2021, of 12 April, (amended text of the Spanish Companies Act). See 'Rules and regulations of the board' in section 4.3.

Pursuant to the Rules and regulations of the board (as adapted to the new legal regime), the following bodies must authorise transactions between Banco Santander, S.A. or its subsidiaries and directors; shareholders who hold at least 10% of voting rights or sit on the board; and with other parties considered 'related parties' under the International Financial Reporting Standards:

- The general meeting, in regard to related-party transactions that amount to 10% or more of the assets listed on the last consolidated balance sheet.
- The board of directors, in regard to the other types of related-party transactions.

However, on 27 July 2021, the board of directors (on the audit committee's recommendation) voted to delegate to executive bodies, committees and competent proxies the approval of related-party transactions that simultaneously meet these legal requirements:

- are carried out under agreements with basic standard terms that usually apply to customers contracting the product or service in question;
- are entered into prices or rates set by the party acting as supplier of the goods or service in question, or arm's length terms and conditions for commercial relations with similar customers, where the goods or services are not subject to set rates that already exist; and
- they do not exceed 0.5% of Banco Santander's net annual income as appears in the last consolidated annual accounts approved at the general shareholders' meeting.

Likewise, the board approved an internal authorization, reporting and regular monitoring procedure, involving the audit committee, to confirm that transactions approved by virtue of the board's delegation are fair and transparent and meet the standards that apply in the above-mentioned exceptions. The procedure requires a permanently up-to-date list of natural and legal persons concerned in related-party transactions.

Lastly, the board also approved certain categories of related-party transactions and established ideal conditions to protect company and shareholder interests. Related-party transactions will be assessed to

make sure they are fair and reasonable to Banco Santander and all shareholders but the related party.

If a related-party transaction must be approved at the general meeting or by the board, the audit committee must issue a preliminary report about it in accordance with the law. That preliminary report will not be necessary for related-party transactions approved by virtue of the board's delegation.

Board members must refrain from deliberating and voting on resolutions with which they or their related parties have a direct or indirect conflict of interest.

In 2021, following due diligence, no director or any other related parties according to International Financial Reporting Standards carried out transactions deemed "significant" (i.e. material to Santander and the related party) or under non-market conditions.

The audit committee confirmed that all related-party transactions in 2021 were performed correctly, after reviewing whether they complied with the law, the Rules and regulations of the board and with the conditions set forth by the board, as mentioned in the audit committee activities report under section 4.5 'Audit committee activities in 2021'.

Banco Santander also has a policy for the admission, authorisation and monitoring of loans, credits and guarantees for directors and senior managers. It sets out the procedure in place for risk transactions of which they or their related parties like spouse or other person with similar relationship; minor children or those of legal age who are economically dependent; or companies controlled by directors or senior managers whose activity is limited to the mere holding of assets and the management of personal or family assets.

Furthermore, it outlines general rules in terms of maximum borrowing, interest rates and other similar conditions to those that apply to other employees. In accordance with this policy and with banking regulations, the policy provides that loans, credits or guarantees to be granted to Banco Santander's directors and senior managers (or to their related parties) must be authorised by the board and subsequently by the ECB, except in the cases listed below:

- Transactions are subject to a collective agreement signed by Banco Santander, with similar conditions to those of transactions granted to any employee.
- Transactions are carried out under agreements with standard conditions that generally apply to a large number of customers, provided that the amount granted to the beneficiary or its related parties does not exceed EUR 200,000.

Note 5.f of the 'consolidated financial statements' lists the Grupo Santander's direct risks in the form of loans, credits and guarantees extended to directors in the ordinary course of business as of 31 December 2021. The terms and conditions of these transactions are the same as those performed under market conditions or applied to other employees, and the corresponding benefits in kind are imputed to them, where applicable.

Intra-group transactions

Under new laws, Banco Santander's transactions with its direct or indirect wholly-owned subsidiaries and with other subsidiaries or investees will not be considered related-party transactions provided that no related party holds an interest in them. The rules, approval bodies and procedures that apply to intragroup transactions are the same as for transactions with customers to make sure they are conducted at market prices and conditions.

Therefore, Santander maintains control of any subsidiaries or investees that might be affected by potential related-party transactions.

Note 52 ('Related parties') in the consolidated financial statements and note 47 ('Related parties') in the individual financial statements specify the amounts of the transactions with other Group entities (subsidiaries, associates and jointly-held entities), directors, senior managers and related parties.

Conflicts of interest

Banco Santander has standards and procedures to prevent conflicts of interest resulting from our activities and functions, or between us and our directors and senior managers. We also have an internal policy that provides the Grupo Santander's employees, directors and entities with criteria to prevent and manage conflicts of interest resulting from their activities.

Directors and senior managers

Our directors must adopt the necessary measures to avoid situations in which their direct or indirect interests may enter into conflict with corporate interests or their obligation towards Banco Santander.

Directors' duty to avoid conflicts of interest requires them to fulfil certain obligations, and they must refrain from using the Banco Santander name or their role to exert undue influence on private transactions. They cannot use corporate assets and confidential information for private purposes, nor take advantage of Banco Santander's business opportunities. Moreover, they are barred from obtaining benefits or remuneration (other than courtesies) from third parties in connection with their role; or carrying out activities, on their own behalf or that of others, that place them in a situation of effective or potential competition or permanent conflict with Banco Santander.

Directors must report direct or indirect conflicts of interest they or their related parties may have with Banco Santander to the board. Such conflicts will be disclosed in the financial statements.

In 2021, no director reported having any conflict of interest with the Group, even though these 39 abstentions occurred in votes on matters deliberated at board and committee meetings. In 12 instances, directors abstained owing to resolutions to appoint or re-elect directors, or to be appointed them to board committees or to the boards of Santander companies. In 13 instances, the matter under consideration related to remuneration, loans or credits. In 4 instances, the matter was a transaction between Banco Santander and a company related to a director. In 9 instances, directors abstained regarding the annual verification of their status and suitability. In one instance, the director's position at the meeting meant he was unable to take part in deliberations.

As directors and senior managers are subject to the Policy on conflicts of interest and the Code of Conduct in Securities Markets, they must provide the Compliance function with a statement on any relations they hold, which they must keep up to date. Directors and senior managers must also report any potential conflict of interest owing to their relations or any other reason to the Compliance function. Furthermore, where a conflict does exist, they must abstain from making decisions or casting votes, in addition to notifying anyone who is to take the respective decision.

The chief officer of the area in question is responsible for resolving conflicts of interest. Conflicts that involve several areas must be resolved by the common senior officer. However, if none of the foregoing rules apply, the Compliance function will designate someone to resolve the conflict. In the event of doubt, the Compliance function is consulted.

The Code of Conduct in Securities Markets describes control mechanisms and bodies for resolving conflicts of interest related to securities markets. This code can be found on the Grupo Santander's corporate website. It dictates that directors, senior managers or related parties may not carry out (i) counter-transactions on Grupo Santander 's securities within 30 days from the time they are acquired or sold; or (ii) transactions on Grupo Santander securities 30 days before the quarterly, half-year or annual results are announced and until they are published.

Group companies

Because Banco Santander is the only group company listed in Spain, no mechanisms must be in place to resolve conflicts of interest with subsidiaries listed in Spain.

If such conflicts do arise, Banco Santander, as the parent company, must consider the interests of all its subsidiaries and how they contribute to the long-term interest of the entire group. Subsidiaries should also consider the interests of Grupo Santander examine how the decisions they take may affect the Group.

Banco Santander, as the parent company of Grupo Santander, structures the governance of the Group through a system of rules that guarantees the existence of rules of governance and an adequate control system, as described in section 7. 'Group structure and internal governance'.

5. Management team

The table below shows the profiles (Senior Executive Vice President —SEVP—) of the Banco Santander's senior managers (other than the executive directors described in section 4.1 'Our directors') as of 31 December 2021.

Alexandra Brandão	GLOBAL HEAD OF HUMAN RESOURCES	Born in 1978, Alexandra Brandão joined Grupo Santander in 2003 as head of Products and Services for Individuals at Santander Totta. From 2012 to 2016, she was global head of Knowledge and Development at the Grupo Santander Corporate Centre; head of Human Resources from 2016 to 2018; and head of Commercial Management and Segments at Santander Portugal from 2019 to 2020. Since February 2021, she has been global head of Human Resources.
Juan Manuel Cendoya	GROUP HEAD OF COMMUNICATIONS, CORPORATE MARKETING AND RESEARCH	Born in 1967, Juan Manuel Cendoya joined Banco Santander in July 2001 as group senior executive vice-president and head of the Communications, Corporate Marketing and Research division. In 2016, Mr Cendoya was appointed vice-chair of the board of directors and head of Institutional and Media Relations of Santander España. He is also a member of the board of directors of Universia España Red de Universidades, S.A. Previously, he had been head of the legal and tax department of Bankinter, S.A. He is a state attorney and a non-executive director at Arena Communications Network, S.L.
José Doncel	GROUP HEAD OF ACCOUNTING AND FINANCIAL CONTROL - GROUP CHIEF ACCOUNTING OFFICER	Born in 1961, José Doncel joined Grupo Santander in 1989 as head of Accounting. Previously, he had served as head of accounting and financial management at Banco Español de Crédito, S.A. (Banesto) (1994-2013). Mr Doncel was appointed senior executive vice-president and head of the Internal Audit division in 2013 and group head of Accounting and Financial Control - group chief accounting officer - in 2014.
Keiran Foad	GROUP CHIEF RISK OFFICER	Born in 1968, Keiran Foad joined Grupo Santander in 2012 as deputy chief risk officer at Santander UK. Previously, he held risk and corporate leadership roles at Barclays Bank plc (1985-2011) and served as chief risk officer at Northern Rock plc. In 2016, he was appointed senior executive vice-president and deputy chief risk officer of Banco Santander until his appointment in 2018 as group chief risk officer.
José Antonio García Cantera	GROUP CHIEF FINANCIAL OFFICER	Born in 1966, José Antonio García joined Grupo Santander in 2003 as senior executive vice-president of Global Wholesale Banking of Banco Español de Crédito, S.A. (Banesto). In 2006, he was appointed chief executive officer of Banesto. Previously, Mr García had served on the executive committee of Citigroup EMEA, as well as the board of directors of Citigroup Capital Markets Int, Ltd. and Citigroup Capital Markets UK. In 2012, he was appointed senior executive vice-president of Global Corporate Banking. In 2015, he was appointed group chief financial officer.
Juan Guitard	GROUP CHIEF AUDIT EXECUTIVE	Born in 1960, Juan Guitard joined Grupo Santander in 1997 as head of Human Resources at Santander Investment, S.A. Previously, he had been general counsel and secretary of the board of Santander Investment, S.A. and Banco Santander de Negocios, S.A. In 2013, Mr Guitard was head of Banco Santander's Risk division. In November 2014, he was appointed head of the Internal Audit division - group chief audit executive. He is also a state attorney.

José María Linares	GLOBAL HEAD OF CORPORATE & INVESTMENT BANKING	Born in 1971, José María Linares joined Grupo Santander in 2017 as senior executive vice-president and global head of Corporate and Investment Banking. Previously, he served as an equity analyst at Morgan Stanley & Co. New York (1993-1994). He worked as senior vice-president and senior Latin America telecom equity analyst at Oppenheimer & Co. New York (1994-1997), as well as senior director Latin America TMT equity analyst at Société Générale, New York & São Paolo (1997-1999). Mr Linares joined J.P. Morgan in 1999 and was subsequently appointed managing director and head of Global Corporate Banking at J.P. Morgan Chase & Co. (2011-2017).
Mónica López-Monís	GROUP HEAD OF SUPERVISORY AND REGULATORY RELATIONS	Born in 1969, Mónica López-Monís joined Grupo Santander in 2009 as general counsel and secretary of the board of Banco Español de Crédito, S.A. (Banesto). Previously, she had been general counsel at Aldeasa, S.A. and Bankinter, S.A., as well as independent director at Abertis Infraestructuras, S.A. In 2015, Ms López-Monís was appointed senior executive vice-president of Santander and group chief compliance officer until her appointment in 2019 as group head of Supervisory and Regulatory Relations. She is a state attorney.
Javier Maldonado	GROUP HEAD OF COSTS	Born in 1962, Javier Maldonado joined Grupo Santander in 1995 as head of the International Legal division of Banco Santander de Negocios, S.A. Mr Maldonado held several roles at Santander UK and in 2014 was appointed senior executive vice-president of Santander and head of Coordination and Control of Regulatory Projects until his appointment in 2015 as group head of Costs.
Dirk Marzluf	GROUP HEAD OF TECHNOLOGY AND OPERATIONS	Born in 1970, Dirk Marzluf joined Grupo Santander in 2018 as senior executive vice-president and head of IT and Operations. Previously, he had served as CIO at AXA Group since 2013, leading the insurance group's technology and information security transformation and co-sponsoring its digital strategy. Mr Marzluf also held global roles at Accenture, Daimler Chrysler and Winterthur Group.
Víctor Matarranz	GLOBAL HEAD OF WEALTH MANAGEMENT & INSURANCE	Born in 1976, Víctor Matarranz joined Grupo Santander in 2012 as head of Strategy and Innovation at Santander UK. In 2014, he was appointed senior executive vice-president and head of the Executive Chairman's Office and Strategy until his appointment in 2017 as global head of Wealth Management & Insurance. Previously, Mr Matarranz had held several roles at McKinsey & Company, where he had become partner.
José Luis de Mora	GROUP HEAD OF STRATEGY AND CORPORATE DEVELOPMENT AND OF CONSUMER FINANCE (SANTANDER CONSUMER FINANCE)	Born in 1966, José Luis de Mora joined Grupo Santander in 2003. Since then, he has been in charge of the group's Strategic Plan Development and Acquisitions. In 2015, he was appointed group senior executive vice-president and group head of Financial Planning and Corporate Development. He was appointed head of Santander Consumer Finance on 1 January 2020 and CEO of the same entity on 17 December 2020.
Jaime Pérez Renovales	GROUP HEAD OF GENERAL SECRETARIAT	See profile in section 4.1 'Our directors'.
António Simões	REGIONAL HEAD OF EUROPE AND COUNTRY HEAD OF SANTANDER ESPAÑA	Born in 1975, António Simões joined Grupo Santander in 2020 as regional head of Europe and he was appointed country head of Santander España in 2021. He was previously at HSBC, where he held roles including chief executive officer of global private banking, member of the group management board and group executive committee, and chief executive of HSBC Bank plc and chief executive of Europe, encompassing all UK and European operations for HSBC Group.
Marjolein van Hellemondt-Gerdingh	GROUP CHIEF COMPLIANCE OFFICER	Born in 1964, Marjolien van Hellemondt-Gerdingh joined Santander Group in 2019 as senior executive vice-president and chief compliance officer. Previously, she had been chief compliance officer of several banking and financial entities such as NN Group, Zurich Insurance Company and De Lage Landen International B.V.

6. Remuneration

Sections 6.1, 6.2, 6.3, 6.5,6.6, 6.7, 9.4 and 9.5 comprise the annual report on directors' remuneration that must be prepared and submitted to the consultative vote of the general shareholders' meeting.

In addition, section 6.4 y 6.5 sets out the directors' remuneration policy for 2022, 2023 and 2024, which is to be put to a vote at the general shareholders' meeting, which is binding.

The annual report on directors' remuneration and the directors' remuneration policy for 2022, 2023 and 2024 were approved by our board of directors on 24 February 2022. All directors were present at the time of vote casting and voted in favour.

The remuneration policy for directors in force as of the date of this report is available on our corporate website (2020 Annual Report, Corporate Governance, chapter 6: Remuneration).

6.1 Principles of the remuneration policy

Director remuneration in their capacity as such

The board of directors sets the individual remuneration of directors (including executive directors) for the performance of supervisory and collective decision-making duties within the amount fixed by shareholders and commensurately with the roles they perform on the collective decision-making body, their committee membership and attendance, and other objective circumstances the board might consider.

Remuneration of directors for executive duties

Banco Santander's remuneration policy for executive duties (which also generally applies to Banco Santander employees) dictates that:

1. Remuneration must be in line with shareholders' interests, conducive to creating long-term value and compatible with our rigorous risk management, long-term strategy and values.

2. Fixed remuneration must make up a significant proportion of total compensation.

3. Variable remuneration must reward individuals for their role in achieving set goals within the framework of prudent risk management.

4. The global remuneration package and its structure must be competitive in order to attract and retain talent.

5. Remuneration decisions must be free of conflicts of interest and discrimination of any kind different from that based on the performance assessment of objectives and corporate behaviours.

   Remuneration must be free of gender-based bias and help eliminate inequalities that could result from it.

   The remuneration elements the policy lays down include necessary mechanisms to ensure remuneration will be conducive to achieving strategic and long-term sustainability objectives of the Bank.

   Accordingly, it bases executive directors and senior managers' variable pay on pre-determined, specific and quantifiable financial, sustainability-based and value-creation targets that are consistent with Banco Santander's interests, including in regard to environmental, social and governance matters.

   For more details, see section 6.3. about the policy's application in 2021 and section 6.4 about the remuneration policy for 2022 and subsequent years.

Lastly, the remuneration committee and the board enlisted the assistance of Willis Towers Watson to:

- Compare markets and entities similar to the Group in size, characteristics and operations using relevant data for setting remuneration.
- Analyse and confirm compliance with certain quantitative metrics required to evaluate accomplishment of objectives.
- Estimate the fair value of variable remuneration linked to long-term objectives.
- Advise in the update to the remuneration policy described in section 6.4.

6.2 Remuneration of directors for supervisory and collective decision-making duties: policy applied in 2021

A. Composition and limits

According to our Bylaws, the remuneration of directors in their roles consists of a fixed annual amount set at the general shareholders' meeting. This amount remains in effect until shareholders vote to amend it, even though the board may reduce it in the years it deems appropriate. At the annual general shareholders' meeting, remuneration for 2021 was set at EUR 6 million, which included (a) annual allotment and (b) attendance fees.

Santander has taken out a civil liability insurance policy for directors subject to usual terms proportionate to its circumstances.

Directors can receive shares, share options or other forms of share-based compensation, subject to prior approval at the general meeting. Directors can also receive other compensation following a proposal made by the remuneration committee and upon resolution by the board of directors, as may be deemed appropriate, in consideration for the performance of other duties in Banco Santander, whether they are executives duties or not, in addition to their oversight and collective decision-making as board members.

Non-executive directors do not have the right to receive any benefit on the occasion of their removal from office.

B. Annual allotment

Each director received the amounts for serving on the board and its committees and positions held in them included in the chart below for 2020 and 2021.

As regards 2020, on 5 May 2020, as a gesture of responsibility in view of the situation created by the health emergency, the board of directors agreed to reduce their allotments by 20% for the balance of 2020, with effect from 1 April 2020, and propose that amounts saved thereby be used to finance the initiatives of Banco Santander to fight against the covid-19 pandemic.

In accordance with the remuneration policy approved at the general shareholders' meeting on 26 March 2021, the amounts for serving and holding roles on the board and committees was the same amount as initially approved for 2020, adding that the innovation and technology committee began to be remunerated, with its members receiving EUR 25,000 and its Chair, an additional EUR 70,000. Applicable amounts were:

		2020	
Amount per director in euros	2021	1 Jan to 31 Mar	1 Apr to 31 Dec
Members of the board of directors	90,000	22,500	49,500
Members of the executive committee	170,000	42,500	93,500
Members of the audit committee	40,000	10,000	22,000
Members of the appointments committee	25,000	6,250	13,750
Members of the remuneration committee	25,000	6,250	13,750
Members of the risk supervision, regulation and compliance committee	40,000	10,000	22,000
Members of the responsible banking, sustainability and culture committee	15,000	3,750	8,250
Members of the innovation and technology committee	25,000	—	—
Chairman of the audit committee	70,000	17,500	38,500
Chairman of the appointments committee	50,000	12,500	27,500
Chairman of the remuneration committee	50,000	12,500	27,500
Chairman of the risk supervision, regulation and compliance committee	70,000	17,500	38,500
Chairman of the responsible banking, sustainability and culture committee	50,000	12,500	27,500
Chairman of the innovation and technology committee	70,000	—	—
Lead director[A]	110,000	27,500	60,500
Non-executive vice chairmen	30,000	7,500	16,500

A. Since 2015, Bruce Carnegie-Brown has been allocated EUR 700,000 in minimum total annual pay (including annual allowances and attendance fees) for his services to the board and its committees, particularly as chair of the nomination and remuneration committees and as lead independent director; and for the required time and dedication to perform these roles. However, in line with the board of directors' decision (shared by Bruce Carnegie-Brown) to reduce their allotments and fees from 1 April 2020 to 31 December, the same reduction was applied to that amount. Accordingly, his allotment for 2020 was EUR 595,000.

C. Attendance fees

Pursuant to resolutions approved by the board on the remuneration committee's recommendations, attendance fees for board and committees meetings (not including the executive committee, for which no fees are set) totalled the amounts included in the chart below for the last two years.

As regards 2020, on 5 May 2020, as a gesture of responsibility in view of the situation created by the health emergency, the board of directors agreed to reduce their attendance fees by 20% for the balance of 2020, with effect from 1 April 2020, and propose that the amounts saved thereby be used to finance the initiatives of Banco Santander to fight against the covid-19 pandemic. For 2021, in the same manner as with the annual allotment, the board voted to keep the same amounts set out in the 2020 policy before the exceptional decision above, and, as foreseen in the remuneration policy approved at the general shareholders' meeting on 26 March 2021, attendance fees for innovation and technology committee members were added.

		2020	
Attendance fees per director per meeting in euros	2021	1 Jan to 31 Mar	1 Apr to 31 Dec
Board of directors	2,600	2,600	2,080
Audit committee and risk supervision, regulation and compliance committee	1,700	1,700	1,360
Other committees (excluding executive committee)	1,500	1,500	1,200

D. Breakdown of bylaw-stipulated emoluments

Total director bylaw-stipulated emoluments and attendance fees received in 2021 amounted to EUR 4,8 million (EUR 4,1 million in 2020). This is 20% less than the amount approved at the general meeting. Each director earned the following amounts for these items:

Amount in euros

			2021											2020
			Annual allotment											
Directors	Executive	Non-executive	Board[M]	EC	AC	ASC	RC	RSRCC	RBSCC	ITC	Total	Board and committee attendance fees	Total by-law stipulated emoluments and attendance fees	
Ana Botín		—	90,000	170,000	—	—	—	—	—	25,000	285,000	45,000	330,000	288,970
José Antonio Álvarez		—	90,000	170,000	—	—	—	—	—	25,000	285,000	45,000	330,000	269,620
Bruce Carnegie-Brown		I	275,500	170,000	—	75,000	75,000	—	—	25,000	620,500	79,500	700,000	595,000
Homaira Akbari		I	90,000	—	40,000	—	—	—	15,000	25,000	170,000	77,800	247,800	202,290
Javier Botín[A]		N	90,000	—	—	—	—	—	—	—	90,000	39,000	129,000	121,220
Álvaro Cardoso[B]		I	90,000	—	—	—	—	27,500	15,000	—	132,500	49,600	182,100	243,170
R.Martín Chávez[C]		I	90,000	—	—	25,000	25,000	40,000	—	95,000	275,000	99,400	374,400	37,453
Sol Daurella		I	90,000	—	—	25,000	25,000	—	15,000	—	155,000	84,000	239,000	213,670
Henrique de Castro[D]		I	90,000	—	40,000	—	25,000	—	—	25,000	180,000	86,800	266,800	216,790
Gina Díez[E]		I	90,000	—	—	685	—	—	—	—	90,685	39,000	129,685	4,053
Luis Isasi[F]		N	90,000	170,000	—	—	25,000	40,000	—	—	325,000	81,000	406,000	203,027
Ramiro Mato		I	90,000	170,000	40,000	—	—	40,000	65,000	—	405,000	93,900	498,900	430,410
Sergio Rial[G]		—	90,000	—	—	—	—	—	—	—	90,000	39,000	129,000	62,800
Belén Romana		I	90,000	170,000	40,000	—	—	92,500	15,000	25,000	432,500	99,900	532,400	417,274
Pamela Walkden[H]		I	90,000	—	110,000	—	—	26,667	—	—	226,667	76,400	303,067	214,594
Rodrigo Echenique[I]		N	—	—	—	—	—	—	—	—	—	—	—	155,501
Ignacio Benjumea[J]		N	—	—	—	—	—	—	—	—	—	—	—	173,473
Guillermo de la Dehesa[K]		N	—	—	—	—	—	—	—	—	—	—	—	107,747
Esther Giménez-Salinas[L]		I	—	—	—	—	—	—	—	—	—	—	—	191,405
			1,535,500	**1,020,000**	**270,000**	**125,685**	**175,000**	**266,667**	**125,000**	**245,000**	**3,762,852**	**1,035,300**	**4,798,152**	**4,148,467**

A. All amounts received were reimbursed to Fundación Botín.
B. Director since 1 April 2018.
C. Director since 27 October 2020.
D. Director since 17 July 2019.
E. Director since 22 December 2020.
F. Director since 19 May 2020
G. Executive director since 30 May 2020
H. Director since 29 October 2019.
I. Stepped down as executive director on 30 April 2019. Non-executive director from 1 May 2019 to 22 December 2020
J. Stepped down as director on 5 May 2020.
K. Stepped down as director on 3 April 2020.
L. Stepped down as director on 27 October 2020
M. Also includes emoluments for other roles in the board.
P: Proprietary I: Independent N: Non-external (neither proprietary nor independent).
EC: Executive committee AC: Audit committee ASC: Appointments committee RC: Remuneration committee
RSRCC: Risk supervision, regulation and compliance committee. RBSCC: Responsible Banking, sustainability and culture committee. ITC: Innovation and technology committee.

6.3 Remuneration of directors for executive duties

The policy on directors' remuneration for executive duties in 2021 was approved by the board of directors and put to a binding vote at the 2021 general shareholders' meeting, with 93.26% votes in favour. The table below summarizes the policy and its implementation for Ana Botín and José Antonio Álvarez.

In the case of Sergio Rial, he has qualified as an executive director since his appointment as director became effective on 30 May 2020, pursuant to section 529 *duodecies* of the Spanish Companies Act (*Ley de Sociedades de Capital*) because of his role as CEO and vice-chair of Banco Santander (Brasil) S.A. (Santander Brasil). In 2021 he received as fixed pay for his role as Regional head for South America, the EUR 750 thousand that had been approved at the 2021 general shareholders meeting as part of the 2021 remuneration policy. He has not received any other remuneration for executive functions in Banco Santander, S.A. On 31 December 2021, Mr Rial has stepped down as CEO and vice-chair of Santander Brasil and as Regional head for South America. Accordingly, he is not considered as an executive director since that date.

Component	Type	Policy	Effective in 2021
Gross annual salary	Fixed	• Paid in cash on a monthly basis.	• Ana Botin: EUR 3,176 thousand. • José Antonio Álvarez: EUR 2,541 thousand.
Variable remuneration	Variable	• Individual benchmark reference. • Calculated against annual quantitative metrics and a qualitative assessment on account of individual performance. • 50% of each payment is shares. The number of shares is set at the time of the award. • 40% paid in 2022; • 60% deferred in five years. ◦ 24% paid in equal parts in 2023 and 2024. ◦ 36% paid in equal parts in 2025, 2026 and 2027, provided certain long-term objectives are met (2021-2023).	• See section 6.3 B ii for details on annual metrics and assessment. • See section 6.3 B iv for details on long-term metrics. • See section 6.3 B iii for details on individual variable pay.
Pension scheme	Fixed	• Annual contribution of 22% of base salary.	• No change since 2018
	Variable	• Annual contribution of 22% of 30% of the average of variable remuneration in the last three years	• See section 6.3 C for details on annual contributions and pension balance.
Other remuneration	Fixed	• Includes life, accident and medical insurance, and other in-kind compensation.	• No change for Ana Botín or José Antonio Álvarez since 2018.
		• Payment for non-compete commitment	• No change.
Shareholding policy	N/A	• Executive directors also have the obligation to hold them for three years from their award date, unless the director already holds shares for an amount equivalent to 200% of their net annual salary (calculated on the basis of their gross annual salary). In such case, the regulatory obligation to hold shares is for one year from their grant date.	• Policy updated during 2020 to assure compliance with recommendation 62 to the Good Governance Code for Listed Companies of the CNMV. Ana Botín and José Antonio Álvarez both maintain an amount in shares higher than 200% of their fixed pay.

A. Gross annual salary

The board resolved to maintain the same gross annual salary for Ana Botín and José Antonio Álvarez for 2021 as in 2020.

It also maintained the fixed pension contribution of 22% of gross annual salary it had agreed in 2020 for 2021.

Executive directors' gross annual salary and fixed annual contribution to pensions for 2021 and 2020 were as follows:

	2021			2020		
EUR thousand	Gross annual salary	Fixed annual pension contribution	Total	Gross annual salary	Fixed annual pension contribution	Total
Ana Botín	3,176	699	3,875	3,176	699	3,875
José Antonio Álvarez	2,541	559	3,100	2,541	559	3,100
Total	**5,717**	**1,258**	**6,975**	**5,717**	**1,258**	**6,975**

Sergio Rial also received EUR 750 thousand as remuneration for his role as Regional Head for South America in 2021.

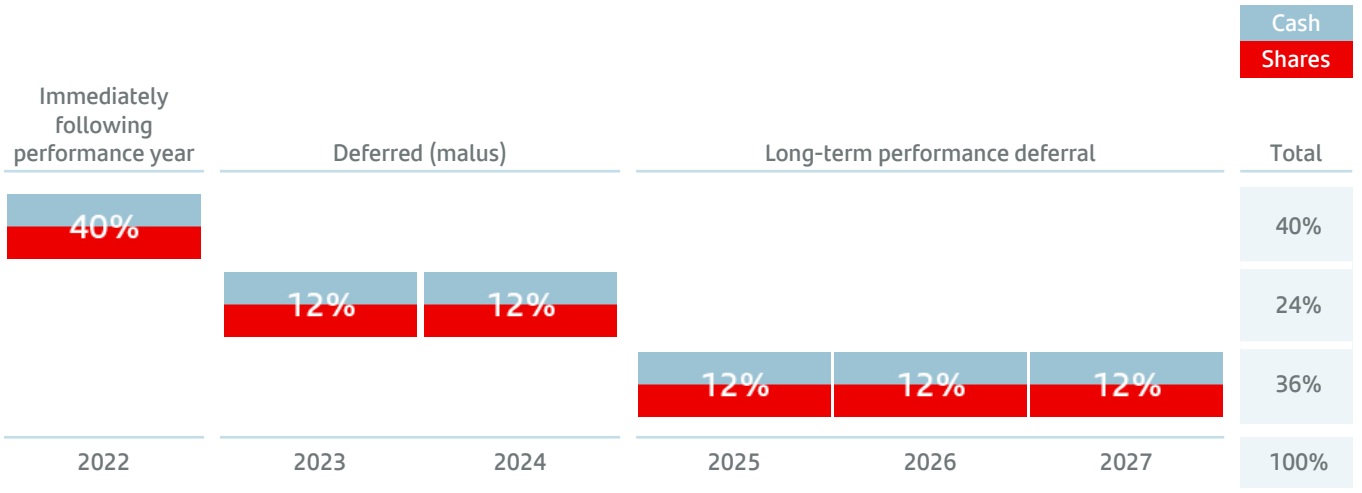
B. Variable remuneration

i) General policy for 2021

The board approved the executive directors' variable remuneration on the remuneration committee's recommendation, according to the policy approved at the general shareholders' meeting:

- Variable components[22] (including the variable part of the contributions to the benefit systems) of executive directors' total remuneration in 2021 should amount to less than 200% of fixed components, as established by resolution of the general shareholders' meeting on 26 March 2021.
- At the beginning of 2022, on the remuneration committee's recommendation, the board approved the final amount of the 2021 incentive, based on the set bonus pool in accordance with the directors' remuneration policy approved at the general shareholders' meeting on 26 March 2021, in consideration of:
  - Short-term quantitative metrics measured against annual objectives.
  - A qualitative assessment that cannot adjust the quantitative result by more than 25 percentage points upwards or downwards.
  - Any exceptional adjustment that must be supported by evidence.
  - The final figure is adjusted to executive directors' individual variable remuneration benchmark according to the current model and (i) their individual objectives (which generally match the Group's and cover financial, risk management and capital adequacy metrics as well as the three pillars the Group's strategy stands on: One Santander, PagoNxt and Digital Consumer Bank; and (ii) how they achieve them in consideration of how they manage employees and demonstrated the corporate values.

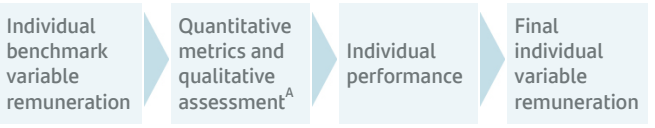
The payment schedule of the incentive is illustrated below.



All deferred payments can be subject to malus, even if they are not subject to long-term objectives. Similarly, Santander can claw back paid incentives in the scenarios and for the period dictated in the group's malus and clawback policy.

ii) Quantitative metrics and qualitative assessment for 2021

Executive directors' variable remuneration for 2021 has been based on the corporate centre executives' common bonus pool, which



A. Any exceptional adjustment supported by evidence

Quantitative metrics and qualitative assessment aspects are described below.

- Payment of the approved incentive is split equally into cash and shares. 40% is paid in 2022, once the final amount has been set. The remaining 60% will be deferred in equal parts over five years (subject to long-term metrics) as follows:
  - The deferred amount payable in 2023 and 2024, (24% of the total) will be paid if none of the malus clauses described below are triggered.
  - The deferred amount payable in 2025, 2026 and 2027, (36% of the total) will be paid if the malus clauses are not triggered and the multi-year targets described below are reached. These targets can only reduce these amounts and the number of deferred shares (which can be lower but not higher).
  - When the deferred amount is paid in cash, the beneficiary may be paid the amount adjusted for inflation up to the date of payment.
  - All payments in shares are subject to a three years retention period, unless the director already holds shares for an amount equivalent to twice his/her annual fix remuneration, in which case the shares would be subject only to the regulatory one year retention period obligation.
  - The hedging of Santander shares received during the retention and deferral periods is expressly prohibited. The sale of shares is also prohibited for one year from time they are received.

calculation comes from the quantitative and qualitative metrics approved by the board at the beginning of 2021 on the remuneration committee's recommendation. This also takes into account the input received from the human resources committee, which for these purpose counts on the participation of the senior management in charge of the group's risk, compliance, audit, human resources and legal and financial accounting and control functions, who among others provided input on risk, solvency, liquidity, results' quality and

[22] As indicated in the first chart in section 6.3 pension contributions include both fix and variable components, the latter of which also form part of total variable remuneration.

recurrence, and compliance and control. The quantitative and qualitative results for the bonus pool resulting from the process above, which are considered by the board, upon recommendation from the remunerations committee, are included in the chart below.

	Quantitative metrics				Qualitative		
Category and (weight)	Metrics	% Achievement over target	Assessment	Weighted assessment[A]	Component	Assessment	Total weighted score[B]
Customers (20%)	Net Promoter Score (NPS)[C]	Target: TOP3 in 6 countries. Achieved: TOP3 in 8 countries[D]	109.3 %	21.86 %	Evaluation of the effective satisfaction of objectives regarding customers conduct risk	+3.40% - Strengthened product governance and made progress with customer conduct risk management, especially to further embed it in the first lines of defence.	25.26 %
Shareholders (80%)	Risk - Cost of credit ratio (IFRS9) (10%)	% Target: 1.18% % Achieved: 0.77%	134.97 %	13.50 %	Appropriate management of risk appetite and operational risk Risks culture and employee awareness	+1.42 % - Considerable progress in our risk management and control environment underpinned by the advances in our cutting edge technology (machine learning, AI and robotics), the definition of new target operating models for financial crime, as well as the successful implementation of our Risk Strategy.	14.92 %
	Capital ratio (CET1) (20%	% Target: 11.90% % Achieved: 12.35%[E]	280.0 %	56.00 %	Efficient capital adequacy management: Sustainable capital contribution Capital strategy planning and execution	+ 3.34% - Positive Evolution of CET1 ratio with active management of regulatory and markets (e.g. available for sale portfolios) headwinds throughout the year.	59.34 %
	Profitability - Return on tangible equity (RoTE) (50%)	Target: 9.50% Result: 11.96%	125.84 %	62.92 %	Ideal business growth from the previous year in view of market conditions and competition (net profit and profit margin after provisions)	-2% - Growth in a complex landscape, influenced by our competitors' management of pandemic-related provisions. While Santander leads its peers in revenue generation, it has released less provisions in 2021.	66.26 %
					Sustainable and sound results, efficient cost management and cost-to-income objectives	+ 1.17% - Total net operating income growth year-on-year (+6%) provided by our geographic and business diversification and efficiency ratio of 46.2%, having improved 0.8 pp on 2020 and 2019. The Group remained one of the most efficient global banks in the world.	
					Progress in public commitments on responsible banking (especially financial inclusion, green finance and diversity-based targets)	+ 4.17% - Good progress made with selected commitments on the Responsible banking agenda, especially in: (i) women in senior leadership positions (the ratio increased by 260 bps from 23.7% in 2020 to 26.3% in 2021. The target was 26.2% in 2021 and the public commitment is 30% by 2025); (ii) financially empowered people (7.5 million people since 2019, including 2.5 million in 2021. The 2021 target was to reach 7.0 million and the public commitment is 10 million people between 2019 and 2025); (iii) green finance (of the EUR 120 billion committed from 2019 to 2025 and EUR 66 billion have been reached so far (EUR 51 billion was the target for close of 2021).	
Exceptional adjustment		Elements (non-exhaustive) under consideration: macro-economic environment, general control environment, compliance with internal and external regulations, prudent and efficient liquidity and capital planning management.			Although the underlying business performance resulted in a bonus calculus of 165.77%, there has been a management proposal, supported by the remuneration committee and approved by the Board of Directors, to exercise downward discretion to the 2021 variable remuneration to align with the ongoing uncertainty about the covid-19 health crisis in the Group's markets and its impact on shareholder returns.		(14.54)%
TOTAL							**151.23 %**

A. The weighted assessment is the result of multiplying each objective's assessment by its weighting per category. Each qualitative component under the RoTE category has same weighting.
B. Result of adding or subtracting the qualitative assessment to/from the weighted assessment.
C. The net promoter core (NPS) measures customers' willingness to recommend Santander. The assessment is based on the number of the group's core markets where Santander's NPS scores in the top 3, as well as on its performance against competitors.
D. The achievement amount is calculated by adding the weight each country where the target is met has over the total of Santander Group clients.
E. For this purpose, CET1 phased-in metric has been adjusted by the board, following a proposal from the remuneration committee, due to inorganic transactions, material changes to the Group's composition or size or other extraordinary circumstances which have affected the suitability of the metric and achievement scale established, resulting in an impact not related to the performance of the executive directors and executives being evaluated.

The following section details the individual variable remuneration approved by the board.

iii) Determination of the individual variable remuneration for executive directors set in 2021

The board approved executive directors' variable remuneration on the remuneration committee's recommendation based on the policy mentioned in the paragraphs above and the result of the quantitative metrics and qualitative assessment described above.

The board also verified that none of the following circumstances have occurred:

- The Group's ONP[23] for 2021 was not more than 50% less than for 2020. Otherwise, variable remuneration would not have been greater than 50% of the benchmark incentive.
- The Group's ONP was not negative. Otherwise, the incentive would have been zero.

The board voted to maintain the same benchmark incentive for Ana Botín and José Antonio Álvarez in 2021 as in 2020.

Variable contributions to pensions were not modified in 2021, so the amounts are the 22% of the 30% of the last three assigned bonus' average.

Breakdown of immediately payable and deferred remuneration

Comparing with the previous year, it should be mentioned that amid the covid-19 health crisis in 2020, Ana Botín and José Antonio Álvarez proposed to reduce their total 2020 compensation (salary and bonus) by 50%.

To achieve the 50% reduction compared to 2019, the board of directors decided to apply an additional adjustment to Ana Botín's and José Antonio Alvarez's variable compensation, reducing the variable compensation by 74% in the case of Ana Botín and 79% in the case of José Antonio Álvarez.

In 2021, the good business performance (which enabled Banco Santander to reach a 12.73% underlying RoTE, above 2019), the excellent execution of our strategy (with the highest underlying attributable profit of the last 12 years), and efficient capital management, have improved substantially the bonus pool results, and thus the variable remuneration of corporate centre employees, including the executive directors.

The immediately payable variable remuneration in deferred amounts not contingent on long-term metrics and variable remuneration deferred and contingent on long-term objectives approved by the board of directors, following a proposal by the remuneration committee resulting from the aforementioned process are:

IMMEDIATELY PAYABLE AND DEFERRED (NOT LINKED TO LONG-TERM OBJECTIVES) VARIABLE REMUNERATION

	2021			2020		
EUR thousand	In cash	In shares	Total	In cash	In shares	Total
Ana Botín	2,941	2,941	5,883	534	534	1,068
José Antonio Álvarez	1,985	1,985	3,970	290	290	580
Total	**4,926**	**4,926**	**9,853**	**824**	**824**	**1,648**

A. The share amounts in the foregoing table correspond to a total of 1,587 thousand shares in Banco Santander (307 thousand shares in 2020).

The following chart states deferred variable remuneration at fair value, which will only be received in 2025, 2026 and 2027, provided that long-term multi-year targets are met (see section 6.3 B iv)), beneficiaries continue to be employed at Grupo Santander, in accordance with the terms approved in the general shareholders' meeting, and no circumstances triggering malus clauses occur[24]:

DEFERRED VARIABLE REMUNERATION LINKED TO LONG-TERM OBJECTIVES (FAIR VALUE)

	2021			2020		
EUR thousand	In cash	In shares	Total	In cash	In shares	Total
Ana Botín	1,158	1,158	2,316	210	210	420
José Antonio Álvarez	782	782	1,563	114	114	228
Total	**1,940**	**1,940**	**3,880**	**324**	**324**	**648**

A. The number of shares in the table total 625 thousand shares in Banco Santander (121 thousand shares in 2020).

Fair value has been determined on the grant date based on the valuation report of an independent expert, Willis Towers Watson. Based on the design of the plan for 2021 and success levels of similar plans at peer entities, the expert found a range of 60%-80% reasonable to estimate the initial success ratio. Therefore, fair value was considered to be 70% of the maximum value.

[23] For this purpose, ONP is attributed ordinary net profit, adjusted upwards or downwards for transactions the board believes have an impact not connected to the performance of evaluated directors, for which extraordinary profit, corporate transactions, impairments, or accounting or legal adjustments that may occur during the year are evaluated. The exclusion in the calculation for these purposes of goodwill impairments is aligned with the supervisors' criteria on their recommendations on dividend distributions.

[24] Corresponds to the fair value of the maximum amount to be received over a total of 3 years, subject to continued service -with certain exceptions-, non- applicability of malus clauses and compliance with set goals. Fair value was estimated at the plan award date on account of several scenarios for the variables in the plan during the measurement periods.

The maximum number of shares to be delivered under the plan (2,480 thousand shares not adjusted for fair value) is within the limit of 3,705 thousand shares authorised in the 2021 AGM for executive directors. This limit was calculated with the weighted average daily volume of weighted average listing prices of Santander shares in the 15 trading sessions prior to the Friday (not inclusive) before 1 February 2022 (the date on which the board approved the 2021 bonus for executive directors), which was EUR 3.104 per share.

iv) Multi-year targets linked to the payment of deferred amounts in 2025, 2026 and 2027

The multi-year targets linked to the payment of the deferred amounts payable in 2025, 2026 and 2027 are:

	Metrics	Weight	Target and compliance scales (metrics ratios)
A	Earnings per share (EPS) growth in 2023 vs 2020	33 %	If EPS in 2023 (% vs.2020) ≥ 125%, then metric ratio is 1.5 If EPS in 2023 (% vs.2020) ≥ 100% but < 125%, then metric ratio is 1 – 1.5[C] If EPS in 2023 (% vs. 2020) ≥ 70% but < 100%, then metric ratio is 0 – 1[C] If EPS in 2023 (% vs. 2020) < 70%, ratio is 0
B	Relative Total Shareholder Return (TSR)[A] in 2021-2023 within a peer group	33 %	If ranking of Santander above percentile 66, then metric ratio is 1 If ranking of Santander between percentiles 33 and 66, then ratio is 0 – 1[D] If ranking of Santander below percentile 33, then metric ratio is 0
C	Fully loaded target common equity Tier 1 ratio (CET1)[B] for 2023	33 %	If CET1 is ≥ 12%, then metric ratio is 1 If CET1 is ≥ 11% but < 12%, then metric ratio is 0 – 1[E] If CET1 is < 11%, then metric ratio is 0

A. TSR refers to the difference (%) between the final and initial values of capital invested in ordinary shares of Banco Santander. The final value is calculated based on the dividends or other similar concepts (such as the Santander Scrip Dividend programme) shareholders receive for this investment during the corresponding period -as if they had invested in more shares of the same type at the first date on which the dividend or similar concept was payable to shareholders- and the weighted average share price at that date. To calculate TSR, the weighted average daily volumes of the weighted average listing prices for the fifteen trading sessions prior to 1 January 2021 (exclusive) is considered (to calculate the initial value) and the fifteen trading sessions prior to 1 January 2024 (exclusive) (to calculate the final value). The peer group consists of BBVA, BNP Paribas, Citi, Crédit Agricole, HSBC, ING, Itaú, Scotia Bank and Unicredit.
B. To check success in terms of this objective, possible increases in CET1 resulting from capital increases will be disregarded (except in relation to the Santander Scrip Dividend programme). Furthermore, the CET1 ratio at 31 December 2023 could be adjusted to factor out the impact of any new regulations on its calculation up to that date.
C. Linear increase in the EPS ratio based on the specific EPS growth rate in 2023 in respect of 2020 within this bracket of the scale.
D. Proportional increase in the TSR ratio based on the number of positions moved up in the ranking.
E. Linear increase in the CET1 ratio as a function of the CET1 ratio in 2023 within this bracket of the scale.

To determine the annual amount of the deferred portion linked to objectives corresponding to each board member in 2025, 2026 and 2027, the following formula shall be applied to each of these payments ('Final annuity') without prejudice to any adjustment deriving from the malus clauses:

$$\text{Final annuity} = \text{Amt.} \times (1/3 \times A + 1/3 \times B + 1/3 \times C)$$

where:

- 'Amt.' is one third of the variable remuneration amount deferred conditional on performance (i.e. Amt. will be 12% of the total variable pay set in early 2022).
- 'A' is the EPS ratio according to the scale in the table above, based on EPS growth in 2023 vs 2020.
- 'B' is the TSR ratio according to the scale in the table above, according to the relative performance of Banco Santander's TSR within its peer group in 2021-2023.
- 'C' is the CET1 ratio according to compliance with the CET1 target for 2023 described in the table above.
- In any event, if the result of (1/3 x A + 1/3 x B + 1/3 x C) is greater than 1, the multiplier will be 1.

v) Malus and clawback

Deferred amounts (whether or not contingent on multi-year targets) will be earned if the beneficiary continues to work with the group[25], and none of the circumstances triggering the malus clause arise before each payment, according to the section on malus and clawback clauses in the remuneration policy.

[25] When the beneficiary's relationship with Banco Santander or another group entity terminates because of retirement, early retirement or pre-retirement; a dismissal ruled by the courts to be wrongful; unilateral withdrawal for good cause by an employee (which includes the situations set forth in article 10.3 of Royal Decree 1382/1985, of 1 August, governing the special relationship of senior management, for the persons subject to these rules); permanent disability or death; mandatory redundancy; or because an employer other than Banco Santander ceases to belong to Santander Group, the right to receive shares and deferred amounts in cash and any amounts of the deferred amounts in cash adjusted for inflation will remain under the same conditions in force as if none of such circumstances had occurred. In the case of death, the right will pass to the beneficiary's heirs.
In cases of justified temporary leave due to temporary disability, suspension of contract due to maternity or paternity leave, or leave to care for children or a relative, there will be no change in the beneficiary's rights. If the beneficiary goes to another group company (even through international assignment and/or expatriation), these rights will likewise not change. If the relationship terminates by mutual agreement or because the beneficiary obtains a leave not mentioned above, the terms of the termination or temporary leave agreement will apply.
None of those circumstances attach the right to receive the deferred amount in advance. If beneficiaries or their heirs maintain the right to receive deferred pay in shares and cash and any deferred amounts in cash adjusted for inflation, it will be delivered within the periods and under the terms dictated by the rules for the plans.
None of the above circumstances shall give the right to receive the deferred amount in advance. If the beneficiary or the successors thereof maintain the right to receive the deferred remuneration in shares and cash and, where applicable, the amounts arising from the adjustment for inflation of the deferred amounts in cash, it shall be delivered within the periods and under the terms provided in the rules for the plans.

Similarly, Banco Santander can clawback any paid variable amounts in the scenarios and for the period dictated by the terms and conditions in the said policy.

Variable remuneration for 2021 can be clawed back until the beginning of 2028.

Malus and clawback clauses are triggered by poor financial performance of Banco Santander, a division or area, or exposures from staff as a result of an executive(s)'s management of, at least, one of these factors:

Category	Factors
Risk	Significant failures in risk management by Banco Santander, or by a business or risk control unit.
Capital	An increase in capital requirements at the Banco Santander or one of its business units not planned at the time that exposure was generated.
Regulation and internal codes	Regulatory penalties or legal convictions for events that might be attributable to the unit or staff responsible for them. In addition, failure to comply with Banco Santander's internal codes of conduct.
Conduct	Improper conduct, whether individual or collective. Negative effects deriving from the marketing of unsuitable products and the liability of persons or bodies making such decisions will be considered especially significant.

The application of malus or clawback clauses for executive directors shall be determined by the board of directors, at the proposal of the remuneration committee, and cannot be proposed once the retention period for the final payment in shares under the plan has elapsed in early 2028. Therefore, the board determines the specific deferred incentive amount to be paid as well as any amount that could be subject to clawback, upon on the remuneration committee's recommendation and depending on the level of compliance with the conditions for applying malus clauses, .

C. Main features of the benefit plans

Executive directors participate in the defined contribution pension scheme created in 2012, which covers contingencies due to retirement, disability and death.

José Antonio Álvarez's contract has been updated in 2020 so that he has ceased to have the right to early retirement in case of termination of his contract. Ana Botín has ceased to have the right to voluntary early retirement, keeping this right if Banco Santander terminates her contract before 31 August 2022, after which early retirement will no longer be available. As long as she retains that right, she is entitled to an annual allotment equal to her total fixed remuneration, plus 30% of the average of up to her last three variable pays.

According to the 2012 system, contracts for executive directors (and other senior managers) with defined benefit pension obligations were transformed into a defined contribution system. The new system gives executive directors the right to receive benefits upon retirement, even if they are not active at Banco Santander at the time, based on contributions to the system. It also replaces their previous right to receive a pension supplement in the event of retirement.

The initial amount for each executive director in the new defined contribution pension scheme corresponded to the market value of the assets for which the provisions for due obligations were recognized when the previous pension commitments had been transferred to the new pension scheme.

Every year since 2013, Banco Santander has been contributing to the pension scheme for executive directors and senior executives in proportion to their pensionable bases until their departure from the group, retirement, death or disability (even during pre-retirement). The pensionable base for executive directors is the sum of fixed remuneration plus 30% of the average of their last three variable remuneration amounts. Contributions will be 22% of pensionable bases in all cases.

Pursuant to remuneration regulations, contributions calculated on the basis of variable remuneration are subject to the discretionary pension benefits scheme. Therefore, under the policy, malus and clawback clauses can be enforced on them in place at any given time and during the same period in which variable remuneration is deferred. Furthermore, these contributions must be invested in shares in Banco Santander for five years from the date of the executive director's retirement, or from the date on which executive directors leave the group. Once that period has elapsed, the amount invested in shares will be paid to them or their beneficiaries if some contingency covered by the pension scheme was happened or will be added to the remainder of their cumulative balance until their retirement age when the total amount will be paid.

The benefit plan is outsourced to Santander Seguros y Reaseguros, Compañía Aseguradora, S.A. The economic rights of the directors previously mentioned belong to them even if they are not active at Banco Santander at the time of their retirement, death or disability. Their contracts do not stipulate any severance payment outside the extent of the law for termination of contract or the aforementioned annual allowance for pre-retirement.

The provisions recognised in 2021 for retirement pensions amounted to 1,825 thousand euros (2,019 thousand euros in 2020), as broken down below.

EUR thousand	2021	2020
Ana Botín	1,041	1,155
José Antonio Álvarez	783	864
Total	**1,825**	**2,019**

These are the amounts corresponding to each executive director as of 31 December 2021 and 2020 in the pension scheme:

EUR thousand	2021	2020
Ana Botín	48,075	49,444
José Antonio Álvarez	18,821	18,082
Total	**66,896**	**67,526**

D. Other remuneration

Grupo Santander also takes out insurance policies for life, health and other contingencies for its executive directors. This other remuneration component includes the fixed supplement approved for Ana Botín and José Antonio Álvarez to replace the supplementary benefits from the pension scheme eliminated in 2018, in addition to the cost for insuring death or disability until they retire. Executive directors are also covered under the group's civil liability insurance policy.

Note 5 to the group's consolidated financial statements describes other benefits received by executive directors in detail.

E. Shareholdings

In 2016, on the remuneration committee's recommendation, the board of directors approved a shareholding policy to better align executive directors with shareholders' long-term interests.

According to this policy, in addition to the executive directors' commitment to maintaining a significant holding of shares in the group for as long as they have their role, executive directors active on 1 January 2016 would have five years to demonstrate that their personal assets include shares in Banco Santander that amount (net of taxes) to twice their gross annual salary on that date. Executive directors have complied with this policy. The following table show the ratio, with a share price at 31 December 2021 of 2.94 euros:

	2021			2020		
	Gross annual salary (thousand)	number of shares (thousand)	X	Gross annual salary (thousand)	number of shares (thousand)	X
Chair	3,176	25,365	23.5	3,176	24,608	22.8
CEO	2,541	1,985	2.3	2,541	1,821	2.1

Likewise, in addition to the regulatory obligation for executive directors not to sell the shares they receive as remuneration for a year from their award, which is included in the shareholding policy, and will apply to all cases, this policy has also been updated to include the obligation for executive directors not to sell the shares they receive as remuneration for a period of three years from their award date, unless the executive director already holds Banco Santander shares for an amount equivalent to twice his/her fix annual remuneration.

F. Remuneration of Sergio Rial in Santander Brasil

In addition to the EUR 750 thousand Sergio Rial received as Regional head for South America, he was paid the following amounts as CEO of Santander Brasil:

2021	BRL thousand	EUR thousand
Base salary	12,645	1,985
Other fixed benefits	47	7
Pensions	7,350	1,153
Variable remuneration immediately payable and deferred (not linked to long-term objectives)	26,600	4,018
Total 2021	**46,642**	**7,163**
Total 2020	**37,079**	**6,378**

His variable remuneration is subject to the same policy principles, deferrals, multi-year targets linked to the payment of deferred amounts and malus and clawback principles described under section B above (but in relation to the subsidiary where he was the CEO until 31 December 2021).

The following table shows the variable remuneration deferred and contingent on long-term objectives (with a fair value applied of 70%):

Deferred and linked to long-term objectives variable remuneration

	2021			2020		
	In cash	In shares	Total	In cash	In shares	Total
Sergio Rial	791	791	1,582	655	655	1,311

G. Remuneration of board members as representatives of Banco Santander

The executive committee has resolved that the remuneration received by directors who represent Banco Santander on boards of companies where it owns equity and were appointed after 18 March 2002 will accrue to the group. No executive director received remuneration for this type of representation in 2021 or 2020.

However, in their personal capacity, in 2021 Álvaro Cardoso was paid BRL 2,130 thousand (EUR 334 thousand) as non-executive chair of Banco Santander Brasil, S.A., Homaira Akbari was paid USD 190 thousand (EUR 161 thousand) as member of the board of Santander Consumer USA (SCUSA) and EUR 52 thousand as member of the Board of PagoNxt, and Henrique de Castro and R.Martín Chávez were each paid the same EUR 52 thousand as members of the board of PagoNxt. Likewise, Pamela Walkden was paid GBP 31 thousand (EUR 36 thousand) as member of Santander UK plc and Santander UK Group Holdings boards.

Likewise, Luis Isasi was paid EUR 1,000 thousand for his roles as non-executive chair and for board and committees meetings (amount included in the chart below as "other remuneration" as it is paid by Banco Santander, S.A.).

H. Individual remuneration of directors for all items in 2021

Below is a breakdown of each director's short-term salary (payable immediately) and deferred remuneration not based on long-term performance for 2021 and 2020. Note 5 to the group's consolidated financial statements contains disclosures on shares delivered in 2021 under the deferred remuneration schemes of previous years where conditions for their delivery were met in the related years.

An additional column for 2019 is included for comparison purposes, being 2019 a more representative year due to the aforementioned extraordinary reduction in the variable remuneration applied in 2020. Total remuneration rose 15% for the Chair and 11% for the chief executive officer compared to 2019, as attributable profit grew 25% from 2019 to 2021. Underling RoTE in 2021 was 12.73% (11.79% in 2019), TSR 18.58% (-4% in 2019).

EUR thousand

	2021								2020	2019
	Bylaw-stipulated emoluments		Salary and bonus of executive directors							
Directors	Board and board committees annual allotment	Board and committee attendance fees	Fixed Salary	Immediate payment bonus (50% in shares)	Deferred payment bonus (50% in shares)	Total	Pension Contribution	Other remuneration	Total	Total	Total
Ana Botín	285	45	3,176	3,676	2,206	9,058	1,041	1,006	11,435	6,818	9,954
José Antonio Álvarez	285	45	2,541	2,482	1,488	6,511	783	1,536	9,160	6,018	8,270
Bruce Carnegie-Brown	620	80	—	—	—	—	—	—	700	595	700
Homaira Akbari	170	78	—	—	—	—	—	—	248	202	226
Javier Botín[A]	90	39	—	—	—	—	—	—	129	122	137
Álvaro Cardoso[B]	133	50	—	—	—	—	—	—	183	243	276
R.Martín Chávez[C]	275	99	—	—	—	—	—	—	374	37	—
Sol Daurella	155	84	—	—	—	—	—	—	239	214	240
Henrique de Castro[D]	180	87	—	—	—	—	—	—	267	217	86
Gina Díez[E]	91	39	—	—	—	—	—	—	130	4	—
Luis Isasi[F]	325	81	—	—	—	—	—	1,000	1,406	943	—
Ramiro Mato	405	94	—	—	—	—	—	—	499	430	500
Sergio Rial[G]	90	39	750	—	—	750	—	—	879	63	—
Belén Romana	433	100	—	—	—	—	—	—	533	417	525
Pamela Walkden[H]	227	76	—	—	—	—	—	—	303	214	34
Rodrigo Echenique[I]	—	—	—	—	—	—	—	—	—	1,955	4,874
Ignacio Benjumea[J]	—	—	—	—	—	—	—	—	—	275	524
Guillermo de la Dehesa[K]	—	—	—	—	—	—	—	—	—	108	399
Esther Giménez-Salinas[L]	—	—	—	—	—	—	—	—	—	191	228
Total 2021	**3,764**	**1,036**	**6,467**	**6,158**	**3,694**	**16,319**	**1,824**	**3,542**	**26,485**	**—**	**—**
Total 2020	**3,081**	**1,066**	**5,717**	**1,029**	**617**	**7,363**	**2,019**	**5,537**	**—**	**19,066**	**—**
Total 2019	**3,770**	**1,094**	**6,317**	**5,146**	**3,087**	**14,550**	**2,003**	**5,770**	**—**		**27,187**

A. All amounts received were reimbursed to Fundación Botín.
B. Director since 1 April 2018.
C. Director since 27 October 2020.
D. Director since 17 July 2019.
E. Director since 22 December 2020.
F. Director since 19 May 2020
G. Executive director since 30 May 2020
H. Director since 29 October 2019.
I.Stepped down as executive director on 30 April 2019. Non-executive director from 1 May 2019 to 22 December 2020
J. Stepped down as director on 5 May 2020.
K.Stepped down as director on 3 April 2020.
L. Stepped down as director on 27 October 2020.

The following table provides each executive director's salary contingent on multi-year targets. It is only paid if they remain active in the group, malus clauses do not apply and set multi-year targets are achieved (as depending on their achievement the amounts will be reduced, or even be cero if the related minimum thresholds are not achieved).

	EUR thousand	
	2021	2020
	(50% in shares)[A]	(50% in shares)[A]
Ana Botín	2,316	420
José Antonio Álvarez	1,563	228
Total	**3,880**	**648**

A. Fair value of the maximum amount receivable over a total of 3 years (2025, 2026 and 2027), which was estimated when the plan was granted, based on several scenarios relating to variables in the plan during the measurement periods.

I. Ratio of variable to fixed pay components in 2021

At the 2021 AGM, shareholders approved a maximum ratio of 200% of variable to fixed components in executive directors' pay.

The table below shows the ratio of variable components to fixed components for each executive director's total pay in 2021. This ratio increased from 2020 by 142 pp for Ana Botín and by 104 pp for José Antonio Álvarez due to the exceptional reduction of their remuneration in 2020 amid the covid-19 health crisis mentioned in subsection B, iii) above.

Executive directors	Variable Components / fixed components (%)
Ana Botín	182 %
José Antonio Álvarez	128 %
Sergio Rial	161 %

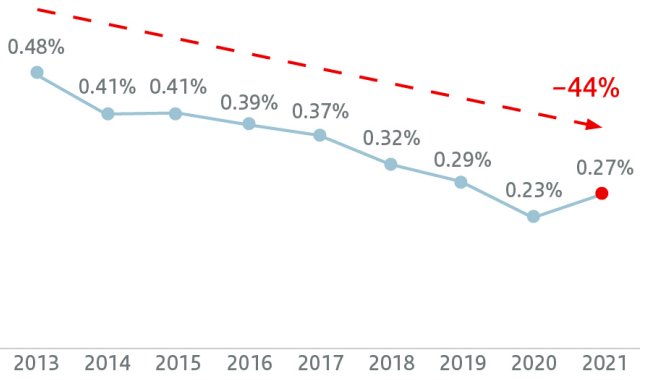
For these purposes:

- Variable components include all items of this nature, such as any contributions to the pension scheme calculated on directors' variable pay.
- Fixed components consist of the other items each director receives for executive duties, including contributions to pension schemes calculated on the basis of fixed remuneration and other benefits, as well as all bylaw-stipulated emoluments that the director is entitled to receive in his or her capacity as such.

J. Comparative analysis of directors' remuneration, company performance and average remuneration of employees

This chart summarizes directors' compensation (short-term remuneration, deferred variable remuneration and/or deferred variable remuneration linked to multi-year targets) for executive duties in relation to underlying attributable profit. The weight of executive directors' remuneration relative to underlying attributable profit continues to decline since 2013.

RATIO OF EXECUTIVE DIRECTOR REMUNERATION TO UNDERLYING ATTRIBUTABLE PROFIT



Compared to 2019 as a more representative year, due to the aforementioned extraordinary reduction in the variable remuneration applied in 2020, total remuneration rose 15% for the Chair and 11% for the chief executive officer, as attributable profit grew 25% from 2019 to 2021. Underling RoTE in 2021 was 12.73% (11.79% in 2019), TSR 18.58% (-4% in 2019).

The following chart shows the comparative analysis between the directors' remuneration, the company performance (underlying profit attributable to the Group, audited profit before taxes and ordinary ROTE) and the average remuneration of Santander employees in the last 5 years:

Directors' remuneration[1] (EUR thousand)	2021	% var. 21/20	2020	% var. 20/19	2019	% var. 19/18	2018	% var. 18/17	2017
• Executive Directors									
Ana Botín	11,435	68%	6,818	(32)%	9,954	(5)%	10,483	(1)%	10,582
José Antonio Álvarez	9,160	52%	6,018	(27)%	8,270	(4)%	8,645	(3)%	8,893
Sergio Rial[A]	879	—	63	—	—	—	—	—	—
• Non-Executive Directors[2]									
Bruce Carnegie-Brown	700	18%	595	(15)%	700	(4)%	732	—	731
Javier Botín[B]	129	6%	122	(11)%	137	13%	121	(2)%	124
Sol Daurella	239	12%	214	(11)%	240	12%	215	4%	207
Belén Romana[C]	533	28%	417	(21)%	525	27%	414	39%	297
Homaira Akbari[D]	248	23%	202	(11)%	226	14%	199	25%	159
Ramiro Mato[E]	499	16%	430	(14)%	500	11%	450	—	36
Álvaro Cardoso[F]	183	(25)%	243	(12)%	276	86%	148	—	—
Henrique de Castro[G]	267	23%	217	152%	86	—	—	—	—
Pamela Walkden[H]	303	42%	214	529%	34	—	—	—	—
Luis Isasi[I]	1,406	49%	943	—	—	—	—	—	—
R. Martín Chávez[J]	374	911%	37	—	—	—	—	—	—
Gina Díez[K]	130	—	4	—	—	—	—	—	—
Company's performance									
Underlying profit attributable to the Group (EUR mn)	8,654	70%	5,081	(38)%	8,252	2%	8,064	7%	7,516
Consolidated results of the Group[3] (EUR mn)	14,547	—	(2,076)	—	12,543	(12)%	14,201	17%	12,091
Ordinary RoTE	12.73%	71%	7.44%	(37)%	11.79%	(2)%	12.08%	2%	11.82%
Employees' average remuneration[4] (EUR)	**55,673**	**18%**	**47,130**	**(12)%**	**53,832**	**2%**	**52,941**	**(5)%**	**55,484**

1. Deferred variable remuneration linked to long-term objectives not included.
2. Non-executive directors' remuneration fluctuations are caused by joining or leaving the Board of Directors and the difference in the amount of meetings they assist during the year. Hence there is no correlation between their remuneration and the company performance.
3. Group operating profit/(loss) before tax.
4. Employee average remuneration includes all concepts, including other remuneration. Full-time equivalent data. The percentage of variable remuneration over fixed remuneration in an average employee is lower than that of the executive directors. Variable remuneration data accrued in the current year, both for employees and executive directors. Evolutive data also impacted by exchange rate performance in the group's geographies.

A. Executive director since 30 May 2020.
B. All amounts received were reimbursed to Fundación Botín.
C. Director since 22 December 2015.
D. Director since 27 September 2016.
E. Director since 28 November 2017.
F. Director since 23 March 2018.
G. Director since 17 July 2019.
H. Director since 29 October 2019.
I. Director since 19 May 2020.
J. Director since 27 October 2020.
K. Director since 22 December 2020.

J. Summary of link between risk, performance and remuneration

Banco Santander's remuneration policy and its application in 2021 have promoted sound and effective risk management, at the same time as supported the fulfilment of long-term business objectives.

The key elements of the remuneration policy for executive directors making alignment between risk, performance and reward in 2021 were as follows:

Key words	Aspect aligning risk, performance and remuneration
Metrics balance	The balance of quantitative metrics and qualitative assessments, including customer, risk, capital and profitability in relation to risk, used to determine the executive directors' variable remuneration.
Financial thresholds	The adjustment to variable remuneration if certain financial thresholds are not reached, which may limit the variable remuneration to 50% of the previous year's amount or lead to it not being awarded at all.
Long-term objectives	The long-term objectives linked to the last three portions of the deferred variable remuneration. These objectives are directly associated with return to shareholders relative to a peer group, earnings per share and maintaining a sound capital base.
Individual performance	The discretion of the board to consider the performance of each executive director in the award of their individual variable remuneration.
Variable remuneration cap	200% of fixed remuneration.
Control functions involvement	The work undertaken by the human resources committee aided by senior managers leading Control functions in relation to the analysis of quantitative metrics information and undertaking qualitative analysis
Malus and clawback	Malus can be applied to unvested deferred pay and clawback can be applied to vested or paid compensation under the conditions dictated by the group's remuneration policy.
Payment in shares	At least 50% of variable pay is in shares and subject to retention for at least one year from their delivery.

6.4 Directors' remuneration policy for 2022, 2023 and 2024 submitted to a binding shareholder vote

Remuneration policy principles and remuneration system

A. Directors' remuneration in their capacity as such

Director's remuneration is regulated by article 58 of Banco Santander's bylaws and article 33 of the Rules and regulations of the board of directors. For 2022, 2023 and 2024, no changes to the principles and composition of directors' remuneration for supervisory and collective decision-making duties are planned with respect of those in 2021. They are described in sections 6.1 and 6.2.

B. Executive directors' remuneration

Executive directors are entitled to be paid the remuneration (e.g., salaries, incentives, bonuses, severance payments for early termination from such duties, and amounts to be paid by Banco Santander for insurance premiums or contributions to savings schemes) deemed appropriate for performing executive functions following a proposal from the remunerations committee and by resolution of the board of directors, subject to the limits set by law.

For 2022, 2023 and 2024, several changes to the principles of executive directors' remuneration for executive duties are planned (sections 6.1 and 6.3).

First, to simplify the variable remuneration scheme, the proposal is to reduce the number of metrics in the bonus scorecard from the four applied in 2021 to three (30% for customers; 40% for RoRWA; and 30% for RoTE) to focus more on the Group's strategic priorities of customers and profitability, assuring adequate risk management and efficient use of capital.

The qualitative assessment for the scorecard will be conformed by the same metrics as in 2021, but adding CET1, to acknowledge the importance of having sufficient capital to support the bank's strategy even in the event of severe stress.

Second, to create a stronger alignment with shareholder returns, it is proposed to introduce options as a remuneration instrument.

Accordingly, the variable remuneration of Banco Santander's identified staff would be 50% in cash, 25% in shares and 25% in share options, instead of 50% in cash and 50% in shares under the current scheme. Executive directors would also be allowed to choose to receive only options, so their variable remuneration would be 50% in cash and 50% in share options.

Options will not include any premium, as they will be valued at fair market price at the moment when they are awarded. So the executives' exposure to shareholders' return is amplified by the effect of the evolution of the share price both positively and negatively.

Third, it is proposed to update the long-term performance metrics according to market best practice and our stakeholders' preferences, prioritising shareholder returns and the Group's profitability in the long-term, as well as sustainability of the balance sheet and its activities and how they are carried out. Therefore:

- Relative performance of Banco Santander's total shareholder return (TSR) compared to our peer group will remain; however, the threshold at which executives begin to accrue remuneration is increased from 33% to 40%. Its weight will be 40% of the total.
- Return on tangible equity (RoTE), as an indication of long-term value creation. Its weight will be 40% of the total.
- Five ESG (environmental, social and governance) metrics linked to the progress we make on our commitments to implement the Group's Responsible banking agenda. Their weight will be 20% of the total. For additional details about our public commitments, please see Responsible banking section.

As shown below in the 'Deferred variable remuneration linked to long-term objectives' section, the maximum achievement ratio is also increased from 100% to 125% so executives have the incentive to exceed their targets; however, the maximum achievement ratio for

effectively paid remuneration will not exceed the thresholds approved at the AGM.

Additionally, with the aim of providing a strong alignment with PagoNxt's success, the executive Chair and the chief executive officer will be able to receive restricted share units (RSUs) of PagoNxt, S.L.

The RSUs will substitute part of their Santander variable pay instruments without increasing their total pay and will not represent more than 10% of their variable pay.

Specifically, as regards 2022, Ana Botín would receive the equivalent of EUR 608 thousand in RSUs, and José Antonio Álvarez would receive the equivalent of EUR 410 thousand in RSUs, under PagoNxt, S.L.'s long term incentive plan. Each RSU would grant the right to a share in PagoNxt, S.L. or the holding entity of its group (or its equivalent in cash) at the moment when, according to such plan, a liquidity event, a repurchase or a liquidation of such instruments takes place.

This plan is subject to the same principles of risk alignment, variable remuneration caps, deferrals and malus and clawback as the incentive which applies to executive directors described herein, but with payment being done in PagoNxt instruments. It is also subject to specific objectives of PagoNxt, the main of which is the completion of its corporate restructuring for 2022.

Finally, every year, Banco Santander conducts a comparative analysis of total compensation for executive directors and other senior executives. For 2022, the analysis will consist of a 'peer group' made up by BBVA, BNP Paribas, Citi, Crédit Agricole, HSBC, ING, Itaú, Scotia Bank and Unicredit.

Principle of equal pay for equal work and equal employment conditions for Santander executives and employees

Santander applies the equal pay principle in the Corporate remuneration policy of Grupo Santander for executive directors and employees alike, which forbids any type of differential treatment that is not exclusively based on an assessment of performance results and corporate behaviours, and promotes equal pay for men and women.

Furthermore, our remuneration framework rewards Santander employees for their contribution based on such common principles as:

- Meritocracy: Non-discrimination based on sex, age, culture, religion or ethnicity.
- Consistency: Remuneration consistent with the level of responsibility, leadership and performance within the Group, to promote retention of key professionals and attract the best talent.
- Sustainability: A remuneration framework that is sustainable in terms of associated costs, cost control, and related objectives (as described in the policy) that ensure variable remuneration is commensurate with the Group's performance, disincentivize short-term commitment and promote long-term sustainability. The remuneration scheme for the c. 1,000 identified staff also includes deferral of up to 60% of variable remuneration, its payment 25% in Santander shares and 25% in Santander share options (also subject to one-year retention), and malus and clawback clauses.

  Also, performance objectives for annual variable remuneration have included since 2020 ESG components aligned with our Responsible banking commitments. From 2022, with the purpose of increasing focus on the group's Responsible banking agenda and highlight sustainability as a core long-term strategy, five new ESG metrics are included (described in the next section) for the last deferred variable remuneration payments.
- Social responsibility: Employees' pay cannot be lower than the legal minimum wage or the living wage in the country where they work. Additionally, in order to give our social responsibility prominence in remuneration, the Group's Responsible banking objectives for employee remuneration include the people financially empowered metric.
- Performance-based pay: Variable remuneration is subject to the achievement of (i) annual objectives (set out in section 6.4.B.ii.B), which reflect customer and profitability strategy, promote proper risk management and cost-effective capital allocation, and discourage short-term management focus; and (ii) long-term objectives (set out in section 6.4.B.ii.B), which support a sustainable balance sheet, shareholder return, the Group's profitability and sustainability of the Group's activities and the way they are carried out.

Directors' remuneration for 2022

A. Directors' remuneration in their capacity as such

In 2022, directors, in their capacity as such, will receive remuneration for supervisory and collective decision-making duties for a total of up to 6 million euros as authorised by the shareholders at the April 2021 AGM (which will again be put to a vote at the 2022 AGM). It consists of:

- annual allocation; and
- attendance fees.

The amounts agreed for 2022 are the same as initially established for 2021 (disclosed in section 6.2.B and C above), with the exception of the annual board member allotment (which is to increase from EUR 90,000 to EUR 95,000).

The specific amounts and the form of payment are determined by the board of directors in the manner described in section 6.2 above, based on the objective circumstances of each director.

Additionally, as indicated in the description of the director remuneration system, Banco Santander will pay its directors' the corresponding civil liability insurance premium in 2022. The related policy is common to all executives and was taken out under usual market condition, proportionate to Banco Santander's situation.

B. Executive directors' remuneration for the performance of executive duties

i) Fixed remuneration components

A) Gross annual salary

On the remuneration committee's recommendation, the board resolved that Ana Botín and José Antonio Álvarez's gross annual salaries would be the same for 2022 as in 2021.

Their gross annual salary amounts may increase owing to adjustments made to the fixed remuneration mix based on the criteria approved by the remuneration committee, provided this does not entail any cost increase for Banco Santander.

B) Other fixed remuneration components

- Benefit systems: defined contribution schemes as set out in section 'Pre-retirement and benefit schemes'[26].

- Supplement to fixed salary: Ana Botín will receive the fixed salary supplement for an amount of EUR 525 thousand in 2022, and José Antonio Álvarez, EUR 710 thousand, that was approved in 2018 when the supplementary death and disability pension schemes were eliminated.

- Social welfare benefits: executive directors will also receive social welfare benefits such as life insurance premiums, medical insurance and the allocation of remuneration to employee loans, in accordance with Banco Santander's general policy for senior management, and in the same terms as the rest of employees. Likewise, the Bank makes available to directors the human and material means required or considered appropriate for carrying out their duties (including any travel required for the exercise of their role). Any eventual private use of these means by the executive directors is duly paid by them under the terms and conditions approved by the board of directors upon proposal from the remuneration committee. This information can also be found under the 'Pre-retirement and benefit plans' section

ii) Variable remuneration components

The board approved the policy on executive directors' variable remuneration for 2022 on the remuneration committee's recommendation, based on the remuneration policy principles described under section 6.3.

Executive directors' variable remuneration consists of a single incentive scheme, linked to the achievement of short-and long-term objectives. It is structured as follows:

- The final amount of variable remuneration will be set at the start of the following year (2023) based on the benchmark amount and subject to compliance with the annual objectives described under section B) below.

- 40% of the incentive will be paid immediately once the final amount has been set, and 60% will be deferred in equal parts paid out over five years and subject to long-term metrics:

  - The amount deferred over the first two years (24% of the total) will be paid in 2024 and 2025 on the condition that no malus clauses described under section 6.3 B vi) are triggered.

  - The amount deferred over the next three years (36% of the total) will be paid in 2026, 2027 and 2028, on the condition that no malus clauses are triggered and long-term targets –described in section D) Deferred incentive subject to long-term performance objectives– are met.

The Group can claw back incentives already paid in the cases and during the term set out in its malus and clawback policy, described under section 6.3 B vi).

Exceptionally, when a new executive director joins Banco Santander, his/her variable pay may include a sign-on bonus and/or buyouts.

Variable components in executive directors' total remuneration for 2022 cannot exceed the limit of 200% of fixed components submitted for approval to the 2022 AGM. However, under EU regulations on remuneration, certain variable components can be excluded.

A. Variable remuneration benchmark

Variable remuneration for executive directors in 2022 will be set based on a standard benchmark contingent upon the full achievement of their set individual targets, which for 2022 among others include, both for the executive chair and the CEO, increasing CET1 and sustainability targets.

The board of directors may revise the variable pay benchmark on the remuneration committee's recommendation and following market and internal contribution criteria.

B. Setting of final variable remuneration based on yearly results

Based on that standard benchmark, 2022 variable remuneration for executive directors will be based on the corporate bonus pool, and set according to:

- Short-term quantitative metrics for annual objectives, which reduce from the four used in 2021 to three (customers, RoTE and RoRWA) to reflect strategic priorities regarding customers and profitability.

- A qualitative assessment that cannot raise or lower the quantitative result by more than 25%, which among other elements includes metrics on capital and progress on ESG commitments.

- An exceptional adjustment that must be supported by duly substantiated evidence and may involve changes owing to control and/or risk deficiencies, negative assessments from supervisors or unexpected material events.

  Capital continues to be an important part of key employees´ remuneration (including executive directors), due to the management of RWA (RoRWA metric weights 40%), the inclusion of CET1 in the qualitative assessment below and also the individual targets of the executive chair, the CEO and all executives running businesses.

[26] As indicated in the next section, executive directors contribution to the benefit systems includes both fixed and variable components

The new scorecard below provides the proposed quantitative metrics, qualitative assessment factors and weightings:

Category and weighting	Quantitative metrics	Qualitative assessment
Customers (30%)	NPS[A] and total customers and loyal customers	Customer conduct Risk. Measurement of additional customer satisfaction metrics, such as easy access to service or response time
Shareholders (70%)	Return - RoTE: return on tangible equity[B] (30%)	CET1 - Efficient capital adequacy management Appropriate management of operational risk, risk appetite and recorded breaches Sustainable and sound results and efficient cost management
	RoRWA[B] (*Return on risk weighted assets*)(40%)	Suitability of business growth compared to the previous year in view of market conditions and competition Annual progress on Responsible banking commitments (as shown in Section D below for 2022)

A. Net promoter score.
B. For this purpose, these metrics may be adjusted upwards or downwards by the board, following a proposal from the remuneration committee, when inorganic transactions, material changes to the Group's composition or size or other extraordinary circumstances (such as impairments, share buybacks, legal changes or restructuring procedures) have occurred which affect the suitability of the metric and achievement scale established in each case and resulting in an impact not related to the performance of the executive directors and executives being evaluated.

Lastly, as additional conditions for determining the incentive, the following circumstances must be confirmed to set variable pay:

- If the Group's ONP for 2022 were 50% less than in 2021, variable pay would in no case exceed 50% of the benchmark incentive for 2022.
- If the Group's ONP were negative, the incentive would be zero.

When setting individual bonuses, the board will also consider restrictions to the dividend policy imposed by supervisors.

C) Forms of payment of the incentive

Variable remuneration will be 50% in cash, 25% in shares and 25% in share options. One portion is paid in 2023 and the other is deferred for five years and subject to long-term metrics:

a) 40% of variable remuneration is paid in 2023 net of tax, with 50% in cash, 25% in shares and 25% in share options.

b) 60% paid, if applicable, in five equal parts in 2024, 2025, 2026, 2027 and 2028 (net of tax), with 50% in cash, 25% in shares and 25% in share options under the conditions stipulated in section E).

The final three payments will also be subject to long-term objectives described in section D) below.

Shares shall be subject to a three-years retention period, unless the executive directors already hold shares for an amount equivalent to 200% of their fix annual remuneration -in which case the regulatory one year retention period will apply. For share options, the retention period applied will be in accordance with the rules of the plan approved by the board of directors to comply with applicable regulations and regulatory recommendations.

Options will not include any premium, as they will be valued at fair market price at the moment when they are awarded. They may be exercised from the moment they are delivered to the executive, in accordance with the deferral calendar above, and until the tenth anniversary of the date when they are delivered.

D) Deferred variable pay subject to long-term objectives

As indicated above, the amounts deferred in 2026, 2027 and 2028 will be paid on the condition that the group achieves its long-term targets for 2022-2024, in addition to the terms described in section E).

As advanced in section B) on the principles of the remuneration policy, the new long-term targets are:

a. Banco Santander's consolidated Return on tangible equity (RoTE) target in 2024. The RoTE ratio for this target is obtained as follows:

RoTE in 2024 (%)	'RoTE Ratio'
≥ 15%	1.5
≥ 12% but < 15%	0 – 1.5[A]
< 12%	0

A. Straight-line increase in the RoTE ratio based on the percentage of specific RoTE in 2024 within this bracket of the scale.

To verify compliance with this objective, the board, following a proposal from the remuneration committee, may adjust it to remove the effects of any regulatory change to its calculation rules or any extraordinary circumstances (such as impairments, corporate transactions, share buybacks or restructuring procedures) that have occurred which affect the suitability of the metric and achievement scale established in each case and resulting in an impact not related to the performance of the executive directors and executives being evaluated.

b. Relative performance of Banco Santander's total shareholder return (TSR) in 2022-2024 in respect of the weighted TSR of a peer group comprising 9 credit institutions, with the appropriate TSR ratio based on the group's TSR among its peers.

Ranking of Santander TSR	'TSR Ratio'
The100th percentile	1.5
Between the 75th and 100th percentiles (not inclusive)	1 – 1.5[A]
Between the 40th and 75th percentiles (not inclusive)	0.5 - 1[A]
Less than the 40th percentile	0

A. Increase in the TSR ratio proportional to the number of positions moved up in the ranking.

TSR[27] measures the return on shareholders' investment. It is the sum of the change in share price plus dividends and other similar items (including the Santander Scrip Dividend programme) shareholders can receive during the period.

The peer group comprises BBVA, BNP Paribas, Citi, Credit Agricole, HSBC, ING, Itaú, Scotiabank and Unicredit.

c. ESG (environmental, social and governance) metrics.

Achievement of this target will depend on the progress made on the Group's responsible banking commitments (described below):

1. Target for women in senior leadership positions by the end of 2024:

Women in senior leadership positions[B] (%)	Coefficient
≥ 30.5%	1.25
≥ 30% but < 30.5%	1 – 1.25[A]
≥ 28% but < 30%	0 – 1[A]
< 28%	0

A. Increase of the coefficient is proportional to its position on this line of the scale.
B. Senior leadership positions make up 1% of the total workforce

2. Financially empowered people target between 2019 and 2024:

Financially empowered people[B] (million)	Coefficient
≥ 14	1.25
≥ 13 but < 14	1 – 1.25[A]
≥ 9 but < 13	0 – 1[A]
< 9	0

A. Increase of the coefficient is proportional to its position on this line of the scale.
B. Unbanked, underbanked or financially vulnerable individuals receive tailored finance solutions and can increase their knowledge and resilience through financial education.
More ambitious target than the public commitment announced due to the good performance of this metric.
Furthermore, our financial inclusion target will always conform to the Group's credit risk policy without altering loanbook performance.
The public commitment is measured with cumulative data since 2019 to align with our 2019-2025 responsible banking public commitments.

3. Green finance raised and facilitated target between 2019 and 2024:

Green Finance[B] (EUR Bn)	Coefficient
≥ 170	1.25
≥ 160 but < 170	1 – 1.25[A]
≥ 120 but < 160	0 – 1[A]
< 120	0

A. Increase of the coefficient is proportional to its position on this line of the scale.
B. Includes Grupo Santander's contribution to green finance: project finance; syndicated loans; green bonds; capital finance; export finance, advisory services, structuring and other products, to help customers transition to a low-carbon economy. Includes the public commitment and the launch of new products and green retail volumes.
The public commitment is measured with cumulative data since 2019 to align with our 2019-2025 responsible banking public commitments.

4. Setting decarbonisation targets across the business following NZBA:

Sectors with decarbonisation targets (number)	Coefficient
≥ 11	1.25
=10	1
≥ 0 but <10	0 – 1[A]

A. Increase of the coefficient is proportional to its position on this line of the scale.

The Group is working on aligning our climate-material portfolios with the goals of the Paris Agreement. In 2021, we set decarbonization targets for the coal and electricity generation industries, based on our ambition to be net zero by 2050. In February, we made our decarbonization targets public with a view to end financing for electricity-generating customers if the source of over 10% of their revenue is thermal coal; and to eliminating our exposure to coal mining entirely by 2030. In July 2021, we announced a new decarbonization target to reduce the emissions intensity of our electricity generation portfolio. As part of the NZBA, we have the obligation to set and announce interim emissions-related targets for 2030 (or sooner) regarding these ten industries by March 2024: electricity generation; coal; oil and gas, transport; iron and steel; aluminium; cement; mortgage lending; property; and agriculture (subject to the availability of data and methodologies, in line with our commitment to NZBA). To meet NZBA guidelines, we must disclose, at least, one target for portfolios of each of those ten industries.

5. Meeting the decarbonisation target set for Santander Power Generation Portfolio:

Emission intensity reduction of our power generation portfolio (%)	Coefficient
≥ 18.75%	1.25
≥ 15% but < 18.75%	1 – 1.25[A]
≥ 0%[B] but < 15%	0 – 1[A]

A. Increase of the coefficient is proportional to its position on this line of the scale.
B. In case emission intensity increase, the coefficient would be 0.

This commitment aims to make sure we succeed in lowering the emissions intensity of our electricity generation portfolio from 0.23 tCO2e/MWh (2019) to 0.18 tCO2e/MWh by 2025 and 0.11 tCO2e/MWh by 2030, in accordance with the "IEA – Net Zero emissions" scenario. From the 2019 baseline scenario of 0.23, a 21.7% emissions reduction is necessary to reach the 2025 target of 0.18. Cutting emissions from 2019 by between 15% and 18.75% will put us on the right path with momentum to reach the targets for our electricity generation portfolio by 2025 and 2030.

Each of the five Responsible banking commitments have the same weighting and this formula to calculate them:

C = (1/5 x Coefficient 1 + 1/5 x Coefficient 2 + 1/5 x Coefficient 3 +1/5 x Coefficient 4 +1/5 x Coefficient 5)

[27] TSR refers to the difference (%) between the final and initial values of capital invested in ordinary shares of Banco Santander. The final value is calculated based on the dividends or other similar concepts (such as the Santander Scrip Dividend programme) shareholders receive for this investment during the corresponding period -as if they had invested in more shares of the same type at the first date on which the dividend or similar concept was payable to shareholders- and the weighted average share price at that date. To calculate TSR, the weighted average daily volumes of the weighted average listing prices for the fifteen trading sessions prior to 1 January 2022 (exclusive) is considered (to calculate the initial value) and the fifteen trading sessions prior to 1 January 2025 (exclusive) (to calculate the final value).

The following formula will be used to set the annual amount of performance-based deferred variable remuneration in 2026, 2027 and 2028 ('Final annuity'), without prejudice to any adjustment deriving from the application of the malus policy (see section 6.3 B vi):

Final annuity = Amt. x (2/5 x A + 2/5 x B + 1/5 x C)

where:

- 'Amt.' is one third of variable remuneration deferred conditional on performance (i.e. Amt. will be 12% of the total incentive set in early 2023).
- 'A' is the RoTE coefficient according to the scale in the table above, based on RoTE at year-end 2024.
- 'B' is the TSR ratio calculated as the scale in the table above, according to the relative performance of Banco Santander's TSR within its peer group in 2022-2024.
- 'C' is the coefficient resulting from the sum of weighted coefficients for each of the five Responsible banking commitments for 2024 (see section (c) above).
- In any event, if the result of (2/5 x A + 2/5 x B +1/5 x C) is greater than 1.25, the multiplier will be 1.25.

The estimated maximum amount to be delivered in shares or share options to executive directors is 11.5 million euros.

E) Other terms of the incentive

Payment of the deferred amounts (including those linked to long-term targets) if they remain in the group and none of the circumstances triggering malus clauses arising (as per the malus and clawback section in the group's remuneration policy) under terms similar to those indicated for 2021. Furthermore, the group can claw back paid incentives under the scenarios, period and terms and conditions set out in the remuneration policy.

Hedging the value of Santander shares or share options received during the retention and deferral periods is expressly prohibited.

The effect of inflation on the deferred amounts in cash may be offset.

Selling shares is also prohibited for at least one year since the delivery. Shares received by the exercise of options, as well as cash proceeds deriving from exercise by differences, will be in accordance with the rules of the plan approved by the board of directors. .

The remuneration committee may propose to the board adjustments in variable remuneration under exceptional circumstances owing to internal or external factors, such as requirements, orders or recommendations issued by regulatory or supervisory bodies. Such adjustments will be described in detail in the report on the remuneration committee and the annual report on directors' remuneration put to a non-binding vote at the annual general meeting.

iv. Shareholdings

As described in section 6.3.E, in addition to the regulatory obligation not to sell shares they receive as remuneration for a year since from their award date, in order to comply with recommendation 62 of the Spanish Corporate Governance Code, the policy on shareholdings includes the obligation for executive directors not to sell the shares they receive as variable remuneration for a period of three years from their award date, unless the executive director already holds Banco Santander shares for an amount equivalent to twice his/her annual salary. For share options, the retention period applied will be in accordance with the rules of the plan approved by the board of directors to comply with applicable regulations and regulatory recommendations.

Directors' remuneration for 2023 and 2024

A. Directors' remuneration

For 2023 and 2024, no changes to directors' remuneration are planned for 2022. However, shareholders at the 2023 or 2024 annual general meeting could approve an amount higher than the six million euros currently in force, or the board could approve an alternative allocation of that amount to directors in accordance with article 58.2 of Banco Santander's Bylaws (duties and responsibilities; positions held on the board; their membership and attendance at committee meetings; and other objective circumstances).

B. Directors' remuneration for the performance of executive duties

Executive directors' remuneration will conform to principles similar to those applied in 2022, with the following changes.

i. Fixed components of remuneration

A) Gross annual salary

Executive directors' annual gross fixed pay may be adjusted each year based on the criteria approved by the remuneration committee at any given time. For 2023 and 2024, it may not increase above 5% of their annual gross salary in the previous year. It could also increase over that threshold owing to adjustments made to the fixed remuneration mix based on standards approved by the remuneration committee, as long as it will not increase the Group's costs.

The 5% increase mentioned above may be higher for one or several directors provided that, when applying the rules or requirements or supervisory recommendations that may be applicable, and if so proposed by the remuneration committee, it is appropriate to adjust their remuneration mix and, in particular, their variable remuneration, in view of the functions they perform.

This should not increase executive directors' total remuneration. Otherwise, it must be disclosed in the report on the remuneration committee and the annual report on director's remuneration put to a non-binding vote at annual general meeting.

B) Other fixed remuneration components

No changes planned in respect of the terms for 2022.

ii) Variable remuneration components

The policy on executive directors' variable remuneration for 2023 and 2024 will be based on the same principles as in 2022, following the same single-incentive scheme described above, and subject to the same rules of operation and limitations.

A) Setting variable remuneration

Executive directors' variable remuneration for 2023 and 2024 will be set based on the corporate bonus pool and a benchmark approved for each year which takes into account:

- a set of short-term quantitative metrics measured against annual objectives and aligned with the group's strategic plan. These metrics will also cover, at least, shareholder return targets, capital and customers. They can be measured at group level and, where applicable, at division level, for a specific business division headed by an executive director. The results of each metric can be

contrasted with the budget for the financial year, as well as with growth from the previous year.

- a qualitative assessment that cannot raise or lower the quantitative result by more than 25%. It will be conducted for the same categories as the quantitative metrics, including shareholder returns, risk and capital management and customers.
- an exceptional adjustment that must be duly substantiated and may involve changes owing to control and/or risk shortfalls, negative assessments from supervisors or unexpected material events.

The quantitative metrics, qualitative assessment and potential extraordinary adjustments will ensure main objectives are considered from the perspective of the various stakeholders and that the importance of risk and capital management is factored in.

Once the corporate bonus pool is fixed according to the criteria above, the board of directors, further to a proposal from the remunerations committee, decides on the individual bonus, taking into consideration the level of achievement of their individual objectives, which in general terms coincide with the bonus pool metrics (60%) and their compliance with corporate values (40%).

Lastly, the following circumstances must be confirmed to set variable remuneration:

- If ONP does not reach a certain compliance threshold, the incentive cannot exceed 50% of the year's incentive benchmark.
- If the group's ONP were negative, the incentive would be zero.
- When setting individual variable pay, the board will also consider restrictions to the dividend policy imposed by supervisors.

B) Forms of payment of the incentive

No changes to pay forms are planned in respect of the terms in place for 2022.

It is also envisaged that for 2023 and 2024 Ana Botín would receive the equivalent of EUR 500 thousand in RSUs, and José Antonio Álvarez would receive the equivalent of EUR 410 thousand in RSUs, under PagoNxt, S.L.'s long term incentive plan. Each RSU would grant the right to a share in PagoNxt, S.L. or the holding entity of its group (or its equivalent in cash) at the moment when, according to such plan, a liquidity event, a repurchase or a liquidation of such instruments takes place.

The RSUs will substitute part of their Santander variable pay instruments without increasing their total pay and will not represent more than 10% of their variable pay.

C) Deferred variable remuneration subject to long-term objectives

The last three annual payments of each deferred variable remuneration amount will be made in accordance with the terms described under section E) above and if the Group fulfils long-term objectives for at least three years. This may confirm, reduce or increase payment amounts and the number of deferred shares.

Long-term metrics will, at least, cover value creation and shareholder returns as well as capital and sustainability over a minimum period of three years. They will be aligned with the group's strategic plan and main priorities towards its stakeholders. They can be measured for the entire group or by country or business, when appropriate, and subsequently compared to a group of peers.

The portion paid in shares cannot be sold until one year has elapsed since delivery. For share options, the retention period applied will be in accordance with the rules of the plan approved by the board of directors.

D) Other terms of the incentive

No changes to the continuity, malus and clawback clauses of the remuneration policy for 2022 described in section E are expected. Furthermore, no changes are planned in respect of the clauses on hedging shares or the deferred amounts in cash adjusted for inflation.

iii) Shareholdings

The policy on shareholdings approved in 2016, with the amendment introduced in 2020 relating to not selling the shares they receive as variable remuneration for a period of three years detailed in section 6.3.E above will apply in 2023 and 2024, unless the remuneration committee proposes it be amended to the board in light of exceptional circumstances (regulations, orders or recommendations from regulators or supervisors). Such amendments would be described in detail in the report on the remuneration committee and the annual report on director's remuneration put to a non-binding vote at the annual general meeting.

iv) Principle of equal pay

The same principle of equal pay that applies for executive directors and any other Santander employee described in respect of 2022 applies for 2023 and 2024.

Terms and conditions of executive directors' contracts

Executive directors' terms of service are governed by board-approved contracts they sign with Banco Santander. The basic terms and conditions, besides those relating to the remuneration mentioned above, are the ones described herebelow.

A. Exclusivity and non-competition

Executive directors may not contract with other companies or entities to perform services, unless expressly authorised by the board of directors. In all cases, they are bound by a duty of non-competition in relation to companies and activities similar in nature to Banco Santander and its consolidated group.

In addition, executive director contracts impose prohibitions on competing and attracting customers, employees and suppliers, which can be enforced for two years after their termination in their executive duties for reasons other than a breach by Banco Santander. In regard to Ana Botín and José Antonio Álvarez, the compensation to be paid by Banco Santander for this duty of non-competition is twice the amount of the fixed remuneration.

B. Code of Conduct

Executive directors are obliged to adhere strictly to the group's General Code and the Code of Conduct in Securities Markets, especially in terms of confidentiality, professional ethics and conflicts of interest.

C. Termination

The length of executive directors' contract is indefinite. Contracts do not provide for any severance payment upon termination apart from what the law provides.

If Ana Botín's contract is terminated by Banco Santander, she must remain available to the group for four months in order to ensure proper transition (6 months from the moment pre-retirement

provisions are taken out). During this period, she would continue to receive her gross annual salary.

D. Pre-retirement and benefit plans

The board of directors has approved in 2020, an amendment to the contracts of the executive directors whereby:

- Ana Botín ceases to have the right to pre-retire if she leaves Banco Santander out of her own volition, keeping this right in case of termination by Banco Santander until 31 August 2022. After this date, she does not have the right to pre-retire. While she keeps this right she will be entitled to an annual allotment equal to the sum of her fixed remuneration and 30% of the average amount of her last variable remuneration, to a maximum of three. This allotment is subject to the malus and clawback provisions in place for a period of five years.

- José Antonio Álvarez ceases to have the right to pre-retire in case of termination of his contract.

They both participate in the defined contribution scheme created in 2012, which covers the contingencies of retirement, disability and death. Banco Santander makes annual contributions to executive directors' benefit plans schemes. Annual contributions are calculated in proportion to executive directors' pensionable bases, and the group will continue to make them until the executive directors' leave the group or until their early retirement within the group, their death or disability (including during pre-retirement). The pensionable base of executive directors' annual contributions is their fixed remuneration plus 30% of the average of their last three variable remuneration amounts. Contributions will be 22% of pensionable bases.

The pension amount that corresponds to contributions linked to variable remuneration will be invested in Santander shares for five years from the earlier of the date of retirement or cessation. It will be paid in cash after the five years have elapsed or on the retirement date (if later). Moreover, the malus and clawback clauses for variable remuneration contributions will apply for the same period as the related bonus or incentive.

This benefit plan is outsourced to Santander Seguros y Reaseguros, Compañía Aseguradora, S.A. Executive directors' economic rights under the scheme belong to them even if they are not active in the group at the time of their retirement, death or disability. Their contracts do not provide for any severance pay upon termination apart from what the law provides and in the case of pre-retirement, the aforementioned annual allotment.

E. Insurance and other remuneration and benefits in kind

Ana Botín and José Antonio Álvarez will receive the supplement to their fixed remuneration approved when the supplementary life and health benefits were eliminated in 2018. It will be paid in 2022, 2023 and 2024 in the same amount and continue to be paid until they reach retirement age (even if they are still active).

The group has life and health insurance policies taken out for directors. Insurance premiums for 2022 include standard life insurance and the life insurance cover with the supplement to their fixed remuneration mentioned above. In 2023 and 2024, premiums could vary if directors' fixed pay or actuarial circumstances change.

Furthermore, executive directors are covered by Banco Santander's civil liability insurance policy and may receive other benefits in kind (such as employee loans) pursuant to the group's general policy and subject to the corresponding tax treatment. Likewise, the Bank makes available to directors the human and material means required or considered appropriate for carrying out their duties (including any travel required for the exercise of their role). Any eventual private use of these means by the executive directors is duly paid by them under the terms and conditions approved by the board of directors upon proposal from the remuneration committee.

F. Confidentiality and return of documents

Directors are bound to a strict duty of confidentiality during their relationship and subsequent to termination. Executive directors are required to return any documents and items relating to their activities and in their possession to Banco Santander.

Agreements with non-executive members of the board

Sergio Rial signed an agreement (effective on 1 January 2022) as strategic adviser to Grupo Santander for providing specific advisory services on strategic and digital transformation, including also business development in the Asian markets and other strategic matters. He will receive fixed remuneration of EUR 2.1 million and variable pay of EUR 1 million, subject to the achievement of objectives. The agreement is for an indefinite term. It also includes a one year non-compete commitment which would entitle him to receive EUR 2 million if he complies with this commitment.

Luis Isasi has a contract since 4 April 2020 to act as non-executive chair of the board of Santander España (for which he receives EUR 925,000 a year) and to serve as a member of the board of Santander España (for which he receives EUR 75,000 a year). His contract is permanent and does not entitle him to any compensation if terminated.

Appointment of new executive directors

The components of remuneration and basic structure of the agreements described in this remunerations policy will apply to any new director that is given executive functions at Banco Santander, notwithstanding the possibility of amending specific terms of agreements so that, overall, they contain conditions similar to those previously described.

Directors' total remuneration for executive duties cannot exceed the highest remuneration received by the group's current executive directors under the remuneration policy approved by shareholders. The same rules apply if a director assumes new duties or becomes an executive director.

If a director takes up executive functions in a specific division or local unit, the board of directors, on the remuneration committee's recommendation, can adapt the metrics for setting and paying incentives to take that division or local unit into account in addition to the group.

Remuneration paid to directors in that capacity will be included within the maximum amount set by shareholders to be distributed by the board of directors in the terms described above.

A new director coming from an entity outside Santander Group could be paid a buyout to offset any variable remuneration foregone for having accepted a contract with the group; and/or a sign-on bonus for leaving to join Banco Santander.

This compensation could be paid fully or partly in shares and share options, depending on the delivery limits approved at the annual general shareholders' meeting. Authorization is expected to be sought at the next general shareholders' meeting in order to deliver a

maximum number of shares and share options to any new executive directors or employees to whom buyout regulations apply.

Furthermore, sign-on bonuses can only be paid once to new executive directors, in cash or in shares, and in each case they will not exceed the sum of the maximum variable remuneration awarded for all executive directors.

In 2021, no executive director appointments could trigger buy outs, sign-on bonuses or any other form of remuneration.

Temporary exceptions to the remuneration policy

According to section 6 of Article 529 *novedecies* of the Spanish Companies Act, specific exceptions may apply to components in the remuneration policy, based on particular business needs or macroeconomic context in the Group's geographies , provided that they are required to serve the long-term interests and sustainability of the entity; ensure its viability; and require to be adopted urgently.

Such exceptions include:

- Complex macroeconomic scenarios where the ordinary course of the business is severely impacted.
- The appointment of a new executive chair or chief executive officer, or the need to retain an executive director to avoid a vacancy at the head of the Group (*vacatio regis*) during especially complex times for the business.
- The need to adapt to regulatory change.

To apply, exceptions must be supported by:

- a reasoned remuneration committee proposal; and
- board of directors analysis and approval.

Any applied exception will be explained in the *Annual report on directors' remuneration*.

6.5 Preparatory work and decision-making for the remuneration policy; remuneration committee involvement

Section 4.7 'Remuneration committee activities for 2021', (the report on the remuneration committee) states:

- Pursuant to Banco Santander's bylaws and the Rules and regulations of the board of directors, the duties relating to the remuneration of directors performed by the remuneration committee.
- How the remuneration committee is composed on the date the report is approved.
- The number of meetings it had in 2021, including joint sessions with the risk, compliance and regulation supervision committee.
- The date of the meeting in which the report was approved.
- The 2020 annual report on directors' remuneration was approved by the board of directors and put to a binding vote at the 2021 AGM, with 91.6% of the votes in favour. The tally of the votes was:

	Number	% of total[A]
Votes	11,397,073,138	97.12 %

	Number	%
Votes for[B]	10,434,787,981	91.59 %
Votes against[B]	957,730,594	8.41 %
Blank[C]	4,554,563	0.04 %
Abstentions[C]	338,103,702	2.88 %

A. Percentage on total valid votes and abstentions.
B. Percentage of votes for and against.
C. Percentage of share capital present and attending by proxy at the Ordinary Shareholders' Meeting.

Decision process for the development, review and application of the policy

Pursuant to Article 529 *novodecies* of the Spanish Companies Act, the remuneration committee issues the report on the proposed remuneration policy for 2022, 2023 and 2024 herein. The board of directors then submits it to the 2022 AGM as a separate item on the agenda and an integral part of this text. See section 6.4 'Directors' remuneration policy for 2022, 2023 and 2024 submitted to a binding shareholder vote'.

Banco Santander's Compensation function prepares the remuneration policy with the suggestions, requests and comments received during the year from the human resources committee, remuneration committee and the board of directors. A first draft of the policy is submitted to the remuneration committee for review every January. The review considers the suggestions, requests and comments the chair and lead director receive through shareholder and stakeholder engagement during the year on our corporate governance and our remuneration structures. Regulators' recommendations and legal requirements that may have come to light since the last time the director remuneration policy was submitted for approval by the annual general meeting are also considered.

The committee also makes sure the policy is consistent with the Group's culture and our Simple, Personal and Fair values. The Compensation function then prepares the final draft for the remuneration committee to submit to the board of directors for approval in February.

Based on the analysis carried out in the context of the 2021 annual remuneration report elaboration and its continued supervision of the remuneration policy, the remuneration committee believes the director remuneration policy for 2022, 2023 and 2024 which is included in section 6.4 above is consistent with the principles of Banco Santander's remuneration policy and its remuneration scheme set out in the Bylaws.

As detailed herein, the policy considers (i) further simplifying our executive remuneration scheme by reducing the four metrics relating to annual results to three (i.e. customers, RoRWA and RoTE) and combining more simplicity with our key strategic pillars of customers and profitability, without losing sight of proper risk and capital management, which is also added as qualitative element for the result,; (ii) introducing share options as part of variable pay, with the aim of creating a greater alignment with shareholder returns; and (iii) updating the metrics linked to the achievement of multi-year objectives, maintaining total shareholder return (TSR) and introducing RoTE and ESG-related metrics related to our Responsible banking commitments, in order to adhere to best market practice and our stakeholders' preferences, prioritizing long-term profitability for

shareholders and Santander, as well as a stable and sustainable balance sheet and operations.

In 2021, no deviations from, or temporary exceptions to, the application of the remuneration policy occurred.

6.6 Remuneration of non-director members of senior management

2021 variable remuneration was approved by the board of directors on 1 February 2022 in view of the recommendation the remuneration committee of 31 January 2022. It was set according to Banco Santander's general remuneration policy as well as specific details pertaining to senior management.

In general, senior management variable remuneration packages were calculated with the quantitative metrics and qualitative assessment used for executive directors (see section 6.3 B ii).

Some senior managers' contracts were amended in 2018 in the same manner described under 6.3.C and D in respect of Ana Botín and José Antonio Alvarez, with a pension scheme of 22% of their pensionable bases, the elimination of supplementary benefits, an increase of the insured sum of life insurance and a supplement to fixed remuneration in cash which is included under "Other remuneration".

The following table shows the amounts of short term remuneration (immediately payable) and deferred remuneration (not linked to multi year targets) for senior management as of 31 December 2021 and 2020, excluding those of executive directors. This amount has been reduced by 33% compared to that reported in 2014 (EUR 80,792 thousand):

EUR thousand

		Short-term and deferred salary remuneration					
Year	Number of people	Fixed	Immediately receivable variable remuneration (50% in shares)[A]	Deferred variable remuneration (50% in shares)[B]	Pension contributions	Other remuneration[C]	Total[D]
2021	15	19,183	16,804	7,296	5,542	5,055	53,880
2020	18	21,642	11,479	4,941	6,039	6,312	50,413

A. The amount immediately payable in shares in 2021 was 2,707 thousand Santander shares (2,136 thousand Santander shares in 2020).
B. The amount of deferred shares in 2021 was 1,175 thousand Santander shares (919 thousand Santander shares in 2020).
C. Includes life insurance premiums, health insurance and relocation packages and other remuneration items.

This table breaks down remuneration linked to multi-year targets for senior management (excluding executive directors) at 31 December 2021 and 2020, which they will only receive if they meet the terms of continued service; non-applicability of malus clauses; and long-term goals are met during deferral periods.

Thousands of euros

Year	Number of people	Deferred variable remuneration subject to long-term metrics[A] (50% in shares)[B]
2021	15	7,660
2020	18	5,188

A. In 2021, this corresponds to the fair value of maximum annual payments for 2025, 2026 and 2027 in the sixth cycle of the plan for deferred variable remuneration linked to multi-year targets. In 2020, this corresponds to the estimated fair value of maximum annual payments for 2024, 2025 and 2026 in the fifth cycle of the plan for deferred variable pay linked to multi-year targets. Fair value in the plan was determined on the authorization date based on the valuation report of independent expert Willis Towers Watson. Based on the plan for 2021 and success levels of similar plans at peer entities, the expert found a range of 60%-80% reasonable to estimate the initial success ratio. Therefore, fair value was considered to be 70% of the maximum value.
B. The number of shares in Santander as deferred variable pay subject to long-term metrics shown in the table above was 1,234 thousand in 2021 (965 thousand shares in Santander in 2020).

The long-term goals are the same as those for executive directors. They are described in section 6.3 B iv).

Senior executives who stepped down from their roles in 2021 consolidated salary remuneration and other remuneration until the cessation of their duties for a total amount of EUR 5,294 thousand during the year (EUR 5,984 thousand for those who stepped down from their roles in 2020). They also have the right to receive, in total, 55 thousand euros in variable pay subject to long-term targets (EUR 133 thousand for those who stepped down from their roles in 2020).

At our 2021 AGM, shareholders approved the 2021 Digital Transformation Incentive, a variable remuneration scheme that delivers Santander shares and share options if the group hits major milestones on its digital roadmap, and is aimed at a group of up to 250 employees whose functions are deemed essential to Santander's growth. No senior executives are included within this plan in 2021.

The 2020 Digital Transformation Incentive, which terms are substantially the same as those of the 2021 one, included three senior executives, who may receive a total of EUR 1,700 thousand.

See Note 46 to the **2021** Group's consolidated financial statements for further information on the Digital Transformation Incentive.

In 2021, the ratio of variable to fixed pay components was 125% of the total for senior managers, well within the maximum limit of 200% set by shareholders.

See note 5 of the group's 2021 consolidated financial statements for further details.

6.7 Prudentially significant disclosures document

On the remuneration committee's recommendation, the board approves the key remuneration elements of managers or employees who, while not belonging to senior management, take on risks, carry out control functions (i.e. internal audit, risk management and compliance) or who receive global remuneration that places them in the same remuneration bracket as senior management and employees who take on risk. These are typically those whose professional activities may have an important impact on the Group's risk profile (all of these, together with the senior management and Banco Santander's board of directors form the so called 'Identified Staff' or 'Material Risk Takers')

Every year, the remuneration committee reviews and, if applicable, updates identified staff in order to include individuals within the organization who qualify as such. The Remuneration Policies chapter in the 2021 Pillar III disclosures report[28] of Banco Santander, S.A. explains the criteria and regulations followed to identify such staff.

At the end of 2021, 1,018 group executives (including executive directors and non-director senior managers) were considered identified staff (1,394 in 2020), which accounts for 0.52% of the total final workforce (0.73% in 2020).

Identified staff have the same remuneration standards as executive directors (see sections 6.1 and 6.3), but not:

- Category-based deferral percentages and terms.
- The possibility in 2021 of certain manager categories of only having deferred variable pay subject to malus and clawback clauses (and not to long-term targets).
- The portion of variable remuneration paid or deferred as shares for group executives in Brazil, Chile and Poland that can be delivered in shares or similar instruments of their own listed entities (as in previous years).

In 2022, on top of the inclusion of share options, described in section 6.4 above, the board will maintain its flexibility to determine full or partial payment in shares or similar instruments of Banco Santander and its subsidiaries in the proportion it deems appropriate (according to the maximum number of Santander shares allocated at the general meeting and to any regulatory restrictions in each jurisdiction), in addition to the aforementioned introduction of share options in the executive pay of Banco Santander, S.A.

The aggregate amount of variable remuneration for identified staff in 2021, the amounts deferred in cash and shares, and the ratio of the variable to fixed remuneration components are explained in the remuneration policies chapter of Banco Santander's Pillar III disclosures report for 2021.

[28] The 2021 Pillar III disclosures report can be found on our corporate website.

7. Group structure and internal governance

Grupo Santander is structured into legally independent subsidiaries whose parent company is Banco Santander, S.A. Its registered office is in Santander (Cantabria, Spain), while its corporate centre is located in Boadilla del Monte (Madrid, Spain). It has a Group-Subsidiary Governance Model (GSGM) and good governance practices in place for its core subsidiaries. Any references to subsidiaries in this section are to the group's most prominent entities.

The key features of the GSGM are:

- The subsidiaries' governing bodies must ensure their rigorous and prudent management and economic solvency while pursuing the interests of their shareholders and other stakeholders.
- The subsidiaries are managed locally by teams that possess extensive knowledge on, and experience with, their customers and markets, while benefiting from the synergies and advantages of belonging to the Group.
- The subsidiaries are subject to local authority regulation and supervision, although the ECB supervises the Group overall.
- Customer funds are secured by the deposit guarantee schemes in the subsidiaries' countries and are subject to local laws.

The subsidiaries finance their own capital and liquidity. The group's capital and liquidity are coordinated by corporate committees. Intra-group risk transactions are limited, transparent and carried out under market conditions. Grupo Santander retains a controlling interest in subsidiaries listed in certain countries.

Each subsidiary runs independently and has its own recovery plan, limiting the contagion of risk between them and reducing systemic risk.

7.1 Corporate Centre

Banco Santander's GSGM is supported by a corporate centre, which brings control and support units together with functions such as strategy, risk, compliance, auditing, finance, accounting, technology and operations, human resources, legal services, internal governance, communications and marketing. It adds value to the Group by:

- Enhancing governance under robust corporate frameworks, models, policies and procedures to implement strategies and ensure effective Group oversight.
- Making the group's units more efficient through cost management synergies, economies of scale and a common brand.
- Sharing best practices in global connectivity, commercial initiatives and digitalization.

7.2 Internal governance

Grupo Santander's internal governance model outlines a set of principles that regulate three types of relationships with its subsidiaries:

- The subsidiaries' governing bodies are subject to the group's rules and procedures for structuring, forming and running boards of directors and audit, nomination, remuneration and risk committees, according to international standards and good governance practices. This includes embedding other group rules and regulations on the suitability, appointment, remuneration and succession plans of governing body members, which fully comply with local regulations and supervisory standards.
- The relationship between regional and country heads and the group CEO.
- The relationship between local and global heads of key control positions, following a three lines of defence model: chief officers for risk (CRO), compliance (CCO), audit (CAE), finance (CFO) and accounting (CAO), as well as other key support and business functions (Technology and Operations, HR, General Counsel, Legal Services, Marketing, Communications, Strategy, SCIB, and Wealth Management & Insurance).

The group has three regional heads who report to the group CEO and are responsible for consolidating and streamlining the management and coordination of its core countries in the three geographic areas where it operates: Europe, South America and North America. Their key responsibilities must be undertaken in compliance with European Union and country-specific laws and regulations, ensuring that the country heads' role and accountability (including regulatory responsibilities) are not compromised.

Since 2020, the Europe region (Spain, Portugal, Poland and UK) has the mandate to execute a pan-European operating model to deliver benefits of scale and efficiency that leverage common product and regional management structures in the countries. Specific coordination elements and organizational structures were defined to ensure the effective discharge of the Europe regional head's responsibilities, fully respecting local governance. Business and functional roles were also created to support and control those responsibilities.

The GSGM dictates rules for appointing those officers, setting their objectives (weighted 50% local and 50% group/regional) and variable pay, assessing their performance and planning their succession. It also explains how group officers should coordinate and interact with their subsidiary counterparts.

Grupo Santander has corporate frameworks for matters considered to have a material impact on its risk profile, covering risk, capital, liquidity, compliance, financial crime, technology, auditing, accounting, finance, strategy, human resources, outsourcing, cybersecurity, special situations management, and communications and brand. In 2021 a new Responsible Banking Corporate Framework was approved by the board. They also specify:

- How the Group should supervise and exert control over subsidiaries; and
- The group's involvement in subsidiaries' decision-making (and vice versa).

Banco Santander board of directors approves the GSGM and corporate frameworks for the subsidiary governing bodies to formally adhere to them. They take local requirements for subsidiaries into account, and are revised each year as required by the group's board and adapted to new legislation and international best practices.

The functions draw on corporate frameworks to prepare internal regulatory documents that are given to subsidiaries as a reference for implementing those frameworks effectively, cohesively and in compliance with local laws and supervisory requirements. This approach ensures consistency throughout the Group. Every year an assessment is conducted by the Functions on the effective embedding of the contents of the group's internal regulation at local level. This information is presented by the internal governance office to the board of directors.

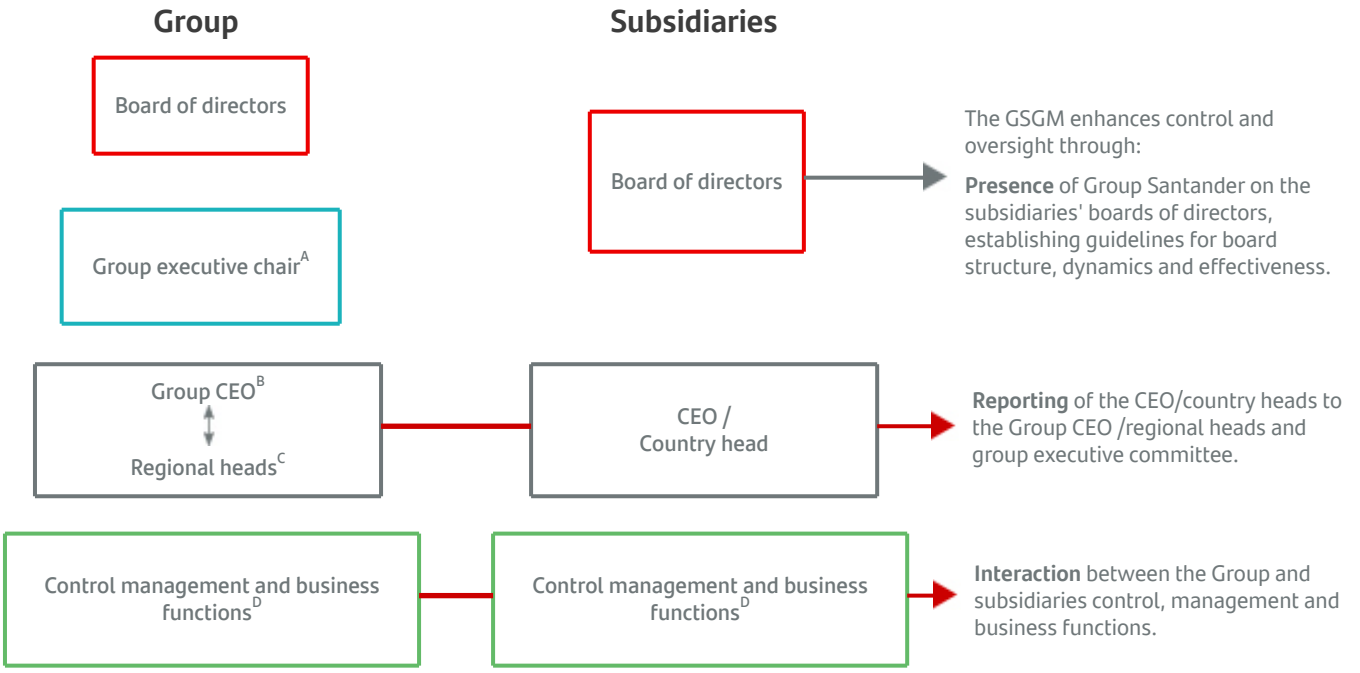
The group's internal governance office and subsidiary general counsels are responsible for embedding the governance model and corporate frameworks. Every year, the group assesses their performance in reports sent to governing bodies.

Since 2019, a policy for the governance of non-GSGM subsidiaries , completes and enhances the governance and control system that has been applied to those companies thus far.

Since 2020, PagoNxt, a wholly-owned subsidiary of Banco Santander that is structured as a dedicated holding company with a set of key initiatives on digitalizing the group's financial services, with payments at the core has its own governance model. This model defines an organizational and governance framework for PagoNxt and its subsidiaries in the context of the group-wide arrangements. It specifically covers the scope, principles, roles and responsibilities, key processes and governance bodies that should be in place to ensure that PagoNxt is managed in alignment with group, legal and supervisory expectations.

Also since 2020, Santander Corporate and Investment Banking (SCIB) and Wealth Management and Insurance have specific governance models to ensure robust, group-wide oversight of those businesses, as set out in the GSGM.

The following charts show the three levels of the GSGM, as well as the main actions to ensure an effective relationship and solid internal governance system for the Group.



A. First executive.
B. Second executive.
C. Europe, North America and South America, reporting to Group CEO.
D. Audit, Risk, Compliance, Finance, Financial Accounting & Control, IT & Operations, Human Resources, General Secretariat, Marketing, Communications, Strategy, Santander Corporate & Investment Banking and Wealth Management & Insurance.

Best practices and talent sharing across the whole Group and between subsidiaries is **key to our success**.

Multiple point of entry structure that has proved to be a **key resilience instrument** and is a result of our diversification strategy.

Continuous collaboration and daily interaction between local and corporate teams.

A common set of corporate frameworks and policies across the Group adapted to local market conditions.

Identifying **synergies and economies of scale** across the Group.

Definition and implementation of new group-wide and local initiatives to keep developing our management and control model.

8. Internal control over financial reporting (ICFR)

This section describes the key aspects of Grupo Santander's ICFR in respect of financial reporting, including:

- Control activities and control environment.
- Risk assessment in financial reporting.
- Reporting and communication.
- System monitoring.
- The external auditor's report.

8.1 Control environment

Governance and control bodies

The board of directors approves the financial reports Banco Santander must publicly disclose as a listed company. It is the body that oversees and guarantees the integrity of the Group's systems for internal communication, operational and financial control, accounting, financial reporting and legal compliance.

The board of directors has an audit committee that assists with supervising the group's financial reporting and internal control systems (see section 4.5 'Audit committee activities in 2021').

The audit committee works with the external auditor to address every aspect with impact in the ICFR identified in audits. It also makes sure the external auditor issues a report on the group's system for ICFR.

Responsibilities, General Code of Conduct, whistleblowing channel and training

Responsibility functions

Grupo Santander, through its corporate organization functions, in countries and businesses, defines, implements and maintains the unit's organizational structures, catalogue of roles and size. The corporate organization function defines and documents the corporate model for managing structures and templates which is used as a reference across the group.

The organizational units are in charge of identifying and defining the main functions under the responsibility of each structural unit, ensuring that the organization has a solid ICFRS model.

Grupo Santander has a responsibility scheme to identify potential risks and their mitigating controls under a three-pronged defence model that establishes lines of authority and accountability including:

The head of the financial accounting and control function (the CAO), which has the following functions concerning the generation of financial information, amongst others:

- Integrating the group's corporate accounting policies into its management and adapting them to local needs.
- Ensuring that appropriate organizational structures are in place to carry out the tasks assigned, as well as suitable hierarchical-functional structure.
- Running critical procedures (control models), based on corporate technology.
- Implementing the corporate accounting and management information systems and adapting them to the specific needs of each unit.

In order to preserve its independence, each controller reports hierarchically to the head of the entity or country in which it exercises its responsibilities (country head) and functionally to the head of the group's Financial Accounting and Control division.

The non-financial risk control function is responsible for:

- Establishing and circulating the methodology for documenting the group's Internal Risk Control System (IRCS) and IRCS evaluation and certification, which covers the ICFRS, amongst other regulatory and regulatory requirements. Grupo Santander's IRCS means the process carried out by the board of directors, senior managers and other group staff to provide reasonable assurance that their objectives will be achieved.
- Encouraging documentation maintenance to adapt it to organizational and regulatory changes and, along with the Financial Accounting and Control division, and, where applicable, representatives of the divisions and/or companies involved, to present the IRCS evaluation outcome to the audit committee. Similar functions in each unit that reports to the corporate non-financial risk control area.

General Code of Conduct (GCC)

The group's GCC sets out the guidelines, principles and rules approved by the board of directors to govern Grupo Santander employees' conduct and ethics. Furthermore, it dictates guidelines in relation to accounting standards and financial reporting. The GCC can be viewed on our corporate website.

All of the group's employees, including members of its governance bodies, sign the Code of Conduct, even though some are also bound to the Code of Conduct in Securities Markets and other codes of

conduct specific to the area or business in which they work. Employees have access to e-learning courses on the Code and can consult the compliance and conduct function to address any queries about its application.

The GCC is a fundamental resource of the compliance function. It explains the duties of the group's governance bodies, units and areas required to implement it together with the compliance function.

If anyone violates the code, the human resources function adopts disciplinary measures and recommends corrective action (including work sanctions), irrespective of any related administrative or criminal sanctions.

The board of directors adapted the GCC in 2021 to forbid board members and employees from releasing external communications on Banco Santander's behalf or from acting as its representatives and employees if such communications could undermine the Group's neutrality by showing political or ideological bias. See the on the information on 'General Code of Conduct' section 'Conduct and ethical behaviour' in the 'Responsible banking' chapter.

Whistleblowing channel

Banco Santander's whistleblowing channel is called *Canal Abierto*. It is a confidential and anonymous means for employees to report unlawful acts, violations of the GCC and other behaviour contrary to corporate values. The channel enable communications by other people related to Banco Santander other than employees, such as shareholders, customers, suppliers and other third parties, ensuring that they are treated confidentially and anonymously.

It can also be used to report claims of accounting or auditing irregularities under SOX to the compliance and conduct function, which will elevate them to the audit committee for appropriate measures to be taken.

The channel does not require whistleblowers to give personal information in order to keep reports confidential before they the audit committee can review them. Only certain compliance and conduct function officers analyse reports to determine if matters pertain to accounting or auditing in order to submit them to the audit committee.

Canal Abierto is supervised jointly by the audit committee and the risk supervision, regulation and compliance committee depending on the subject of the complaint. The SOX attributes the authority to supervise the whistleblowing channel in matters that fall under the remit of the audit committee (specifically financial and accounting, including those related to the audit), while the supervision of reports of breaches of regulatory requirements for corporate behaviours or the internal governance system are the responsibility of the risk, regulation and compliance committee. The channel can be viewed on our corporate website.

For more information on the number of complaints filed on the channel and their typology, see the on the information on 'Ethical Channels' section 'A talented and motivated team' in the 'Responsible banking' chapter, for additional information.

Training

Group employees who help prepare or analyse financial information take part in training programmes and regular refresher courses specifically designed to teach them the concepts and skills they require to discharge their duties properly.

The Financial Accounting and Control division promotes, designs and oversees these programmes and courses. It has with support from the corporate learning and career development unit under the Human Resources division.

Training takes the form of both e-learning and on-site sessions monitored and overseen by the corporate learning and career development unit to guarantee that employees duly complete them and assimilate concepts properly.

Training programmes and refresher courses taught in 2020 focused on matters directly and indirectly related to the financial reporting. These subjects include: (i) risk analysis and management; (ii) accounting and financial statement analysis; (iii) the business, banking and the financial environment; (iv) financial management, costs and budgeting; (v) numerical skills; and (vi) calculations and statistics.

31,373 employees in the all of the group's markets were involved in training programmes. Over 545,459 training hours were spent at the corporate centre in Spain and remotely via e-learning. Furthermore, local units develop their own training programmes based on the parent's.

8.2 Risk assessment in financial reporting

The Group has a specific process to identify the companies that must be included in its scope of consolidation. The Financial Accounting and Control division and the General Secretariat division oversee this approach.

This process enables us to identify the entities the Grupo Santander controls through the voting rights that grant direct or indirect ownership of its capital and other entities controlled by others such as mutual funds, securitization funds and structured entities; analyses whether the group has control over an entity, whether it has rights to the variable returns of the entity or is exposed to them, and whether it can influence the amount of such variable returns. If the group is considered to have control, the entity is included in the scope of consolidation and is consolidated using the global integration method.

Otherwise, we analyse whether there is significant influence or joint control. If so, the entity is also included in the scope of consolidation and it is measured using the equity method.

For entities with the greatest impact on the preparation of the group's financial information, we implement an IRCS using a homogeneous methodology to make sure that relevant controls are included and all significant risks to financial reporting are covered.

The group's IRCS complies with the strictest international standards, particularly the guidelines of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) within its last published Internal Control framework in 2013 which covers control targets for the effective and efficient operations, reliable financial reporting and regulatory compliance.

The risk identification process takes into account all the group's activities, the scope of which is greater than all the risks directly related to the preparation of the group's financial information.

The identification of potential risks that must necessarily be covered by the IRCS is based on management's knowledge and understanding of the business and its operations relative to the

importance and qualitative criteria associated with the type, complexity or structure of the business.

Banco Santander ensures there are controls to cover risks of errors and fraud in financial reporting, such as (i) the existence of assets, liabilities and transactions at the relevant date; (ii) the items are assets or rights or liabilities and obligations of the group; (iii) timely and correct recording and adequate valuation of assets, liabilities and transactions; and (iv) correct application of accounting principles and rules, as well as appropriate breakdowns.

The main features of the group's IRCS are as follows:

- It is a corporate model that involves the entire organizational structure through a direct set of individual responsibilities.
- Management of the IRCS documents is decentralized to the various units, while coordination and monitoring falls to the non-financial risk control area, which provides general criteria and guidelines to standardize procedure documents, control assessment, criteria for classifying potential deficiencies and regulatory adaptations.
- It is a global model primarily aimed at documenting activities to produce consolidated financial information and other procedures carried out by each entity's support areas that, without having a direct impact on the accounts, could lead to possible losses or contingencies in the event of incidents, errors, breaches of regulations and/or fraud.
- It is dynamic and constantly updated in order to reflect the reality of the group's business, risks and controls to mitigate them.
- It produces comprehensive documents on the processes within its scope and includes detailed descriptions of operations, assessment criteria and reviews.

All IRCS documents of the Group's companies are compiled on a corporate IT application that is used by employees of different levels of responsibility in the assessment and certification of the group's internal control system.

The audit committee is responsible for supervising Banco Santander and the group's regulated financial information procedures and the internal control systems.

8.3 Control activities

Revision and approval of financial information

The audit committee and the board of directors oversee the preparation and submission of the financial information required of Banco Santander and the Group, which includes the non-financial information and its integrity. They also review compliance with regulatory requirements, the scope of consolidation and the correct application of accounting criteria, ensuring that this information is permanently updated on the Banco Santander corporate's website.

The production, revision and approval of financial information and the description of ICFR is documented in a corporate tool that integrates the control model into risk management, including a description of activities, risks, tasks and controls associated with all operations that may have a significant effect on the financial statements. This documentation covers recurrent banking operations and one-off transactions (sale of investments, fixed assets transactions, etc.) and aspects related to judgements and estimates, to correctly record, evaluate, present and breakdown financial information.

The audit committee is responsible for reporting to the board on the financial information that the group must regularly publish, ensuring that it is prepared in accordance with the same principles and practices as the annual accounts and is as equally reliable as the financial statements for the board to adopt the corresponding resolutions.

The most significant aspects when closing and reviewing relevant judgements, estimates, measurements and projections are:

- Impairment losses on certain assets.
- The assumptions used in the actuarial calculation of post-employment benefit liabilities and other obligations.
- The useful life of tangible and intangible fixed assets.
- The valuation of consolidation goodwill.
- The calculation of provisions and of contingent liabilities.
- The fair value of certain unquoted assets and liabilities.
- The recoverability of the tax assets.
- The fair value of acquired identifiable assets and the liabilities assumed in business combinations.

The group CAO presents the financial information to the audit committee for validation at least quarterly, giving explanations of the main criteria used to make estimates, assessments and significant judgements.

The information provided to directors prior to meetings, including relevant judgements, estimates and projections is specifically prepared for these sessions.

The group also has a corporate accounting and financial management information committee, which is responsible for governing and supervising accounting, financial management and control, and ensuring that these matters are disclosed in accordance with law and such disclosure is fair, accurate and not misleading.

To verify that the IRCS operates correctly, the group conducts an annual pyramid assessment and certification, identifying and analysing the criticality of risks and the effectiveness of controls. This begins with an assessment of control activities by those responsible for them, which is then challenged and ratified through the organization's different hierarchy, so that, the CEO, the CFO and the CAO can certify the effectiveness of the IRCS.

The Non-Financial Risk Control area prepares a report that includes the main conclusions from the units' certifications reflecting the main deficiencies identified during the year and indicating whether they have been appropriately resolved or what plans are in place for satisfactory resolution as well as supporting evidence for the signatures of the CEO, CFO and CAO.

The Non-Financial Risk Control area presents the conclusions of these assessments to the audit committee alongside with the Financial Accounting and Control division and, where applicable, the representatives of the divisions and/or companies in question, prior to submission to the risk supervision, regulation and compliance committee.

The Group also has a forum to oversee internal control. It is chaired by the heads of the Risk and Financial Accounting & Control divisions and continuously monitors the Group's control environment and ICFR strategy and operations.

Internal control policies and procedures for IT systems

The Technology and Operations division draws up the group's corporate policies on IT systems involved directly or indirectly with the financial statements. These systems implement special internal controls to prepare and post financial information correctly.

The internal control policies on the following aspects are of particular importance:

- Updated and divulged internal policies and procedures for system security and access to applications and computer systems according to functions and ratings of each unit/role.
- The group's methodology, under which new applications are developed and existing applications are maintained or adapted through a circuit that formulates, develops and tests them so as to treat financial information reliably.
  - Once applications are developed according to regularly defined requirements (detailed documentation of processes to be implemented), they are run through comprehensive tests by a specialist development laboratory.
  - Before they are rolled out, a complete software testing cycle is run in a pre-production computerized environment that simulates real situations. Testing includes technical and functional tests, performance tests, user-acceptance tests and pilot and prototype tests, which are defined by the entities.
- The group's continuity plans for key functions in disasters or other events that could suspend or disrupt operations, as well as highly automated back-up systems that support critical systems and require little manual intervention owing to redundant systems, high availability systems and redundant communication lines.

Internal control policies and procedures for outsourced activities and valuation services from independent experts

The group's action framework and specific policies and procedures fittingly cover outsourcing risks. All group companies must adhere to this framework, which meets the EBA's requirements for outsourcing and risk management with third parties. It consists of:

- Tasks to initiate, record, process, settle, report and accounting for transactions and asset valuations.
- IT support in terms of software development, infrastructure maintenance, incident management, security and processing.
- Other material support services not directly related to financial reporting, such as supplier management, property management, HR management, etc.

Key control procedures include:

- Documenting relations between group companies with comprehensive service agreements.
- Documentation and validation by the group's service providers of processes and controls for the services they perform.
- The external suppliers must undergo an approval process to ensure that the relevant risks associated with the services they provide remain within acceptable levels, in accordance with the group's risk appetite.

The group reviews estimates internally according to its control model guidelines. It will hire the services of a third party to help with specific matters upon confirming their expertise and independence and approving their methods and rationale of its assumptions though relevant procedures.

Furthermore, the group's controls make sure information for external suppliers of services that could affect the financial statements is accurately and comprehensively detailed in service level agreements.

8.4 Information and communication

Responsible for accounting policies

The Financial Accounting and Control division has an area called 'accounting policies', whose manager reports directly to the head of the division, and has the following exclusive responsibilities:

- To define the accounting treatment of the transactions that constitute Banco Santander's activity, in accordance with their economic nature and the regulations governing the financial system.
- To define and keep up-to-date the group's accounting policies and resolve any doubts or conflicts arising from their interpretation.
- Improve and standardize the group's accounting practices.

The corporate accounting and financial reporting and management framework sets out the principles and guidelines to prepare accounting, financial and management information that must apply to all Grupo Santander entities as a key element of their good governance. The group's structure makes it necessary to establish these principles and standard guidelines for their application, and for each of the group entities to have effective consolidation methods and employ homogeneous accounting policies. The framework's principles described in this framework are adequately reflected in the group's accounting policies.

Accounting policies should be understood as a complement to local financial and accounting rules. Their overarching aims are (i) that statements and financial information made available to the management bodies, supervisors or other third parties, provide accurate and reliable information for decision-making in relation to the group, and (ii) timely compliance by all group entities with their legal obligations.

Accounting policies are revised at least once a year and when relevant regulations are amended.

Every month, the Accounting Policies area publishes an internal bulletin on new accounting regulation and their most significant interpretations.

The Group entities, through their operations or accounting heads, maintain open communication with the financial regulation and accounting processes area, as well as with the other areas of the Financial Accounting and Control division.

8.5 Monitoring

2021 ICFR monitoring activities and results

The board of directors approved an Internal Audit framework for Grupo Santander that defines the function and how it should conduct its work.

Internal Audit is a permanent, independent function that guarantees the quality and effectiveness of internal control, risk management (current or emerging) and governance processes and systems, thus contributing to the protection of the organization's value, solvency and reputation as well as the board of directors and senior managers. The internal audit function reports to the audit committee and periodically, at least twice a year, to the board of directors. As an independent unit, it also has direct access to the board when required.

Internal audit assesses:

- The efficiency and effectiveness of the processes and systems referred to above.
- The compliance with applicable regulations and supervisory requirements.
- The reliability and integrity of financial and operational information.
- Asset integrity.
- Internal audit is the third line of defence, independent of the other two. Its scope of action includes:
- All entities over which the group exercises effective control.
- Separated assets (for example, mutual funds) managed by the entities mentioned in the previous section.
- Any entity (or separated assets) not included in the above points, with which the group has entered into an agreement to provide Internal Audit functions.

This subjective scope includes, in any case, the activities, businesses and processes carried out (either directly or through outsourcing), the organization and, where applicable, commercial networks. Internal Audit may also conduct audits for other investees that are not included in the preceding points when the group has reserved this right as a shareholder, as well as on outsourced activities in accordance with the established agreements.

The audit committee supervises the group's internal audit function. See section 4.5 'Audit committee activities in 2021'.

As at 2021 year-end, Internal Audit had 1,212 employees, all exclusively dedicated to this service. Of these, 269 were based at Corporate Centre and 943 in the local units located in the main geographies where the group is present.

Every year, Internal Audit prepares an audit plan based on a risk self-assessment and is solely responsible for executing the plan. Reviews may lead to audit recommendations, which are prioritized in accordance with their relative importance, and are continuously monitored until fully implemented.

At its meeting of 19 February 2021, the audit committee reviewed the 2021 audit plan, which was reported to and approved by the board at its meeting of 22 February 2021.

Internal audit reports, as regards the review of the ICFR, mainly aimed to:

- Verify compliance with the provisions contained in sections 302, 404, 406, 407 and 806 of the SOX Act.
- Check corporate governance with regard to information relating to the internal control system for financial reporting, including the risk culture.
- Review the functions performed by the internal control departments and by other departments, areas or divisions involved in ensuring compliance with the SOX Act.
- Make sure the supporting documentation relating to the SOX Act is up to date.
- Confirm the effectiveness of a sample of controls based on an internal audit risk assessment methodology.
- Assess the accuracy of the unit's certifications, especially their consistency of the certifications with respect to the observations and recommendations made by Internal Audit, the external auditors of the annual accounts or supervisors.
- Ratify the implementation of recommendations made in the audit plan.

In 2021, the audit committee and the board of directors were informed of the Internal Audit unit's work, in accordance with its annual plan, and of other matters related to this function. See section 4.5 'Audit committee activities in 2021'.

Detection and management of deficiencies

The audit committee oversees to supervise the financial reporting process and the internal control systems. It is responsible for any control deficiencies that could affect the reliability and accuracy of the annual accounts. It may refer to the areas of the Group involved in the process to obtain the necessary information and clarifications. The committee also assesses the potential impact of any errors detected in the financial information.

The audit committee is responsible for discussing any significant weaknesses detected in the audit with the external auditor.

As part of its oversight, the audit committee assesses the results of the work of the internal audit unit, and may take the necessary measures to correct any deficiencies identified in the financial information.

In 2021, the audit committee was informed of the IRCS evaluation and certification for the 2019 financial year. See section 4.5 'Audit committee activities in 2021'.

8.6 External auditor report

The external auditor issued an independent reasonable assurance report on the design and effectiveness of the ICFR and the description on the ICFR that is provided in this section 8 of the annual corporate governance report.

This report is included in the following pages.

pwc

This version of our report is a free translation of the original, which was prepared in Spanish. All possible care has been taken to ensure that the translation is an accurate representation of the original. However, in all matters of interpretation of information, views or opinions, the original language version of our report takes precedence over this translation.

Independent reasonable assurance report on the design and effectiveness of Internal Control over Financial Reporting (ICFR)

To the Board of Directors of Banco Santander, S.A.:

We have carried out a reasonable assurance engagement of the design and effectiveness of the Internal Control over Financial Reporting (hereinafter, ICFR) and the description that is included in the attached Report that forms part of the corresponding section of the Annual Corporate Governance Report of the Directors' Report accompanying the consolidated financial statements of Banco Santander, S.A., (hereinafter, the Parent Company) and its subsidiaries (hereinafter, the Group or Santander Group) as at December 31, 2021. This system is based on the criteria and policies defined by the Group in accordance with the guidelines established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in its "Internal Control-Integrated Framework" report, in its most recent framework published in 2013.

An Internal Control over Financial Reporting is a process designed to provide reasonable assurance over the reliability of financial information in accordance with the applicable financial reporting framework and includes those policies and procedures that: (i) enable the records reflecting the transactions performed to be kept accurately and with a reasonable level of detail; (ii) provide reasonable assurance as to the proper recognition of transactions to make it possible to prepare the financial information in accordance with the accounting principles and standards applicable to it and (iii) provide reasonable assurance in relation to the prevention or timely detection of unauthorised acquisitions, use or sales of the Group assets that could have material effect on the financial information.

Inherent limitations

In this regard, it should be borne in mind that, given the inherent limitations of any system of Internal Control over Financial Reporting, regardless of the quality of the design and operation of the system, it can only allow reasonable, but not absolute security, in relation to the objectives it pursues, which may lead to errors, irregularities or fraud that may not be detected. On the other hand, the projection to future periods of the evaluation of internal control is subject to risks such as such internal control being inadequate as a result of future changes in the applicable conditions, or that in the future the level of compliance of the established policies or procedures may be reduced.

Director's responsibility

The Parent Company's Directors are responsible for taking the necessary measures to reasonably guarantee the implementation, maintenance and supervision of an adequate Internal Control over Financial Reporting, as well as the evaluation of its effectiveness, the development of improvements of ICFR and the preparation and establishment of the content of the attached information relating to the ICFR.

Our Responsibility

Our responsibility is to issue a reasonable assurance report on the design and effectiveness of the Internal Control over Financial Reporting of the Group, based on the work we have performed and on the evidence we have obtained. We have performed our reasonable assurance engagement in accordance with "International Standard on Assurance Engagements 3000 (ISAE 3000)" (Revised), "Assurance Engagements other than Auditing or Reviews of Historical Financial Reporting", issued by the International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC).

PricewaterhouseCoopers Auditores, S.L., Torre PwC, Pº de la Castellana 259 B, 28046 Madrid, España
Tel.: +34 915 684 400 / +34 902 021 111, Fax: +34 915 685 400, www.pwc.es

R. M. Madrid, hoja 87.250-1, folio 75, tomo 9.267, libro 8.054, sección 3ª
Inscrita en el R.O.A.C. con el número S0242 - CIF: B-79.031290

A reasonable assurance report includes the understanding of the Internal Control over Financial Reporting, assessing the risk of material weaknesses in the internal control, that the controls are not properly designed or they do not operate effectively, the execution of tests and evaluations on the design and effective implementation of this ICFR, based on our professional judgment, and the performance of such other procedures as may be deemed necessary.

We believe that the evidence we have obtained provides a sufficient and adequate basis for our opinion.

Our Independence and Quality Control

We have complied with the independence requirements and other ethical requirements of the Accounting Professionals Code of Ethics issued by the International Ethics Standards Board for Accountants (IESBA), which is based on the fundamental principles of integrity, objectivity, professional competence and diligence, confidentiality and professional behavior.

Our firm applies the "International Standard on Quality Control 1 (ISQC 1)" and maintains an exhaustive qualitative control system that includes documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory provisions.

Opinion

In our opinion, Santander Group, maintained as at December 31, 2021, in all material respects, a system of Internal Control relating to Financial Reporting included in the consolidated financial statements of the Group as at December 31, 2021 effective, which is based on the criteria and the policies defined by the Group´s management in accordance with the guidelines established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in its "Internal Control - Integrated Framework" report, in its most recent framework published in 2013.

In addition, the attached description of the ICFR Report as at December 31, 2021, has been prepared, in all material respects, in accordance with the requirements established by article 540 of the Consolidated Text of the Capital Companies Act and with the Circular 5/2013 of June 12 of the CNMV, and subsequent amendments, the most recent being Circular 3/2021, of September 28, of the CNMV for the purposes of describing the ICFR in the Annual Reports of Corporate Governance.

This work does not constitute an audit of accounts nor is it subject to the regulations governing the activity of the audit in force in Spain, so we do not express any audit opinion in the terms provided in the aforementioned regulations. However, we have audited under separate engagement, in accordance with the regulations governing the audit activity in force in Spain, the consolidated financial statements of Santander Group prepared by the Parent Company's Directors in accordance with the International Financial Reporting Standards adopted by the European Union and other provisions of the financial reporting standards applicable to the Group, and our report dated February 25, 2022 expresses a favorable opinion on those consolidated annual accounts.

PricewaterhouseCoopers Auditores, S.L.

Julián González Gómez

February 25, 2022

9. Other corporate governance information

Since 12 June 2018 CNMV allows the annual corporate governance and directors' remuneration reports Spanish listed companies must submit to be drafted in a free format, which is what we selected for our corporate governance and directors' remuneration reports since 2018.

The CNMV requires any issuer opting for a free format to provide certain information in a format it dictates so that it can be aggregated for statistical purposes. This information is included (i) for corporate governance matters, under section 9.2 'Statistical information on corporate governance required by the CNMV', which also covers the section 'Degree of compliance with corporate governance recommendations', and (ii) for remuneration matters, under section 9.5 'Statistical information on remuneration required by the CNMV'.

Some shareholders or other stakeholders may be used to the formats of the corporate governance and directors' remuneration reports set the by the CNMV. Therefore, each section under this format in sections 9.1 'Reconciliation with the CNMV's corporate governance report model' and 9.4 'Reconciliation to the CNMV's remuneration report model' include a cross reference indicating where this information may be found in the 2021 annual corporate governance report (drafted in a free format) and elsewhere in this annual report.

We have normally completed the 'comply or explain' section for all recommendations in the Spanish Corporate Governance Code to clearly show the ones we complied with, and explain the ones we partially complied or failed to comply with. In section 9.3 'Table on compliance with or explanations of recommendations in corporate governance', we have included a chart with cross-references showing where information supporting each response can be found in this corporate governance chapter and elsewhere in this annual report.

9.1 Reconciliation with the CNMV's corporate governance report model

Section in the CNMV model	Included in statistical report	Comments
A. OWNERSHIP STRUCTURE		
A.1	Yes	See sections 2.1 'Share capital', 3.2 'Shareholder rights' and 9.2 'Statistical information on corporate governance as required by the CNMV'.
A.2	Yes	See section 2.3 'Significant shareholders' where we explain there are no significant shareholders on their own account.
A.3	Yes	See 'Tenure and equity ownership' in section 4.2 and sections 6. 'Remuneration' and 9.2 'Statistical information on corporate governance as required by the CNMV'.
A.4	No	See section 2.3 'Significant shareholders' where we explain there are no significant shareholders on their own account so this section does not apply.
A.5	No	See section 2.3 'Significant shareholders' where we explain there are no significant shareholders on their own account so this section does not apply.
A.6	No	See section 2.3 'Significant shareholders' where we explain there are no significant shareholders on their own account so this section does not apply.
A.7	Yes	See sections 2.4 'Shareholders' agreements' and 9.2 'Statistical information on corporate governance as required by the CNMV'.
A.8	Yes	Not applicable.
A.9	Yes	See section 2.5 'Treasury shares' and 9.2 'Statistical information on corporate governance as required by the CNMV'.
A.10	No	See section 2.5 'Treasury shares'.
A.11	Yes	See section 9.2 'Statistical information on corporate governance as required by the CNMV'.
A.12	No	See section 3.2 'Shareholder rights'.
A.13	No	See section 3.2 'Shareholder rights'.
A.14	Yes	See section 2.6 'Stock market information'.

Section in the CNMV model	Included in statistical report	Comments
B. GENERAL SHAREHOLDERS' MEETING		
B.1	No	See 'Quorum and majorities for passing resolutions at general meeting' in section 3.2.
B.2	No	See 'Quorum and majorities for passing resolutions at general meeting' in section 3.2.
B.3	No	See 'Rules for amending our Bylaws' in section 3.2.
B.4	Yes	See 'Quorum and attendance' in section 3.4, in relation to financial year 2021, and section 9.2 'Statistical information on corporate governance as required by the CNMV', in relation to the remaining financial years.
B.5	Yes	See 'Voting results and resolutions' in section 3.4.
B.6	Yes	See 'Shareholder participation at general meetings' in section 3.2 and section 9.2 'Statistical information on corporate governance as required by the CNMV'.
B.7	No	See 'Quorum and majorities for passing resolutions at general meeting' in section 3.2.
B.8	No	See 'Corporate website' in section 3.1.
C. MANAGEMENT STRUCTURE		
C.1 Board of directors		
C.1.1	Yes	See 'Size' in section 4.2.
C.1.2	Yes	See 'Tenure and equity ownership' in section 4.2, and section 9.2 'Statistical information on corporate governance as required by the CNMV'.
C.1.3	Yes	See sections 2.4 'Shareholders' agreements', 4.1 'Our directors', 'Composition by type of director' in section 4.2, 'Duties and activities in 2021' in section 4.6 and section 9.2 'Statistical information on corporate governance as required by the CNMV'.
C.1.4	Yes	See 'Diversity' and 'Board skills and diversity matrix' in section 4.2, in relation to financial year 2021, and section 9.2 'Statistical information on corporate governance as required by the CNMV', in relation to the remaining financial years.
C.1.5	No	See 'Diversity' in section 4.2 and 'Duties and activities in 2021' in section 4.6.
C.1.6	No	See 'Diversity' in section 4.2, 'Duties and activities in 2021' in section 4.6 and, regarding top executive positions, see 'Responsible banking' chapter.
C.1.7	No	See 'Diversity' in section 4.2. and 'Duties and activities in 2021' in section 4.6.
C.1.8	No	Not applicable, since there are no proprietary directors. See 'Composition by type of director' in section 4.2.
C.1.9	No	See 'Group executive chair and chief executive officer' in section 4.3 and 'Functions' in section 4.4.
C.1.10	No	See section 4.1 'Our directors'.
C.1.11	Yes	See sections 4.1 'Our directors' and 9.2 'Statistical information on corporate governance as required by the CNMV'.
C.1.12	Yes	See 'Board and committees attendance' in section 4.3.
C.1.13	Yes	See sections 6 'Remuneration' and 9.2 'Statistical information on corporate governance as required by the CNMV'. Additionally, see note 5 c) to our 'consolidated financial statements'.
C.1.14	Yes	See sections 5 'Management team' and 9.2 'Statistical information on corporate governance as required by the CNMV'.
C.1.15	Yes	See 'Rules and regulations of the board' in section 4.3.
C.1.16	No	See 'Election, renewal and succession of directors' in section 4.2.
C.1.17	No	See 'Board assessment in 2021' in section 4.3, 'Annual assessment of the committee and its achievement of 2021 objectives' in section 4.6 and 'Board assessment and actions to continuously improve its functioning' in section 1.2.
C.1.18	No	See 'Board assessment in in 2021' in section 4.3.
C.1.19	No	See 'Director election, renewal and succession' in section 4.2.
C.1.20	No	See 'Board meetings' in section 4.3.
C.1.21	Yes	Not applicable since there are no specific requirements, other than those applying to directors generally, to be appointed chair.
C.1.22	No	See 'Diversity' in section 4.2.
C.1.23	Yes	See 'Election, renewal and succession of directors' in section 4.2 and section 9.2 'Statistical information on corporate governance as required by the CNMV'.
C.1.24	No	See 'Board meetings' in section 4.3.
C.1.25	Yes	See 'Lead independent director' and 'Board and committees attendance' in section 4.3, 'Duties and activities in 2021' in sections 4.4, 4.5, 4.6, 4.7, 4.8, 4.9 and 4.10 and section 9.2 'Statistical information on corporate governance as required by the CNMV'.
C.1.26	Yes	See 'Board and committees attendance' in section 4.3. and section 9.2 'Statistical information on corporate governance as required by the CNMV'.
C.1.27	Yes	See section 9.2 'Statistical information on corporate governance as required by the CNMV'.
C.1.28	No	See 'Duties and activities in 2021' in section 4.5.
C.1.29	Yes	See section 4.1 'Our directors' and section 'Secretary of the board' in section 4.3.

Section in the CNMV model	Included in statistical report	Comments
C.1.30	No	See section 3.1 'Shareholder communication and engagement' and 'Duties and activities in 2021' in section 4.5
C.1.31	Yes	See 'External auditor' in section 4.5 and section 9.2 'Statistical information on corporate governance as required by the CNMV's.
C.1.32	Yes	See 'Duties and activities in 2021' in section 4.5 and section 9.2 'Statistical information on corporate governance as required by the CNMV'.
C.1.33	Yes	Not applicable.
C.1.34	Yes	See section 9.2 'Statistical information on corporate governance as required by the CNMV'.
C.1.35	Yes	See 'Board meetings' and 'Committee meetings' in section 4.3.
C.1.36	No	See 'Election, renewal and succession of directors' in section 4.2.
C.1.37	No	Not applicable. See 'Duties and activities in 2021' in section 4.6.
C.1.38	No	Not applicable.
C.1.39	Yes	See sections 6.4 'Directors' remuneration policy for 2022, 2023 and 2024 submitted to a binding shareholder vote', 6.7 'Prudentially significant disclosure document' and 9.2 'Statistical information on corporate governance as required by the CNMV'.
C.2 Board committees		
C.2.1	Yes	See 'Committee structure' and 'Committee meetings' in section 4.3, 'Duties and activities in 2021' in sections 4.4, 4.5, 4.6, 4.7, 4.8, 4.9 and 4.10 and section 9.2 'Statistical information on corporate governance as required by the CNMV'.
C.2.2	Yes	See section 9.2 'Statistical information on corporate governance as required by the CNMV'.
C.2.3	No	See 'Rules and regulations of the board' and 'Committee structure', 'Committee meetings' in section 4.3 and 'Duties and activities in 2020" in sections 4.4, 4.5, 4.6, 4.7, 4.8, 4.9 and 4.10.
D. RELATED PARTY AND INTRAGROUP TRANSACTIONS		
D.1	No	See 'Related-party transactions' in section 4.12.
D.2	Yes	Not applicable. See 'Related-party transactions' in section 4.12.
D.3	Yes	Not applicable. See 'Related-party transactions' in section 4.12.
D.4	Yes	See section 9.2 'Statistical information on corporate governance as required by the CNMV'.
D.5	Yes	Not applicable. See 'Related-party transactions' in section 4.12.
D.6	No	See 'Conflicts of interests' in section 4.12
D.7	Yes	Not applicable. See section 2.3 'Significant shareholders' and 'Conflicts of interests' in section 4.12.
E. CONTROL AND RISK MANAGEMENT SYSTEMS		
E.1	No	See chapter 'Risk management and compliance', in particular section 2.'Risk management and control model' and sections 'A strong and inclusive culture: The Santander Way' and 'Principles of action in tax matters' in the 'Responsible banking' chapter.
E.2	No	See note 53 to our consolidated financial statements, section 2.3 'Risk governance' in the 'Risk management and compliance' chapter, and sections 'A strong and inclusive culture: The Santander Way' and 'Principles of action in tax matters'in the 'Responsible banking' chapter.
E.3	No	See sections 2.2'Risk factors', 3. 'Credit risk', 4. 'Market, structural and liquidity risk', 5. 'Credit risk', 6. 'Operational risk', 7. 'Compliance and conduct risk', 8 'Model risk' and 9. 'Strategic risk' in the 'Risk management and compliance' chapter. See also the 'Responsible banking' chapter and, for our capital needs, see section 3.5 'Capital management and adequacy. Solvency ratios' of the 'Economic and financial review' chapter.
E.4	No	See section 2.4. 'Management processes and tools' in the Risk management and compliance chapter and sections 'A strong and inclusive culture: The Santander Way' and 'Principles of action in tax matters' in the 'Responsible banking' chapter.
E.5	No	See 3. 'Credit risk', 4. 'Market, structural and liquidity risk', 5. 'Credit risk', 6. 'Operational risk', 7 'Compliance and conduct risk', 8 'Model risk', 9 'Strategic risk' and in 10.'Climate and environmental risk' the 'Risk management and compliance' chapter. Additionally, see note 25e) to our consolidated financial statements.
E.6	No	See sections 2.'Risk management and control model', 3. 'Credit risk', 4. 'Market, structural and liquidity risk', 5. 'Capital risk', 6. 'Operational risk', 7. 'Compliance and conduct risk', 8. 'Model risk', 9. 'Strategic risk' and 10.'Climate and environmental risk' in the 'Risk management and compliance' chapter.
F. ICFRS		
F.1	No	See section 8.1 'Control environment'.
F.2	No	See section 8.2 'Risk assessment in financial reporting'.
F.3	No	See section 8.3 'Control activities'.
F.4	No	See section 8.4 'Information and communication'.
F.5	No	See section 8.5 'Monitoring'.
F.6	No	Not applicable.
F7	No	See section 8.6 'External auditor report'.

Section in the CNMV model	Included in statistical report	Comments
G. DEGREE OF COMPLIANCE WITH CORPORATE GOVERNANCE RECOMMENDATIONS		
G	Yes	See 'Degree of compliance with the corporate governance recommendations' in section 9.2 and section 9.3 'Table on compliance with or explanations of recommendations on corporate governance'.
H. OTHER INFORMATION OF INTEREST		
H	No	Banco Santander also complies with the Polish Code of Best Practices, updated in 2021, except in areas where regulation is different in Spain and Poland. In addition, see sections 'Conduct and ethical behaviour' and 'Governance', in particular, 'Joint initiatives to promote our agenda', in the Responsible banking chapter.

9.2 Statistical information on corporate governance required by the CNMV

Unless otherwise indicated all data as of 31 December 2020.

A. OWNERSHIP STRUCTURE

A.1 Complete the following table on the company's share capital:

Indicate whether company bylaws contain the provision of double loyalty voting:
No ☑
Yes ☐

Date of last modification	Share capital (euros)	Number of shares	Number of voting rights
03/12/2020	8,670,320,651	17,340,641,302	17,340,641,302

Indicate whether different types of shares exist with different associated rights:

No ☑
Yes ☐

A.2 List the direct and indirect holders of significant ownership interests at year-end, including directors with a significant shareholding:

	% of voting rights attributed to shares		% of voting rights through financial instruments		Total % of voting rights
Name or corporate name of shareholder	Direct	Indirect	Direct	Indirect	
BlackRock Inc.	0	5.08%	0	3.46%	5.43%

Details of the indirect shares:

Name or corporate name of the indirect shareholder	Name or corporate name of the direct shareholder	% of voting rights attributed to shares	% of voting rights through financial instruments	Total % of voting rights
BlackRock Inc.	Subsidiaries of BlackRock Inc.	5.08%	3.46%	5.43%

A.3 Give details of the participation at the close of the fiscal year of the members of the board of directors who are holders of voting rights attributed to shares of the company or through financial instruments, whatever the percentage, excluding the directors who have been identified in Section A2 above:

Name or corporate name of director	% of voting rights attributed to shares		% of voting rights through financial instruments		Total % of voting rights	% of voting rights that may be transferred through financial instruments	
	Direct	Indirect	Direct	Indirect		Direct	Indirect
Ana Botín-Sanz de Sautuola y O'Shea	0.01	0.17	0.00	0.00	0.18	0.00	0.00
José Antonio Álvarez Álvarez	0.01	0.00	0.00	0.00	0.01	0.00	0.00
Bruce Carnegie-Brown	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Homaira Akbari	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Javier Botín-Sanz de Sautuola y O'Shea	0.03	0.11	0.00	0.00	0.14	0.00	0.00
Álvaro Cardoso de Souza	0.00	0.00	0.00	0.00	0.00	0.00	0.00
R. Martin Chávez Márquez	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sol Daurella Comadrán	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Henrique de Castro	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gina Díez Barroso	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Luis Isasi Fernández de Bobadilla	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ramiro Mato García-Ansorena	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sergio Rial	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Belén Romana García	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pamela Walkden	0.00	0.00	0.00	0.00	0.00	0.00	0.00

% total voting rights held by the board of directors	0.34
% total voting rights represented on the board of directors	0.71

Details of the indirect holding:

Name or corporate name of director	Name or corporate name of direct owner	% of voting rights attributed to shares	% of voting rights through financial instruments	Total % of voting rights	% of voting rights that may be transferred through financial instruments
–	–	–	–	–	–

A.7 Indicate whether the company has been notified of any shareholders' agreements pursuant to Articles 530 and 531 of the Spanish Companies Act (LSC). Provide a brief description and list the shareholders bound by the agreement, as applicable:

Yes ☑ No ☐

Parties to the shareholders' agreement	% of share capital affected	Brief description of agreement	Expiry date, if applicable
Javier Botín-Sanz de Sautuola y O'Shea (directly and indirectly through Agropecuaria El Castaño, S.L.U.) Emilio Botín-Sanz de Sautuola y O'Shea, Puente San Miguel, S.L.U. Ana Botín-Sanz de Sautuola y O'Shea, CRONJE, S.L.U. Nueva Azil, S.L. Carmen Botín-Sanz de Sautuola y O'Shea Paloma Botín-Sanz de Sautuola y O'Shea Bright Sky 2012, S.L.	0.58%	Transfer restrictions and syndication of voting rights as described under section 2.4 'Shareholders' agreements' of the 'Corporate governance' chapter in the annual report. The communications to CNMV relating to this shareholders' agreement can be found in material facts with entry numbers 64179, 171949, 177432, 194069, 211556, 218392, 223703, 226968 and 285567 filed in CNMV on 17 February 2006, 3 August 2012, 19 November 2012, 17 October, 2013, 3 October 2014, 6 February 2015, 29 May 2015, 29 July 2015 and 31 December 2019, respectively.	01/01/2056

Indicate whether the company is aware of the existence of any concerted actions among its shareholders. Give a brief description as applicable:

Yes ☑ No ☐

Participants in the concerted action	% of share capital affected	Brief description of concerted action	Expiry date, if applicable
Javier Botín-Sanz de Sautuola y O'Shea (directly and indirectly through Agropecuaria El Castaño, S.L.U.) Emilio Botín-Sanz de Sautuola y O'Shea, Puente San Miguel, S.L.U. Ana Botín-Sanz de Sautuola y O'Shea, CRONJE, S.L.U. Nueva Azil, S.L. Carmen Botín-Sanz de Sautuola y O'Shea Paloma Botín-Sanz de Sautuola y O'Shea Bright Sky 2012, S.L.	0.58%	Transfer restrictions and syndication of voting rights as described under section 2.4 'Shareholders' agreements' of the 'Corporate governance' chapter in the annual report. The communications to CNMV relating to this shareholders' agreement can be found in material facts with entry numbers 64179, 171949, 177432, 194069, 211556, 218392, 223703, 226968 and 285567 filed in CNMV on 17 February 2006, 3 August 2012, 19 November 2012, 17 October, 2013, 3 October 2014, 6 February 2015, 29 May 2015, 29 July 2015 and 31 December 2019, respectively.	01/01/2056

A.8 Indicate whether any individual or entity currently exercises control or could exercise control over the company in accordance with article 5 of the Spanish Securities Market Act. If so, identify them:

Yes ☐ No ☑

A.9 Complete the following tables on the company's treasury shares:

At year end:

Number of shares held directly	Number of shares held indirectly (*)	% of total share capital
259,930,273	17,661,667	1.601%

(*) Through:

Name or corporate name of the direct shareholder	Number of shares held directly
Pereda Gestión, S.A.	13,680,000
Banco Santander Río, S.A.	975,238
Banco Santander México, S.A.	3,006,429
Total:	**17,661,667**

A.11 Estimated free float:

	%
Estimated free float	91.92 %

A.14 Indicate whether the company has issued securities not traded in a regulated market of the European Union.

Yes ☑ No ☐

B. GENERAL SHAREHOLDERS' MEETING

B.4 Indicate the attendance figures for the general shareholders' meetings held during the fiscal year to which this report relates and in the two preceding fiscal years:

	Attendance data				
			% remote voting		
Date of General Meeting	% attending in person	% by proxy	Electronic means	Other	Total
12/04/2019	0.77%	65.31%	0.96%	1.47%	68.51%
of which free float:	0.07%	64.87%	0.96%	1.47%	67.37%

	Attendance data				
			% remote voting		
Date of General Meeting	% attending in person	% by proxy	Electronic means	Other	Total
23/07/2019	0.66%	41.82%	15.54%	1.21%	59.23%
of which free float:	0.02%	41.32%	15.54%	1.21%	58.09%

	Attendance data				
			% remote voting		
Date of General Meeting	% attending in person	% by proxy	Electronic means	Other	Total
03/04/2020	0.09%	62.60%	1.71%	0.60%	65.00%
of which free float:	0.01%	61.59%	1.71%	0.60%	63.91%

	Attendance data				
			% remote voting		
Date of General Meeting	% attending in person	% by proxy	Electronic means	Other	Total
27/10/2020	0.17%	43.29%	16.30%	0.59%	60.35%
of which free float:	0.11%	42.27%	16.30%	0.59%	59.27%

	Attendance data				
			% remote voting		
Date of General Meeting	% attending in person	% by proxy	Electronic means	Other	Total
26/03/2021	0.06%	65.02%	2.04%	0.55%	67.67%
of which free float:	0.01%	64.03%	2.04%	0.55%	66.63%

B.5 Indicate whether in the general shareholders' meetings held during the fiscal year to which this report relate there has been any matter submitted to them which, for any reason, has not been approved by the shareholders:

Yes ☐ No ☑

B.6 Indicate whether the Bylaws require a minimum holding of shares to attend to or to vote remotely in the general shareholders' meeting:

Yes ☐ No

C. MANAGEMENT STRUCTURE

C.1 Board of directors

C.1.1 Maximum and minimum number of directors provided for in the Bylaws:

Maximum number of directors	17
Minimum number of directors	12
Number of directors fixed by GSM	15

C.1.2 Complete the following table with the directors' details:

Name or corporate name of director	Representative	Category of director	Position in the board	Date of first appointment	Date of last appointment	Election procedure
Ana Botín-Sanz de Sautuola y O'Shea	N/A	Executive	Chair	04/02/1989	03/04/2020	Vote in general shareholders' meeting
José Antonio Álvarez Álvarez	N/A	Executive	Chief executive officer	25/11/2014	12/04/2019	Vote in general shareholders' meeting
Bruce Carnegie-Brown	N/A	Independent	Lead independent director	25/11/2014	26/03/2021	Vote in general shareholders' meeting
Homaira Akbari	N/A	Independent	Director	27/09/2016	26/03/2021	Vote in general shareholders' meeting
Javier Botín-Sanz de Sautuola y O'Shea	N/A	Other external	Director	25/07/2004	26/03/2021	Vote in general shareholders' meeting
Álvaro Cardoso de Souza	N/A	Independent	Director	23/03/2018	26/03/2021	Vote in general shareholders' meeting
R. Martín Chávez Márquez	N/A	Independent	Director	27/10/2020	27/10/2020	Vote in general shareholders' meeting
Sol Daurella Comadrán	N/A	Independent	Director	25/11/2014	03/04/2020	Vote in general shareholders' meeting
Henrique de Castro	N/A	Independent	Director	12/04/2019	12/04/2019	Vote in general shareholders' meeting
Gina Díez Barroso	N/A	Independent	Director	22/12/2020	22/12/2020	Vote in general shareholders' meeting
Luis Isasi Fernández de Bobadilla	N/A	Other external	Director	03/04/2020	03/04/2020	Vote in general shareholders' meeting
Ramiro Mato García-Ansorena	N/A	Independent	Director	28/11/2017	26/03/2021	Vote in general shareholders' meeting
Sergio Rial	N/A	Other external	Director	03/04/2020	03/04/2020	Vote in general shareholders' meeting
Belén Romana García	N/A	Independent	Director	22/12/2015	12/04/2019	Vote in general shareholders' meeting
Pamela Walkden	N/A	Independent	Director	29/10/2019	03/04/2020	Vote in general shareholders' meeting

Total number of directors	15

Indicate any directors who have left during the fiscal year to which this report relates, regardless of the reason (whether for resignation or by agreement of the general meeting or any other):

Name or corporate name of director	Category of director at the time he/her left	Date of last appointment	Date of leave	Board committees he or she was a member of	Indicate whether he or she has left before the expiry of his or her term
N/A	N/A	N/A	N/A	N/A	N/A

C.1.3 Complete the following tables for the directors in each relevant category:

EXECUTIVE DIRECTORS

Name or corporate name of director	Position held in the company	Profile
Ana Botín-Sanz de Sautuola y O'Shea	Executive chair	See section 4.1 'Our directors' in the 'Corporate governance' chapter in the annual report.
José Antonio Álvarez Álvarez	CEO	See section 4.1 'Our directors' in the 'Corporate governance' chapter in the annual report.

Total number of executive directors	2
% of the Board	13.33%

PROPRIETARY NON-EXECUTIVE DIRECTORS

Name or corporate name of director	Name or corporate name of significant shareholder represented or having proposed his or her appointment	Profile
N/A	N/A	N/A

Total number of proprietary non-executive directors	0
% of the Board	0%

INDEPENDENT NON-EXECUTIVE DIRECTORS

Name or corporate name of director	Profile
Bruce Carnegie-Brown	See section 4.1 'Our directors' in the 'Corporate governance' chapter in the annual report.
Homaira Akbari	See section 4.1 'Our directors' in the 'Corporate governance' chapter in the annual report.
Álvaro Cardoso de Souza	See section 4.1 'Our directors' in the 'Corporate governance' chapter in the annual report.
R. Martín Chávez Márquez	See section 4.1 'Our directors' in the 'Corporate governance' chapter in the annual report.
Sol Daurella Comadrán	See section 4.1 'Our directors' in the 'Corporate governance' chapter in the annual report.
Henrique de Castro	See section 4.1 'Our directors' in the 'Corporate governance' chapter in the annual report.
Gina Díez Barroso	See section 4.1 'Our directors' in the 'Corporate governance' chapter in the annual report.
Ramiro Mato García-Ansorena	See section 4.1 'Our directors' in the 'Corporate governance' chapter in the annual report.
Belén Romana Garcia	See section 4.1 'Our directors' in the 'Corporate governance' chapter in the annual report.
Pamela Walkden	See section 4.1 'Our directors' in the 'Corporate governance' chapter in the annual report.

Total number of independent directors	10
% of the Board	66.67%

Identify any independent director who receives from the company or its group any amount or perk other than his or her director remuneration or who maintain or have maintained during the fiscal year covered in this report a business relationship with the company or any group company, either in his or her own name or as a principal shareholder, director or senior manager of an entity which maintains or has maintained such a business relationship.

In such a case, a reasoned statement from the Board on why the relevant director(s) is able to carry on their duties as independent director(s) will be included.

Name or corporate name of director	Description of the relationship	Reasoned statement
Homaira Akbari	Business	When conducting the annual verification of the independence of directors of this status, the nomination committee analysed the business relationships between Grupo Santander and the companies in which they are or have previously been principal shareholders, directors or senior managers. The committee concluded that the business relationships maintained between Grupo Santander and the company in which Homaira Akbari was a director in 2021 were not significant because, among other reasons they did not reach certain comparable materiality thresholds used in other jurisdictions, e.g. NYSE and Nasdaq.
Sol Daurella	Financing	When conducting the annual verification of the independence of directors of this status, the nomination committee analysed the business relationships between Grupo Santander and the companies in which they are or have previously been principal shareholders, directors or senior managers. The committee concluded that the funding Grupo Santander granted to companies in which Sol Daurella was a principal shareholder or director in 2021 was not significant because, among other reasons: (i) it did not generate economic dependence on the companies involved in view of the substitutability of this funding by other sources, whether banks or others, (ii) it aligned with Grupo Santander's share in the corresponding market, and (iii) it did not reach certain comparable materiality thresholds used in other jurisdictions, e.g. NYSE, Nasdaq and the Canadian Bank Act.
Henrique de Castro	Business	When conducting the annual verification of the independence of directors of this status, the nomination committee analysed the business relationships between Grupo Santander and the companies in which they are or have previously been principal shareholders, directors or senior managers. The committee concluded that the business relationships maintained between Grupo Santander and the company in which Henrique de Castro was a director in 2021 were not significant because, among other reasons they did not reach certain comparable materiality thresholds used in other jurisdictions, e.g. NYSE and Nasdaq.
Gina Díez	Financing	When conducting the annual verification of the independence of directors of this status, the nomination committee analysed the business relationships between Grupo Santander and the companies in which they are or have previously been principal shareholders, directors or senior managers. The committee concluded that the funding granted by Grupo Santander to the companies in which Gina Díez was a principal shareholder and director in 2021 was not significant because, among other reasons: (i) it did not generate a situation of economic dependence on the company involved in view of the substitutability of this funding by other sources, whether banks or others, (ii) it aligned with Grupo Santander's share in the corresponding market, and (iii) it did not reach certain comparable materiality thresholds used in other jurisdictions, e.g. NYSE, Nasdaq and the Canadian Bank Act.
R. Martín Chávez	Business	When conducting the annual verification of the independence of directors of this status, the nomination committee analysed the business relationships between Grupo Santander and the companies in which they are or have previously been principal shareholders, directors or senior managers. The committee concluded that the business relationships maintained between Grupo Santander and the company in which R. Martín Chávez was a director in 2021 were not significant because, among other reasons they did not reach certain comparable materiality thresholds used in other jurisdictions, e.g. NYSE and Nasdaq.
Belén Romana	Business	When conducting the annual verification of the independence of directors of this status, the nomination committee analysed the business relationships between Grupo Santander and the companies in which they are or have previously been principal shareholders, directors or senior managers. The committee concluded that the business relationships maintained between Grupo Santander and the companies in which Belén Romana was a director in 2021 were not significant because, among other reasons they did not reach certain comparable materiality thresholds used in other jurisdictions, e.g. NYSE and Nasdaq.

Other external directors

Identify all other non-executive directors and explain why these cannot be considered proprietary or independent directors and detail their relationships with the company, its executives or shareholders:

Name or corporate name of director	Reasons	Company, manager or shareholder to which or to whom the director is related	Profile
Javier Botín-Sanz de Sautuola y O'Shea	Given that Mr Botín has been director for over 12 years, pursuant to sub-section 4. i) of article 529 *duodecies* of the Spanish Companies Act.	Banco Santander, S.A.	See section 4.1 'Our directors' in the Corporate governance chapter in the annual report.
Luis Isasi Fernández de Bobadilla	Under prudent criteria given his remuneration as non-executive chair of Santander España's body as supervisor, unit without its own corporate identity separate to Banco Santander, pursuant to sub-sections 2 to 4 of article 529 *duodecies* of the Spanish Companies Act.	Banco Santander, S.A.	See section 4.1 'Our directors' in the Corporate governance chapter in the annual report.
Sergio Rial	Given that Mr Rial, as a former executive director of Banco Santander as CEO of Banco Santander (Brasil) S.A. and Regional head of South America until 31 December 2021, pursuant to sub-section 4 a) of article 529 *duodecies* of the Spanish Companies Act.	Banco Santander, S.A.	See section 4.1 'Our directors' in the Corporate governance chapter in the annual report.
Total number of other non-executive directors			3
% of the Board			20.00%

List any changes in the category of a director which have occurred during the period covered in this report.

Name or corporate name of director	Date of change	Previous category	Current category
Sergio Rial	31/12/2021	Executive	

C.1.4 Complete the following table on the number of female directors at the end of each the past four years and their category:

Number of female directors					% of total directors of each category			
	FY 2021	FY 2020	FY 2019	FY 2018	FY 2021	FY 2020	FY 2019	FY 2018
Executive	1	1	1	1	50.00 %	33.33 %	50.00 %	33.33 %
Proprietary	—	—	—	—	0.00 %	0.00 %	0.00 %	0.00 %
Independent	5	5	5	4	50.00 %	50.00 %	55.55 %	44.44 %
Other external	—	—	—	—	0.00 %	0.00 %	0.00 %	0.00 %
Total:	6	6	6	5	40.00 %	40.00 %	40.00 %	33.33 %

C.1.11 List the positions of director, administrator or representative thereof, held by directors or representatives of directors who are members of the company's board of directors in other entities, whether or not they are listed companies:

Identity of the director or representative	Company name of the listed or non-listed entity	Position	Remunerated YES/NO
Ana Botín-Sanz de Sautuola y O'Shea	The Coca-Cola Company	Director	YES
Bruce Carnegie-Brown	Lloyd's of London	Chair	YES
	Cuvva Limited	Chair	YES
Homaira Akbari	Landstar System, Inc.	Director	YES
	AKnowledge Partners, LLC	Chief executive officer	YES
	Temenos AG	Director	YES
Sol Daurella Comadrán	Coca-Cola Europacific Partners plc.	Chair	YES
	Cobega, S.A.	Representative of director	NO
	Equatorial Coca Cola Bottling Company, S.L.	Director	YES
	Cobega Invest S.L.	Sole administrator	NO
	Olive Partners, S.A.	Representative of director	NO
	Indau, S.A.R.L.	Sole administrator	YES
Henrique de Castro	Fiserv Inc.	Director	YES
	Stakecorp Capital, s.a.r.l.	Director	NO
Gina Díez Barroso	Grupo Diarq, S.A. de C.V.	Chair-chief executive officer	NO
	Dalia Women , S.A.P.I. de C.V.	Director	NO
	Centro de Diseño y Comunicación, S.C.	Chair	NO
Ramiro Mato García-Ansorena	Ansorena, S.A.	Chair	NO
R. Martín Chávez Márquez	Sixth Street Partners Management Company, L.P.	Vice-president	YES
	Recursion Pharmaceuticals, Inc.	Chair	YES
Luis Isasi Fernández de Bobadilla	Compañía de Distribución Integral Logista Holdings, S.A.	Director	YES
	Agropecuaria Fuenfría, S.L.	Director	NO
	Santa Clara de C. Activos, S.L.	Director	NO
Sergio Rial	Delta Airlines Inc	Director	YES
	Ebury Partners Limited	Chair	YES
Belén Romana García	Aviva plc.	Director	YES
	Six Group AG	Director	YES
	Bolsas y Mercados Españoles, Sociedad Holding de Mercados y Sistemas Financieros, S.A.	Director	YES
Javier Botín-Sanz de Sautuola y O'Shea	JB Capital Markets, Sociedad de Valores, S.A.U.	Chair	YES
	Inversiones Zulú, S.L.	Chair-chief executive officer	NO
	Agropecuaria El Castaño, S.L.E	Joint and several administrator	NO
	Inversiones Peña Cabarga, S.L.	Sole administrator	NO

Indicate, where appropriate, the other remunerated activities of the directors or directors' representatives, whatever their nature, other than those indicated in the previous table.

Identity of the director or representative	Other paid activities
Bruce Carnegie-Brown	Member of investment committee of Gresham House Plc
Belén Romana García	Member of the advisory board of Inetum
	Senior advisor of Artá Capital, S.G.E.I.C., S.A
Pamela Walkden	Member of the advisory board of JD Haspel Limited
Luis Isasi Fernández de Bobadilla	Senior Advisor of Morgan Stanley
R. Martín Chávez Márquez	Senior advisor of Cambrian Biopharma
	Senior advisor of Earli
	Senior advisor of Block.one
	Senior advisor of Ketch Kloud
	Senior advisor of Abacus.AI

C.1.12 Indicate and, if applicable explain, if the company has established rules on the maximum number of directorships its directors may hold and, if so, where they are regulated:

Yes ☑ No ☐

The maximum number of directorships is established, as provided for in article 30 of the Rules and regulations of the board, in article 26 of Spanish Law 10/2014 on the ordering, supervision and solvency of credit institutions. This rule is further developed by articles 29 and subsequent of Royal Decree 84/2015 and by Rules 30 and subsequent of Bank of Spain Circular 2/2016.

C.1.13 Identify the following items of the total remuneration of the board of directors:

Board remuneration accrued in the fiscal year (EUR thousand)	26,485
Funds accumulated by current directors for long-term savings systems with consolidated economic rights (EUR thousand)	66,896
Funds accumulated by current directors for long-term savings systems with unconsolidated economic rights (EUR thousand)	0
Pension rights accumulated by former directors (EUR thousand)	49,778

C.1.14 Identify the members of the company's senior management who are non executive directors and indicate total remuneration they have accrued during the fiscal year:

Name or corporate name	Position (s)
Alexandra Brandão	Head of Human Resources
Juan Manuel Cendoya Méndez de Vigo	Group head of Communications, Corporate Marketing and Research
José Francisco Doncel Razola	Group head of Accounting and Financial Control - Group Chief Accounting Officer
Keiran Paul Foad	Group Chief Risk Officer
José Antonio García Cantera	Group Chief Financial Officer
Juan Guitard Marín	Group Chief Audit Executive
José Maria Linares Perou	Global head of Corporate & Investment Banking
Mónica Lopez-Monís Gallego	Group head of Supervisory and Regulatory Relations
Javier Maldonado Trinchant	Group head of Costs
Dirk Marzluf	Group head of Technology and Operations
Víctor Matarranz Sanz de Madrid	Global head of Wealth Management
José Luis de Mora Gil-Gallardo	Group head of Strategy and Corporate Development and Head of Consumer Finance (Santander Consumer Finance)
Jaime Pérez Renovales	Group head of General Secretariat
Antonio Simões	Head regional of Europe and Country head of Santander Spain
Marjolein van Hellemondt-Gerdingh	Group Chief Compliance Officer
Number of women in senior management	3
Percentage of total senior management	20.00 %
Total remuneration accrued by the senior management (EUR thousand)	53,880

C.1.15 Indicate whether any changes have been made to the board Rules and regulations during the fiscal year:

Yes ☑ No ☐

C.1.21 Indicate whether there are any specific requirements, other than those applying to directors generally, to be appointed chair:

Yes ☐ No ☑

C.1.23 Indicate whether the bylaws or the board Rules and regulations set a limited term of office (or other requirements which are stricter than those provided for in the law) for independent directors different than the one provided for in the law.

Yes ☐ No ☑

C.1.25 Indicate the number of board meetings held during the fiscal year and how many times the board has met without the chair's attendance. Attendance will also include proxies appointed with specific instructions:

Number of board meetings	15
Number of board meetings held without the chair's attendance	0

Indicate the number of meetings held by the lead independent director with the rest of directors without the attendance or representation of any executive director.

Number of meetings	8

Indicate the number of meetings of the various board committees held during the fiscal year.

Number of meetings of the audit committee	14
Number of meetings of the responsible banking, sustainability and culture committee	6
Number of meetings of the innovation and technology committee	4
Number of meetings of the nomination committee	12
Number of meetings of the remuneration committee	12
Number of meetings of the risk supervision, regulation and compliance committee	16
Number of meetings of the executive committee	40

C.1.26 Indicate the number of board meetings held during the fiscal year and data about the attendance of the directors:

Number of meetings with at least 80% of directors being present	15
% of votes cast by members present over total votes in the fiscal year	98.66%
Number of board meetings with all directors being present (or represented having given specific instructions)	14
% of votes cast by members present at the meeting or represented with specific instructions over total votes in the fiscal year	99.11%

C.1.27 Indicate whether the company´s consolidated and individual financial statements are certified before they are submitted to the board for their formulation.

Yes ☑ No ☐

Identify, where applicable, the person(s) who certified the company's individual and consolidated financial statements prior to their formulation by the board:

Name	Position
José Francisco Doncel Razola	Group head of Accounting and Financial Control

C.1.29 Is the secretary of the board also a director?

Yes ☐ No ☑

If the secretary of the board is not a director fill in the following table:

Name or corporate name of the secretary	Representative
Jaime Pérez Renovales	N/A

C.1.31 Indicate whether the company has changed its external audit firm during the fiscal year. If so, identify the incoming audit firm and the outgoing audit firm:

Yes ☐ No ☑

C.1.32 Indicate whether the audit firm performs non-audit work for the company and/or its group. If so, state the amount of fees paid for such work and express this amount as a percentage they represent of all fees invoiced to the company and/or its group.

Yes ☑ No ☐

	Company	Group companies	Total
Amount of non-audit work (EUR thousand)	556	2,567	3,123
Amount of non-audit work as a % of amount of audit work	0.5%	2.5%	3.0%

C.1.33 Indicate whether the audit report on the previous year's financial statements contains a qualified opinion or reservations. Indicate the reasons given by the chair of the audit committee to the shareholders in the general shareholders meeting to explain the content and scope of those qualified opinion or reservations.

Yes ☐ No ☑

C.1.34 Indicate the number of consecutive years during which the current audit firm has been auditing the financial statements of the company and/or its group. Likewise, indicate for how many years the current firm has been auditing the financial statements as a percentage of the total number of years over which the financial statements have been audited:

	Individual financial statements	Consolidated financial statements
Number of consecutive years	6	6

	Company	Group
Number of years audited by current audit firm/Number of years the company's or its Group financial statements have been audited (%)	15.38%	15.38%

C.1.35 Indicate and if applicable explain whether there are procedures for directors to receive the information they need in sufficient time to prepare for meetings of the governing bodies:

Yes ☑ No ☐

Procedures
Our Rules and regulations of the board stipulate that members of the board and committees are provided with the relevant documentation for each meeting sufficiently in advance of the meeting date.

C.1.39 Identify, individually in the case of directors, and in the aggregate in all other cases, and provide detailed information on, agreements between the company and its directors, executives and employees that provide indemnification, guarantee or golden parachute clause in the event of resignation, unfair dismissal or termination as a result of a takeover bid or other type of transaction.

Number of beneficiaries	21
Type of beneficiary	Description of the agreement:
Employees	The Bank has no commitments to provide severance pay to directors. A number of employees have a right to compensation equivalent to one to two years of their basic salary in the event of their contracts being terminated by the Bank in the first two years of their contract in the event of dismissal on grounds other than their own will, retirement, disability or serious dereliction of duties. In addition, for the purposes of legal compensation, in the event of redundancy a number of employees are entitled to recognition of length of service including services provided prior to being contracted by the Bank; this would entitle them to higher compensation than they would be due based on their actual length of service with the Bank itself.

Indicate whether these agreements must be reported to and/or authorised by the governing bodies of the company or its group beyond the procedures provided for in applicable law. If applicable, specify the process applied, the situations in which they apply, and the bodies responsible for approving or communicating those agreements:

	Board of directors	General Shareholders' Meeting
Body authorising clauses	√	
	YES	NO
Is the general shareholders' meeting informed of such clauses?	√	

C.2 Board committees

C.2.1 Give details of all the board committees, their members and the proportion of executive, independent and other external directors.

EXECUTIVE COMMITTEE

Name	Position	Type
Ana Botín-Sanz de Sautuola y O'Shea	Chair	Executive director
José Antonio Álvarez Álvarez	Member	Executive director
Bruce Carnegie-Brown	Member	Independent director
Luis Isasi Fernández de Bobadilla	Member	Other external director
Ramiro Mato García-Ansorena	Member	Independent director
Belén Romana García	Member	Independent director

% of executive directors	33.33%
% of proprietary directors	0.00%
% of independent directors	50.00%
% of other non-executive directors	16.67%

AUDIT COMMITTEE

Name	Position	Type
Pamela Walkden	Chair	Independent director
Homaira Akbari	Member	Independent director
Henrique de Castro	Member	Independent director
Ramiro Mato García-Ansorena	Member	Independent director
Belén Romana García	Member	Independent director

% of executive directors	0%
% of proprietary directors	0%
% of independent directors	100%
% of other non-executive directors	0%

Identify those directors in the audit committee who have been appointed on the basis of their knowledge and experience in accounting, audit or both and indicate the date of appointment of the committee chair.

Name of directors with accounting or audit experience	Pamela Walkden Belén Romana García Homaira Akbari Ramiro Mato García-Ansorena Henrique de Castro
Date of appointment of the committee chair for that position	26 April 2020

NOMINATION COMMITTEE

Name	Position	Type
Bruce Carnegie-Brown	Chair	Independent director
R. Martin Chávez Márquez	Member	Independent director
Sol Daurella Comadrán	Member	Independent director
Gina Díez Barroso	Member	Independent director

% of executive directors	0%
% of proprietary directors	0%
% of independent directors	100%
% of other executive directors	0%

REMUNERATION COMMITTEE

Name	Position	Type
Bruce Carnegie-Brown	Chair	Independent director
R. Martín Chávez Márquez	Member	Independent director
Sol Daurella Comadrán	Member	Independent director
Henrique de Castro	Member	Independent director
Luis Isasi Fernández de Bobadilla	Member	Other external director

% of executive directors	0%
% of proprietary directors	0%
% of independent directors	80%
% of other external directors	20%

RISK SUPERVISION, REGULATION AND COMPLIANCE COMMITTEE

Name	Position	Type
Belén Romana García	Chair	Independent director
R. Martín Chávez Márquez	Member	Independent director
Luis Isasi Fernández de Bobadilla	Member	Other external director
Ramiro Mato García-Ansorena	Member	Independent director
Pamela Walkden	Member	Independent director

% of executive directors	0%
% of proprietary directors	0%
% of independent directors	80%
% of other external directors	20%

RESPONSIBLE BANKING, SUSTAINABILITY AND CULTURE COMMITTEE

Name	Position	Type
Ramiro Mato García-Ansorena	Chair	Independent director
Homaira Akbari	Member	Independent director
Álvaro Cardoso de Souza	Member	Independent director
Sol Daurella Comadrán	Member	Independent director
Belén Romana García	Member	Independent director

% of executive directors	0%
% of proprietary directors	0%
% of independent directors	100%
% of other external directors	0%

INNOVATION AND TECHNOLOGY COMMITTEE

Name	Position	Type
R. Martín Chávez Márquez	Chair	Independent director
Ana Botín-Sanz de Sautuola y O'Shea	Member	Executive director
José Antonio Álvarez Álvarez	Member	Executive director
Bruce Carnegie-Brown	Member	Independent director
Homaira Akbari	Member	Independent director
Henrique de Castro	Member	Independent director
Belén Romana García	Member	Independent director

% of executive directors	28.57%
% of proprietary directors	0.00%
% of independent directors	71.43%
% of other external directors	0.00%

C.2.2 Complete the following table on the number of female directors on the various board committees over the past four years.

	Number of female directors							
	FY 2021		FY 2020		FY 2019		FY 2018	
	Number	%	Number	%	Number	%	Number	%
Audit committee	3	60.00 %	3	60.00%	3	60.00%	2	50.00%
Responsible banking, sustainability and culture committee	3	60.00 %	3	60.00%	5	62.50%	5	62.50%
Innovation and technology committee	3	— %	3	42.85%	3	37.50%	3	42.85%
Nomination committee	2	50.00 %	1	33.33%	2	40.00%	1	25.00%
Remuneration committee	1	20.00 %	1	20.00%	1	20.00%	1	20.00%
Risk supervision, regulation and compliance committee	2	40.00 %	1	20.00%	2	40.00%	2	33.30%
Executive committee	2	33.33 %	2	33.33%	2	28.50%	2	25.00%

D. RELATED-PARTY AND INTRAGROUP TRANSACTIONS

D.2 Give individual details of operations that are significant due to their amount or of importance due to their subject matter carried out between the company or its subsidiaries and shareholders holding 10% or more of the voting rights or who are represented on the board of directors of the company, indicating which has been the competent body for its approval and if any affected shareholder or director has abstained. In the event that the board of directors has responsibility, indicate if the proposed resolution has been approved by the board without a vote against the majority of the independents:

Not applicable.

D.3 Give individual details of the operations that are significant due to their amount or relevant due to their subject matter carried out by the company or its subsidiaries with the administrators or managers of the company, including those operations carried out with entities that the administrator or manager controls or controls jointly, indicating the competent body for its approval and if any affected shareholder or director has abstained. In the event that the board of directors has responsibility, indicate if the proposed resolution has been approved by the board without a vote against the majority of the independents:

Not applicable.

D.4 Report individually on intra-group transactions that are significant due to their amount or relevant due to their subject matter that have been undertaken by the company with its parent company or with other entities belonging to the parent's group, including subsidiaries of the listed company, except where no other related party of the listed company has interests in these subsidiaries or that they are fully owned, directly or indirectly, by the listed company.

In any case, report any intragroup transactions carried out with entities in countries or territories considered to be tax havens.

Corporate name of the group company	Brief description of the transaction and any other information necessary for its evaluation	Amount (EUR thousand)
Banco Santander (Brasil) S.A. (Cayman Islands Branch)	This chart shows the transactions and the results obtained by the Bank at 31 December 2021 with Group entities resident in countries or territories that were considered non-cooperative jurisdictions pursuant to Spanish legislation, at such date (Law 11/2021 on measures to prevent and fight against tax fraud expands the meaning of tax havens, which it renames "non-cooperative jurisdictions"). These results, and the balances indicated below, were eliminated in the consolidation process. See note 3 to the 2021 Consolidated financial statements for more information on offshore entities. The amount shown on the right corresponds to positive results relating to contracting of derivatives (includes branches in New York and London of Banco Santander, S.A.). The referred derivatives had a net positive market value of EUR 274 million in the Bank and covered the following transactions: - 91 Non Delivery Forwards. - 251 Swaps. - 65 Cross Currency Swaps. - 12 Options. - 44 Forex.	18,681
	The amount shown on the right corresponds to negative results relating to short term deposits with the New York branch of Banco Santander, S.A. (liability), all of them expired before 31 December 2021.	1,036
	The amount shown on the right corresponds to positive results relating to deposits with the Hong Kong branch of Banco Santander, S.A. (asset). These deposits had a nominal value of EUR 0.9 million at 31 December 2021.	16
	The amount shown on the right corresponds to positive results relating to fixed income securities-subordinated instruments (asset). This relates to the investment in November 2018 in two subordinated instruments (Tier I Subordinated Perpetual Notes and Tier II Subordinated Notes due 2028) with an amortised cost of EUR 2,228 million as at 31 December 2021.	140,892
	The amount shown on the right corresponds to negative results relating to interests and commissions concerning correspondent accounts (includes Hong Kong branch of Banco Santander, S.A.) (liability). This relates to correspondent accounts with a credit balance of EUR 40 million at 31 December 2021.	15

D.5 Give individual details of the operations that are significant due to their amount or relevant due to their subject matter carried out by the company or its subsidiaries with other related parties pursuant to the international accounting standards adopted by the EU, which have not been reported in previous sections.

Not applicable.

G. DEGREE OF COMPLIANCE WITH THE CORPORATE GOVERNANCE RECOMMENDATIONS

Indicate the degree of the company's compliance with the recommendations of the good governance code for listed companies.

Should the company not comply with any of the recommendations or comply only in part, include a detailed explanation of the reasons so that shareholders, investors and the market in general have enough information to assess the company's behaviour. General explanations are not acceptable.

1. The bylaws of listed companies should not place an upper limit on the votes that can be cast by a single shareholder, or impose other obstacles to the takeover of the company by means of share purchases on the market.

Complies ☑ Explain ☐

2. When the listed company is controlled, pursuant to the meaning established in Article 42 of the Commercial Code, by another listed or non-listed entity, and has, directly or through its subsidiaries, business relationships with that entity or any of its subsidiaries (other than those of the listed company) or carries out activities related to the activities of any of them, this is reported publicly, with specific information about:

a) The respective areas of activity and possible business relationships between, on the one hand, the listed company or its subsidiaries and, on the other, the parent company or its subsidiaries.

b) The mechanisms established to resolve any conflicts of interest that may arise.

Complies ☐ Partially complies ☐ Explain ☐ Not applicable ☑

3. During the AGM the chair of the board should verbally inform shareholders in sufficient detail of the most relevant aspects of the company's corporate governance, supplementing the written information circulated in the annual corporate governance report. In particular:

a) Changes taking place since the previous annual general meeting.

b) The specific reasons for the company not following a given Good Governance Code recommendation, and any alternative procedures followed in its stead.

Complies ☑ Partially complies ☐ Explain ☐

4. The company should define and promote a policy for communication and contact with shareholders and institutional investors within the framework of their involvement in the company, as well as with proxy advisors, that complies in full with the rules on market abuse and gives equal treatment to shareholders who are in the same position. The company should make said policy public through its website, including information regarding the way in which it has been implemented and the parties involved or those responsible its implementation.

Further, without prejudice to the legal obligations of disclosure of inside information and other regulated information, the company should also have a general policy for the communication of economic-financial, non-financial and corporate information through the channels it considers appropriate (media, social media or other channels) that helps maximise the dissemination and quality of the information available to the market, investors and other stakeholders.

Complies ☑ Partially complies ☐ Explain ☐

5. The board of directors should not make a proposal to the general meeting for the delegation of powers to issue shares or convertible securities without pre-emptive subscription rights for an amount exceeding 20% of capital at the time of such delegation.

And that whenever the board of directors approves an issuance of shares or convertible securities without pre-emptive rights the company immediately publishes reports on its web page regarding said exclusions as referenced in applicable mercantile law.

Complies ☑ Partially complies ☐ Explain ☐

6. Listed companies drawing up the following reports on a voluntary or compulsory basis should publish them on their website well in advance of the AGM, even if their distribution is not obligatory:

a) Report on auditor independence.

b) Reviews of the operation of the audit committee and the nomination and remuneration committees.

c) Audit committee report on third-party transactions.

Complies ☑ Partially complies ☐ Explain ☐

7. The company should broadcast its general meetings live on the corporate website.

The company should have mechanisms that allow the delegation and exercise of votes by electronic means and even, in the case of large-cap companies and, to the extent that it is proportionate, attendance and active participation in the general shareholders' meeting.

Complies ☑ Explain ☐

8. The audit committee should strive to ensure that the financial statements that the board of directors presents to the general shareholders' meeting are drawn up in accordance to accounting legislation. And in those cases where the auditors includes any qualification in its report, the chair of the audit committee should give a clear explanation at the general meeting of their opinion regarding the scope and content, making a summary of that opinion available to the shareholders at the time of the publication of the notice of the meeting, along with the rest of proposals and reports of the board.

Complies ☑ Partially complies ☐ Explain ☐

9. The company should disclose its conditions and procedures for admitting share ownership, the right to attend general meetings and the exercise or delegation of voting rights, and display them permanently on its website.

Such conditions and procedures should encourage shareholders to attend and exercise their rights and be applied in a non-discriminatory manner.

Complies ☑ Partially complies ☐ Explain ☐

10. When a shareholder so entitled exercises the right to supplement the agenda or submit new proposals prior to the general meeting, the company should:

a) Immediately circulate the supplementary items and new proposals.

b) Disclose the standard attendance card or proxy appointment or remote voting form, duly modified so that new agenda items and alternative proposals can be voted on in the same terms as those submitted by the board of directors.

c) Put all these items or alternative proposals to the vote applying the same voting rules as for those submitted by the board of directors, with particular regard to presumptions or deductions about the direction of votes.

d) After the general meeting, disclose the breakdown of votes on such supplementary items or alternative proposals.

Complies ☑ Partially complies ☐ Explain ☐ Not applicable ☐

11. In the event that a company plans to pay for attendance at the general meeting, it should first establish a general, long-term policy in this respect.

Complies ☐ Partially complies ☐ Explain ☐ Not applicable ☑

12. The board of directors should perform its duties with unity of purpose and independent judgement, according the same treatment to all shareholders in the same position. It should be guided at all times by the company's best interest, understood as the creation of a profitable business that promotes its sustainable success over time, while maximising its economic value.

In pursuing the corporate interest, it should not only abide by laws and regulations and conduct itself according to principles of good faith, ethics and respect for commonly accepted customs and good practices, but also strive to reconcile its own interests with the legitimate interests of its employees, suppliers, clients and other stakeholders, as well as with the impact of its activities on the broader community and the natural environment.

Complies ☑ Partially complies ☐ Explain ☐

13. The board of directors should have an optimal size to promote its efficient functioning and maximise participation. The recommended range is accordingly between five and fifteen members.

Complies ☑ Explain ☐

14. The board of directors should approve a policy aimed at promoting an appro-priate composition of the board that:

a) is concrete and verifiable;

b) ensures that appointment or re-election proposals are based on a prior analysis of the competences required by the board; and

c) favours diversity of knowledge, experience, age and gender. Therefore, measures that encourage the company to have a significant number of female senior managers are considered to favour gender diversity.

The results of the prior analysis of competences required by the board should be written up in the nomination committee's explanatory report, to be pub-lished when the general shareholders' meeting is convened that will ratify the appointment and re-election of each director.

The nomination committee should run an annual check on compliance with this policy and set out its findings in the annual corporate governance report.

Complies ☑ Partially complies ☐ Explain ☐

15. Proprietary and independent directors should constitute an ample majority on the board of directors, while the number of executive directors should be the minimum practical bearing in mind the complexity of the corporate group and the ownership interests they control.

Further, the number of female directors should account for at least 40% of the members of the board of directors before the end of 2022 and thereafter, and not less than 30% previous to that.

Complies ☑ Partially complies ☐ Explain ☐

16. The percentage of proprietary directors out of all non-executive directors should be no greater than the proportion between the ownership stake of the shareholders they represent and the remainder of the company's capital.

This criterion can be relaxed:

a) In large cap companies where few or no equity stakes attain the legal threshold for significant shareholdings.

b) In companies with a plurality of shareholders represented on the board but not otherwise related.

Complies ☑ Explain ☐

17. Independent directors should be at least half of all board members.

However, when the company does not have a large market capitalisation, or when a large cap company has shareholders individually or concertedly controlling over 30 percent of capital, independent directors should occupy, at least, a third of board places.

Complies ☑ Explain ☐

18. Companies should disclose the following director particulars on their websites and keep them regularly updated:

a) Background and professional experience.

b) Directorships held in other companies, listed or otherwise, and other paid activities they engage in, of whatever nature.

c) Statement of the director class to which they belong, in the case of proprietary directors indicating the shareholder they represent or have links with.

d) Dates of their first appointment as a board member and subsequent re-elections.

e) Shares held in the company, and any options on the same.

Complies ☑ Partially complies ☐ Explain ☐

19. Following verification by the nomination committee, the annual corporate governance report should disclose the reasons for the appointment of proprietary directors at the urging of shareholders controlling less than 3 percent of capital; and explain any rejection of a formal request for a board place from shareholders whose equity stake is equal to or greater than that of others applying successfully for a proprietary directorship.

Complies ☐ Partially complies ☐ Explain ☐ Not applicable ☑

20. Proprietary directors should resign when the shareholders they represent dispose of their ownership interest in its entirety. If such shareholders reduce their stakes, thereby losing some of their entitlement to proprietary directors, the number of the latter should be reduced accordingly.

Complies ☑ Partially complies ☐ Explain ☐ Not applicable ☐

21. The board of directors should not propose the removal of independent directors before the expiry of their tenure as mandated by the bylaws, except where they find just cause, based on a proposal from the nomination committee. In particular, just cause will be presumed when directors take up new posts or responsibilities that prevent them allocating sufficient time to the work of a board member, or are in breach of their fiduciary duties or come under one of the disqualifying grounds for classification as independent enumerated in the applicable legislation.

The removal of independent directors may also be proposed when a takeover bid, merger or similar corporate transaction alters the company's capital structure, provided the changes in board membership ensue from the proportionality criterion set out in recommendation 16.

Complies ☑ Explain ☐

22. Companies should establish rules obliging directors to disclose any circum-stance that might harm the organisation's name or reputation, related or not to their actions within the company, and tendering their resignation as the case may be, and, in particular, to inform the board of any criminal charges brought against them and the progress of any subsequent trial.

When the board is informed or becomes aware of any of the situations men-tioned in the previous paragraph, the board of directors should examine the case as soon as possible and, attending

to the particular circumstances, de-cide, based on a report from the nomination and remuneration committee, whether or not to adopt any measures such as opening of an internal investigation, calling on the director to resign or proposing his or her dismissal. The board should give a reasoned account of all such determinations in the annual corporate governance report, unless there are special circumstances that justify otherwise, which must be recorded in the minutes. This is without prejudice to the information that the company must disclose, if appropriate, at the time it adopts the corresponding measures.

Complies ☑ Partially complies ☐ Explain ☐

23. Directors should express their clear opposition when they feel a proposal submitted for the board's approval might damage the corporate interest. In particular, independents and other directors not subject to potential conflicts of interest should strenuously challenge any decision that could harm the interests of shareholders lacking board representation.

When the board makes material or reiterated decisions about which a director has expressed serious reservations, then he or she must draw the pertinent conclusions. Directors resigning for such causes should set out their reasons in the letter referred to in the next recommendation.

The terms of this recommendation also apply to the secretary of the board, even if he or she is not a director.

Complies ☑ Partially complies ☐ Explain ☐ Not applicable ☐

24. Directors who give up their position before their tenure expires, through resignation or resolution of the general meeting, should state the reasons for this decision, or in the case of non-executive directors, their opinion of the reasons for the general meeting resolution, in a letter to be sent to all members of the board.

This should all be reported in the annual corporate governance report, and if it is relevant for investors, the company should publish an announcement of the departure as rapidly as possible, with sufficient reference to the reasons or circumstances provided by the director.

Complies ☑ Partially complies ☐ Explain ☐ Not applicable ☐

25. The nomination committee should ensure that non-executive directors have sufficient time available to discharge their responsibilities effectively.

The board rules and regulations should lay down the maximum number of company boards on which directors can serve.

Complies ☑ Partially complies ☐ Explain ☐

26. The board should meet with the necessary frequency to properly perform its functions, eight times a year at least, in accordance with a calendar and agendas set at the start of the year, to which each director may propose the addition of initially unscheduled items.

Complies ☑ Partially complies ☐ Explain ☐

27. Director absences should be kept to a strict minimum and quantified in the annual corporate governance report. In the event of absence, directors should delegate their powers of representation with the appropriate instructions.

Complies ☑ Partially complies ☐ Explain ☐

28. When directors or the secretary express concerns about some proposal or, in the case of directors, about the company's performance, and such concerns are not resolved at the meeting, they should be recorded in the minutes book if the person expressing them so requests.

Complies ☑ Partially complies ☐ Explain ☐ Not applicable ☐

29. The company should provide suitable channels for directors to obtain the advice they need to carry out their duties, extending if necessary to external assistance at the company's expense.

Complies ☑ Partially complies ☐ Explain ☐

30. Regardless of the knowledge directors must possess to carry out their duties, they should also be offered refresher programmes when circumstances so advise.

Complies ☑ Explain ☐ Not applicable ☐

31. The agendas of board meetings should clearly indicate on which points directors must arrive at a decision, so they can study the matter beforehand or obtain the information they consider appropriate.

For reasons of urgency, the chair may wish to present decisions or resolutions for board approval that were not on the meeting agenda. In such exceptional circumstances, their inclusion will require the express prior consent, duly minuted, of the majority of directors present.

Complies ☑ Partially complies ☐ Explain ☐

32. Directors should be regularly informed of movements in share ownership and of the views of major shareholders, investors and rating agencies on the company and its group.

Complies ☑ Partially complies ☐ Explain ☐

33. The chair, as the person responsible for the efficient functioning of the board of directors, in addition to the functions assigned by law and the company's bylaws, should prepare and submit to the board a schedule of meeting dates and agendas; organise and coordinate regular evaluations of the board and, where appropriate, of the company's chief executive officer; exercise leadership of the board and be accountable for its proper functioning; ensure that sufficient time is given to the discussion of strategic issues, and approve and review refresher courses for each director, when circumstances so advise.

Complies ☑ Partially complies ☐ Explain ☐

34. When a lead independent director has been appointed, the bylaws or the Rules and regulations of the board of directors should grant him or her the following powers over and above those conferred by law: to chair the board of directors in the absence of the chair or vice chair; to give voice to the concerns of non-executive directors; to maintain contact with investors and shareholders to hear their views and develop a balanced understanding of their concerns, especially those to do with the company's corporate governance; and to coordinate the chair's succession plan.

Complies ☑ Partially complies ☐ Explain ☐ Not applicable ☐

35. The board secretary should strive to ensure that the board's actions and decisions are informed by the governance recommendations of the Good Governance Code of relevance to the company.

Complies ☑ Explain ☐

36. The board in full should conduct an annual evaluation, adopting, where necessary, an action plan to correct weakness detected in:

a) The quality and efficiency of the board's operation.

b) The performance and membership of its committees.

c) The diversity of board membership and competencies.

d) The performance of the chair of the board of directors and the company's chief executive.

e) The performance and contribution of individual directors, with particular attention to the chair of board committees.

The evaluation of board committees should start from the reports they send to the board of directors, while that of the board itself should start from the report of the nomination committee.

Every three years, the board of directors should engage an external facilitator to aid in the evaluation process. This facilitator's independence should be verified by the nomination committee.

Any business dealings that the facilitator or members of its corporate group maintain with the company or members of its corporate group should be detailed in the annual corporate governance report.

The process followed and areas evaluated should be detailed in the annual corporate governance report.

Complies ☑ Partially complies ☐ Explain ☐

37. When there is an executive committee, there should be at least two non-executive members, at least one of whom should be independent; and its secretary should be the secretary of the board of directors.

Complies ☑ Partially complies ☐ Explain ☐ Not applicable ☐

38. The board should be kept fully informed of the matters discussed and decisions made by the executive committee. To this end, all board members should receive a copy of the committee's minutes.

Complies ☑ Partially complies ☐ Explain ☐ Not applicable ☐

39. All members of the audit committee, particularly its chair, should be appointed with regard to their knowledge and experience in accounting, auditing and risk management matters, both financial and non-financial.

Complies ☑ Partially complies ☐ Explain ☐

40. Listed companies should have a unit in charge of the internal audit function, under the supervision of the audit committee, to monitor the effectiveness of reporting and control systems. This unit should report functionally to the board's non-executive chair or the chair of the audit committee.

Complies ☑ Partially complies ☐ Explain ☐

41. The head of the unit handling the internal audit function should present an annual work programme to the audit committee, for approval by this committee or the board, inform it directly of any incidents or scope limitations arising during its implementation, the results and monitoring of its recommendations, and submit an activities report at the end of each year.

Complies ☑ Partially complies ☐ Explain ☐ Not applicable ☐

42. The audit committee should have the following functions over and above those legally assigned:

1. With respect to internal control and reporting systems:

a) Monitor and evaluate the preparation process and the integrity of the financial and non-financial information, as well as the con-trol and management systems for financial and non-financial risks related to the company and, where appropriate, to the group – including operating, technological, legal, social, environmental, political and reputational risks or those related to corruption – reviewing compliance with regulatory requirements, the accurate demarcation of the consolidation perimeter, and the correct ap-plication of accounting principles.

b) Monitor the independence of the unit handling the internal audit function; propose the selection, appointment and removal of the head of the internal audit service; propose the service's budget; approve or make a proposal for approval to the board of the prior-ities and annual work programme of the internal audit unit, ensur-ing that it focuses primarily on the main risks the company is ex-posed to (including reputational risk); receive regular report-backs on its activities; and verify that senior management are acting on the findings and recommendations of its reports.

c) Establish and supervise a mechanism that allows employees and other persons related to the company, such as directors, sharehold-ers, suppliers, contractors or subcontractors, to report irregulari-ties of potential significance, including financial and accounting irregularities, or those of any other nature, related to the company, that they notice within the company or its group. This mechanism must guarantee confidentiality and enable communications to be made anonymously, respecting the rights of both the complainant and the accused party.

d) In general, ensure that the internal control policies and systems established are applied effectively in practice.

2. With regard to the external auditor:

a) Investigate the issues giving rise to the resignation of the external auditor, should this come about.

b) Ensure that the remuneration of the external auditor, does not compromise its quality or independence.

c) Ensure that the company notifies any change of external auditor through the CNMV, accompanied by a statement of any disagreements arising with the outgoing auditor and the reasons for the same.

d) Ensure that the external auditor has a yearly meeting with the board in full to inform it of the work undertaken and developments in the company's risk and accounting positions.

e) Ensure that the company and the external auditor adhere to current regulations on the provisions of non-audit services, limits on the concentration of the auditor's business and other requirements concerning auditor independence.

Complies ☑ Partially complies ☐ Explain ☐

43. The audit committee should be empowered to meet with any company employee or manager, even ordering their appearance without the presence of another manager.

Complies ☑ Partially complies ☐ Explain ☐

44. The audit committee should be informed of any structural changes or corporate transactions the company is planning, so the committee can analyse the operation and report to the board beforehand on its economic conditions and accounting impact and, when applicable, the exchange ratio proposed.

Complies ☑ Partially complies ☐ Explain ☐ Not applicable ☐

45. Risk control and management policy should identify or establish at least:

a) The different types of financial and non-financial risk the company is exposed to (including operational, technological, financial, legal, social, environmental, political and reputational risks, and risks relating to corruption), with the inclusion under financial or economic risks of con-tingent liabilities and other off-balance-sheet risks.

b) A risk control and management model based on different levels, of which a specialised risk committee will form part when sector regula-tions provide or the company deems it appropriate.

c) The level of risk that the company considers acceptable.

d) The measures in place to mitigate the impact of identified risk events should they occur.

e) The internal control and reporting systems to be used to control and manage the above risks, including contingent liabilities and off-balance-sheet risks.

Complies ☑ Partially complies ☐ Explain ☐

46. Companies should establish a risk control and management function in the charge of one of the company's internal department or units and under the direct supervision of the audit committee or some other specialised board committee. This internal department or unit should be expressly charged with the following responsibilities:

a) Ensure that risk control and management systems are functioning correctly and, specifically, that major risks the company is exposed to are correctly identified, managed and quantified.

b) Participate actively in the preparation of risk strategies and in key decisions about their management.

c) Ensure that risk control and management systems are mitigating risks effectively in the frame of the policy drawn up by the board of directors.

Complies ☑ Partially complies ☐ Explain ☐

47. Members of the nomination and remuneration committee-or of the nomination committee and remuneration committee, if separately constituted - should be chosen procuring they have the right balance of knowledge, skills and experience for the functions they are called on to discharge. The majority of their members should be independent directors.

Complies ☑ Partially complies ☐ Explain ☐

48. Large cap companies should have formed separate nomination and remuneration committees.

Complies ☑ Explain ☐ Not applicable ☐

49. The nomination committee should consult with the company's chair and chief executive, especially on matters relating to executive directors.

When there are vacancies on the board, any director may approach the nomination committee to propose candidates that it might consider suitable.

Complies ☑ Partially complies ☐ Explain ☐

50. The remuneration committee should operate independently and have the following functions in addition to those assigned by law:

a) Propose to the board the standard conditions for senior officer contracts.

b) Monitor compliance with the remuneration policy set by the company.

c) Periodically review the remuneration policy for directors and senior officers, including share-based remuneration systems and their application, and ensure that their individual compensation is proportionate to the amounts paid to other directors and senior officers in the company.

d) Ensure that conflicts of interest do not undermine the independence of any external advice the committee engages.

e) Verify the information on director and senior officers' pay contained in corporate documents, including the annual directors' remuneration statement.

Complies ☑ Partially complies ☐ Explain ☐

51. The remuneration committee should consult with the company's chair and chief executive, especially on matters relating to executive directors and senior officers.

Complies ☑ Partially complies ☐ Explain ☐

52. The rules regarding composition and functioning of supervision and control committees should be set out in the regulations of the board of directors and aligned with those governing legally mandatory board committees as specified in the preceding sets of recommendations. They should include at least the following terms:

a) Committees should be formed exclusively by non-executive directors, with a majority of independents.

b) They should be chaired by independent directors.

c) The board should appoint the members of such committees with regard to the knowledge, skills and experience of its directors and each committee's terms of reference; discuss their proposals and reports; and provide report-backs on their activities and work at the first board plenary following each committee meeting.

d) They may engage external advice, when they feel it necessary for the discharge of their functions.

e) Meeting proceedings should be minuted and a copy made available to all board members.

Complies ☑ Partially complies ☐ Explain ☐ Not applicable ☐

53. The task of supervising compliance with the policies and rules of the company in the environmental, social and corporate governance areas, and internal rules of conduct, should be assigned to one board committee or split between several, which could be the audit committee, the nomination committee, a committee specialised in sustainability or corporate social responsibility, or a dedicated committee established by the board under its powers of self-organisation. Such a committee should be made up solely of non-executive directors, the majority being independent and specifically assigned the following minimum functions.

Complies ☑ Partially complies ☐ Explain ☐

54. The minimum functions referred to in the previous recommendation are as follows:

a) Monitor compliance with the company's internal codes of conduct and corporate governance rules, and ensure that the corporate culture is aligned with its purpose and values.

b) Monitor the implementation of the general policy regarding the disclosure of economic-financial, non-financial and corporate information, as well as communication with shareholders and investors, proxy advisors and other stakeholders. Similarly, the way in which the entity communicates and relates with small and medium-sized shareholders should be monitored.

c) Periodically evaluate the effectiveness of the company's corporate governance system and environmental and social policy, to confirm that it is fulfilling its mission to promote the corporate interest and catering, as appropriate, to the legitimate interests of remaining stakeholders.

d) Ensure the company's environmental and social practices are in accordance with the established strategy and policy.

e) Monitor and evaluate the company's interaction with its stakeholder groups.

Complies ☑ Partially complies ☐ Explain ☐

55. Environmental and social sustainability policies should identify and include at least:

a) The principles, commitments, objectives and strategy regarding shareholders, employees, clients, suppliers, social welfare issues, the environment, diversity, fiscal responsibility, respect for human rights and the prevention of corruption and other illegal conducts.

b) The methods or systems for monitoring compliance with policies, associated risks and their management.

c) The mechanisms for supervising non-financial risk, including that related to ethical aspects and business conduct.

d) Channels for stakeholder communication, participation and dialogue.

e) Responsible communication practices that prevent the manipulation of information and protect the company's honour and integrity.

Complies ☑ Partially complies ☐ Explain ☐

56. Director remuneration should be sufficient to attract and retain directors with the desired profile and compensate the commitment, abilities and responsibility that the post demands, but not so high as to compromise the independent judgement of non-executive directors.

Complies ☑ Explain ☐

57. Variable remuneration linked to the company and the director's performance, the award of shares, options or any other right to acquire shares or to be remunerated on the basis of share price movements, and membership of long-term savings schemes such as pension plans, retirement accounts or any other retirement plan should be confined to executive directors.

The company may consider the share-based remuneration of non-executive directors provided they retain such shares until the end of their mandate. The above condition will not apply to any shares that the director must dispose of to defray costs related to their acquisition.

Complies ☑ Partially complies ☐ Explain ☐

58. In the case of variable awards, remuneration policies should include limits and technical safeguards to ensure they reflect the professional performance of the beneficiaries and not simply the general progress of the markets or the company's sector, or circumstances of that kind.

In particular, variable remuneration items should meet the following conditions:

a) Be subject to predetermined and measurable performance criteria that factor the risk assumed to obtain a given outcome.

b) Promote the long-term sustainability of the company and include non-financial criteria that are relevant for the company's long-term value, such as compliance with its internal rules and procedures and its risk control and management policies.

c) Be focused on achieving a balance between the achievement of short, medium and long-term targets, such that performance-related pay rewards ongoing achievement, maintained over sufficient time to appreciate its contribution to long-term value creation. This will ensure that performance measurement is not based solely on one off, occasional or extraordinary events.

Complies ☑ Partially complies ☐ Explain ☐ Not applicable ☐

59. The payment of the variable components of remuneration is subject to sufficient verification that previously established performance, or other, conditions have been effectively met. Entities should include in their annual directors' remuneration report the criteria relating to the time required and methods for such verification, depending on the nature and characteristics of each variable component.

Additionally, entities should consider establishing a reduction clause ('malus') based on deferral for a sufficient period of the payment of part of the variable components that implies total or partial loss of this remuneration in the event that prior to the time of payment an event occurs that makes this advisable.

Complies ☑ Partially complies ☐ Explain ☐ Not applicable ☐

60. Remuneration linked to company earnings should bear in mind any qualifications stated in the external auditor's report that reduce their amount.

Complies ☑ Partially complies ☐ Explain ☐ Not applicable ☐

61. A major part of executive directors' variable remuneration should be linked to the award of shares or financial instruments whose value is linked to the share price.

Complies ☑ Partially complies ☐ Explain ☐ Not applicable ☐

62. Following the award of shares, options or financial instruments corresponding to the remuneration schemes, executive directors should not be able to transfer their ownership or exercise them until a period of at least three years has elapsed.

Except for the case in which the director maintains, at the time of the transfer or exercise, a net economic exposure to the variation in the price of the shares for a market value equivalent to an amount of at least twice his or her fixed annual remuneration through the ownership of shares, options or other financial instruments.

The foregoing shall not apply to the shares that the director needs to dispose of to meet the costs related to their acquisition or, upon favourable assessment of the nomination and remuneration committee to address an extraordinary situation.

Complies ☑ Partially complies ☐ Explain ☐ Not applicable ☐

63. Contractual arrangements should include provisions that permit the company to reclaim variable components of remuneration when payment was out of step with the director's actual performance or based on data subsequently found to be misstated.

Complies ☑ Partially complies ☐ Explain ☐ Not applicable ☐

64. Termination payments should not exceed a fixed amount equivalent to two years of the director's total annual remuneration and should not be paid until the company confirms that he or she has met the predetermined performance criteria.

For the purposes of this recommendation, payments for contractual termination include any payments whose accrual or payment obligation arises as a consequence of or on the occasion of the termination of the contractual relationship that linked the director with the company, including previously unconsolidated amounts for long-term savings schemes and the amounts paid under post-contractual non-compete agreements.

Complies ☑ Partially complies ☐ Explain ☐ Not applicable ☐

List whether any directors voted against or abstained from voting on the approval of this Report.

Yes ☐ No ☑

I declare that the information included in this statistical annex are the same and are consistent with the descriptions and information included in the annual corporate governance report published by the company.

9.3 Table on compliance with or explanations of recommendations on corporate governance

Recommendation	Comply / Explain	Information
1	Comply	See section 3.2 'Shareholder rights'.
2	Not applicable	See 'Conflicts of interest' in section 4.12. and section 2.3 'Significant shareholders'.
3	Comply	See section 3.1 'Shareholder communication and engagement'.
4	Comply	See section 3.1 'Shareholder communication and engagement'.
5	Comply	See section 2.2 'Authority to increase capital'.
6	Comply	See sections 4.5 'Audit committee activities in 2021', 4.6 'Nomination committee activities in 2021', 4.7 'Remuneration committee activities in 2021', 4.8 'Risk supervision, regulation and compliance committee activities in 2021', 4.9 'Responsible banking, sustainability and culture committee activities in 2021', 4.10 'Innovation and technology committee activities in 2021' and 4.12 'Related-party transactions and conflicts of interest'.
7	Comply	See 'Engagement with shareholders in 2021' in section 3.1, 'Shareholder participation at general meetings' in section 3.2 and section 3.5 'Our next AGM in 2022'.
8	Comply	See 'Rules and regulations of the board' in section 4.3 and section 4.5 'Audit committee activities in 2021'.
9	Comply	See 'Participation of shareholders at the general meeting' in section 3.2.
10	Comply	See 'Supplement to the annual general meeting notice' in section 3.2.
11	Not applicable	See section 3.5 'Our next AGM in 2022'.
12	Comply	See section 4.3 'Board functioning and effectiveness'.
13	Comply	See 'Size' in section 4.2.
14	Comply	See 'Diversity' and 'Election, renewal and succession of directors' in section 4.2, 'Rules and regulations of the board' in section 4.3, 'Duties and activities in 2021' in section 4.6, section 5 'Management team' and 'Responsible banking' chapter.
15	Comply	See section 4.2 'Board composition'.
16	Comply	See 'Composition by type of director' in section 4.2.
17	Comply	See 'Composition by type of director' and 'Election, renewal and succession of directors' in section 4.2.
18	Comply	See 'Corporate website' in section 3.1 and section 4.1 'Our directors'.
19	Not applicable	See 'Composition by type of director' and 'Tenure and equity ownership' in section 4.2.
20	Comply	See 'Election, renewal and succession of directors' in section 4.2.
21	Comply	See 'Election, renewal and succession of directors' in section 4.2.
22	Comply	See 'Election, renewal and succession of directors' in section 4.2, 'Rules and regulations of the board' in section 4.3 and 'Duties and activities in 2021' in section 4.6.
23	Comply	See 'Election, renewal and succession of directors' in section 4.2.
24	Comply	See 'Election, renewal and succession of directors' in section 4.2, 'Rules and regulations of the board' in section 4.3 and 'Duties and activities in 2021' in section 4.6.
25	Comply	See 'Board and committees attendance' in section 4.3 and 'Duties and activities in 2021' in section 4.6.
26	Comply	See 'Board meetings' and 'Board and committee attendance' in section 4.3.
27	Comply	See 'Board meetings' and 'Board and committee attendance' in section 4.3.
28	Comply	See 'Board meetings' in section 4.3.
29	Comply	See 'Board meetings' in section 4.3.
30	Comply	See 'Training of directors and induction programmes for new directors' in section 4.3.
31	Comply	See 'Board meetings' in section 4.3.
32	Comply	See section 3.1 'Shareholder communication and engagement' and 'Duties and activities in 2021' in section 4.6.
33	Comply	See section 4.3 'Board functioning and effectiveness'.
34	Comply	See 'Lead independent director' in section 4.3.
35	Comply	See 'Secretary of the board' in section 4.3.
36	Comply	See 'Board assessment in 2021' in section 4.3.
37	Comply	See 'Rules and regulations of the board' in section 4.3 and 'Composition' in section 4.4.
38	Comply	See 'Committee meetings' in section 4.3 and section 4.4 'Executive committee activities in 2021'.
39	Comply	See 'Rules and regulations of the board' in section 4.3 and 'Composition' in section 4.5.
40	Comply	See 'Duties and activities in 2021' in section 4.5 and section 8.5 'Monitoring'.
41	Comply	See 'Rules and regulations of the board' in section 4.3 and 'Duties and activities in 2021' in section 4.5.
42	Comply	See 'Rules and regulations of the board' in section 4.3 and 'Duties and activities in 2021' in section 4.5.
43	Comply	See 'Committee meetings' in section 4.3.
44	Comply	See 'Duties and activities in 2021' in section 4.5.
45	Comply	See 'Rules and regulations of the board' in section 4.3, 'Duties and activities in 2021' in section 4.5, 'Duties and activities in 2021' in section 4.8 and the 'Risk management and compliance' chapter.

Recommendation	Comply / Explain	Information
46	Comply	See 'Duties and activities in 2021' in section 4.5,'Duties and activities in 2021' in section 4.8 and the 'Risk management and compliance' chapter.
47	Comply	See 'Composition' in section 4.6 and 'Composition' in section 4.7.
48	Comply	See 'Structure of board committees' in section 4.3.
49	Comply	See 'Duties and activities in 2021' in section 4.6.
50	Comply	See 'Duties and activities in 2021' in section 4.7.
51	Comply	See 'Duties and activities in 2021' in section 4.7.
52	Comply	See 'Rules and regulations of the board' and 'Committee meetings' in section 4.3 and sections 4.8 'Risk supervision, regulation and compliance committee activities in 2021' and 4.9 'Responsible banking, sustainability and culture committee activities in 2021'.
53	Comply	See 'Rules and regulations of the board' in section 4.3, 'Duties and activities in 2021' in section 4.6, 'Duties and activities in 2021' in section 4.8 and 'Duties and activities in 2021' in section 4.9.
54	Comply	See 'Rules and regulations of the board' in section 4.3, 'Duties and activities in 2021' in section 4.6, 'Duties and activities in 2021' in section 4.8 and 'Duties and activities in 2021' in section 4.9.
55	Comply	See 'Duties and activities in 2021' in section 4.9 and 'Responsible banking' chapter.
56	Comply	See sections 6.2 'Remuneration of directors for supervisory and collective decision-making duties: policy applied in 2021', 6.3 'Remuneration of directors for executive duties' and 6.4 'Directors' remuneration policy for 2022, 2023 and 2024 submitted to a binding shareholder vote'.
57	Comply	See sections 6.2 'Remuneration of directors for supervisory and collective decision-making duties: policy applied in 2021', 6.3 'Remuneration of directors for executive duties' and 6.4 'Directors' remuneration policy for 2022, 2023 and 2024 submitted to a binding shareholder vote'.
58	Comply	See section 6.3 'Remuneration of directors for executive duties' and 6.4 'Directors' remuneration policy for 2022, 2023 and 2024 submitted to a binding shareholder vote'.
59	Comply	See section 6.3 'Remuneration of directors for executive duties'.
60	Comply	See section 6.3 'Remuneration of directors for executive duties'.
61	Comply	See section 6.3 'Remuneration of directors for executive duties' and 6.4 'Directors' remuneration policy for 2022, 2023 and 2024 submitted to a binding shareholder vote'.
62	Comply	See 'Duties and activities in 2021' in section 4.7, section 6.3 'Remuneration of directors for executive duties' and 6.4 'Directors' remuneration policy for 2022, 2023 and 2024 submitted to a binding shareholder vote'.
63	Comply	See section 6.3 'Remuneration of directors for executive duties' and 6.4 'Directors' remuneration policy for 2022, 2023 and 2024 submitted to a binding shareholder vote'.
64	Comply	See sections 6.1 'Principles of the remuneration policy' and 6.3 'Remuneration of directors for executive duties' and 6.4 'Directors' remuneration policy for 2022, 2023 and 2024 submitted to a binding shareholder vote'.

9.4 Reconciliation to the CNMV's remuneration report model

Section in the CNMV model	Included in statistical report	Further information elsewhere and comments
A. Remuneration policy for the present fiscal year		
A.1	No	• See section 6.4: A.1.1, A.1.2, A.1.3, A.1.4, A.1.5, A.1.6, A.1.7, A.1.8, A.1.9, A.1.10, A.1.11 (note 5), A.1.12. • See also sections 4.7 and 6.5 for A.1.1 y A.1.6. • See 'Summary of link between risk, performance and reward' in section 6.3.
A.2	No	See section 6.4.
A.3	No	See section 6.4. See Introduction.
A.4	No	See section 6.5.
B. Overall summary of application of the remuneration policy over the last fiscal year		
B.1	No	For B.1.1, see sections 6.1, 6.2. and 6.3. For B.1.2 y B.1.3 (not applicable) see section 6.5
B.2	No	See 'Summary of link between risk, performance and reward' in section 6.3.
B.3	No	See sections 6.1, 6.2 and 6.3.
B.4	No	See section 6.5.
B.5	No	See section 6.2 and 6.3
B.6	No	See 'Gross annual salary' in section 6.3.
B.7	No	See 'Variable remuneration' in section 6.1, 6.2 and 6.3.
B.8	No	Not applicable.
B.9	No	See 'Main features of the benefit plans' in section 6.3.
B.10	No	See 'Other remuneration' in section 6.3.
B.11	No	See 'Terms and conditions of executive directors' contracts' in section 6.4.
B.12	No	See section 6.3: "Remuneration of board members as representatives of Banco Santander"
B.13	No	See note 5 to the consolidated financial statements.
B.14	No	See 'Insurance and other remuneration and benefits in kind' in section 6.4.
B.15	No	See 'Remuneration of board members as representatives of the Bank' in section 6.3.
B.16	No	No remuneration for this component.
C. Breakdown of the individual remuneration of directors		
C	Yes	See section 9.5.
C.1 a) i)	Yes	See section 9.5.
C.1 a) ii)	Yes	See section 9.5.
C.1 a) iii)	Yes	See section 9.5.
C.1 a) iii)	Yes	See section 9.5.
C.1 b) i)	Yes	See section 9.5.
C.1 b) ii)	No	See section 9.5.
C.1 b) iii)	No	See section 9.5.
C.1 b) iv)	No	See section 9.5.
C.1 c)	Yes	See section 9.5.
C.2	Yes	See section 9.5.
D. Other information of interest		
D	No	See section 4.7

9.5 Statistical information on remuneration required by the CNMV

B. OVERALL SUMMARY OF HOW REMUNERATION POLICY WAS APPLIED DURING THE YEAR ENDED

B.4 Report on the result of the consultative vote at the General Shareholders' Meeting on remuneration in the previous year, indicating the number of votes in favour, votes against, abstentions and blank ballots:

	Number	% of total
Votes cast	11,735,176,840	100.00 %

	Number	% of votes cast
Votes in favour	10,434,787,981	88.92 %
Votes against	957,730,594	8.16 %
Blank	4,554,563	0.04 %
Abstentions	338,103,702	2.88 %

C. ITEMISED INDIVIDUAL REMUNERATION ACCRUED BY EACH DIRECTOR

Directors	Type	Period of accrual in year 2021
Ms Ana Botín-Sanz de Sautuola y O'Shea	Executive	From 01/01/2021 to 31/12/2021
Mr José Antonio Álvarez Álvarez	Executive	From 01/01/2021 to 31/12/2021
Mr Bruce Carnegie-Brown	Lead independent director	From 01/01/2021 to 31/12/2021
Ms Homaira Akbari	Independent	From 01/01/2021 to 31/12/2021
Mr Francisco Javier Botín-Sanz de Sautuola y O'Shea	Other external	From 01/01/2021 to 31/12/2021
Mr Álvaro Antonio Cardoso de Souza	Independent	From 01/01/2021 to 31/12/2021
Mr Ramón Martín Chávez Márquez	Independent	From 01/01/2021 to 31/12/2021
Ms Sol Daurella Comadrán	Independent	From 01/01/2021 to 31/12/2021
Mr Henrique Manuel Drummond Borges Cirne de Castro	Independent	From 01/01/2021 to 31/12/2021
Ms Gina Díez Barroso	Independent	From 01/01/2021 to 31/12/2021
Mr Luis Isasi Fernández de Bobadilla	Other External	From 01/01/2021 to 31/12/2021
Mr Ramiro Mato García-Ansorena	Independent	From 01/01/2021 to 31/12/2021
Mr Sergio Rial	Executive	From 01/01/2021 to 31/12/2021
Ms Belén Romana García	Independent	From 01/01/2021 to 31/12/2021
Mrs Pamela Ann Walkden	Independent	From 01/01/2021 to 31/12/2021

C.1 Complete the following tables on individual remuneration of each director (including the remuneration for exercising executive functions) accrued during the year.

a) Remuneration from the reporting company:

i) Remuneration in cash (thousand euros)

Name	Fixed remuneration	Per diem allowances	Remuneration for membership of Board's committees	Salary	Short-term variable remuneration	Long-term variable remuneration[1]	Severance pay	Other grounds	Total year 2021	Total year 2020
Ms Ana Botín-Sanz de Sautuola y O'Shea	90	45	195	3,176	2,941	561	—	525	7,533	5,352
Mr José Antonio Álvarez Álvarez	90	45	195	2,541	1,985	375	—	710	5,941	4,370
Mr Bruce Carnegie-Brown	275	80	345	—	—	—	—	—	700	595
Ms Homaira Akbari	90	78	80	—	—	—	—	—	248	202
Mr Francisco Javier Botín-Sanz de Sautuola y O'Shea	90	39	—	—	—	—	—	—	129	122
Mr Álvaro Antonio Cardoso de Souza	90	50	43	—	—	—	—	—	183	243
Mr Ramón Martín Chávez Márquez	90	99	185	—	—	—	—	—	374	37
Ms Sol Daurella Comadrán	90	84	65	—	—	—	—	—	239	214
Mr Henrique Manuel Drummond Borges Cirne de Castro	90	87	90	—	—	—	—	—	267	217
Ms Gina Díez Barroso	90	39	1	—	—	—	—	—	130	4
Mr Luis Isasi Fernández de Bobadilla	90	81	235	—	—	—	—	1,000	1,406	943
Mr Ramiro Mato García-Ansorena	90	94	315	—	—	—	—	—	499	430
Mr Sergio Rial	90	39	—	750	—	—	—	—	879	63
Ms Belén Romana García	90	100	343	—	—	—	—	—	533	417
Mrs Pamela Ann Walkden	90	76	137	—	—	—	—	—	303	214
Mr Rodrigo Echenique Gordillo	—	—	—	—	—	292	—	—	292	2,369
Mr Ignacio Benjumea Cabeza de Vaca	—	—		—	—				—	275
Mr Guillermo de la Dehesa Romero	—	—		—	—				—	108
Ms Esther Giménez-Salinas i Colomer	—	—		—	—				—	191

Comments *(Not included in the electronic submission to the CNMV)*

1. Includes deferred amounts from the 2017 deferred and conditional variable remuneration plan subject to long term metrics for Ana Botín, José Antonio Álvarez and Rodrigo Echenique.

ii) Table of changes in share-based remuneration schemes and gross profit from consolidated shares or financial instruments

		Financial instruments at start of year 2021		Financial instruments granted at start of year 2021		Financial instruments consolidated during 2021				Instruments matured but not exercised	Financial instruments at end of year 2021	
Name	Name of Plan	No. of instruments	No. of equivalent shares	No. of instruments	No. of equivalent shares	No. of instruments	No. of equivalent shares / handed over	Price of the consolidated shares	Net profit from shares handed over or consolidated financial instruments (EUR thousand)	No. of instruments	No. of instruments	No of equivalent shares
Ms Ana Botín-Sanz de Sautuola y O'Shea	2nd cycle of deferred variable remuneration plan linked to multi-year targets (2017)	206,775	206,775	—	—	94,083	94,083	3.104	292	112,692	—	—
	3rd cycle of deferred variable remuneration plan linked to multi-year targets (2018)	309,911	309,911	—	—	—	—	—	—	—	309,911	309,911
	4th cycle of deferred variable remuneration plan linked to multi-year targets (2019)	319,390	319,390	—	—	—	—	—	—	—	319,390	319,390
	5th cycle of deferred variable remuneration plan linked to multi-year targets (2020)	111,823	111,823	—	—	—	—	—	—	—	111,823	111,823
	6th cycle of deferred variable remuneration plan linked to multi-year targets (2021)	—	—	1,480,622	1,480,622	947,598	947,598	3.104	2,941	—	533,024	533,024

		Financial instruments at start of year 2021		Financial instruments granted at start of year 2021		Financial instruments consolidated during 2021				Instruments matured but not exercised	Financial instruments at end of year 2021	
Name	Name of Plan	No. of instruments	No. of equivalent shares	No. of instruments	No. of equivalent shares	No. of instruments	No. of equivalent shares / handed over	Price of the consolidated shares	Net profit from shares handed over or consolidated financial instruments (EUR thousand)	No. of instruments	No. of instruments	No of equivalent shares
Mr. José Antonio Álvarez Álvarez	2nd cycle of deferred variable remuneration plan linked to multi-year targets (2017)	138,283	138,283	—	—	62,919	62,919	3.104	195	75,364	—	—
	3rd cycle of deferred variable remuneration plan linked to multi-year targets (2018)	207,097	207,097	—	—	—	—	—	—	—	207,097	207,097
	4th cycle of deferred variable remuneration plan linked to multi-year targets (2019)	213,449	213,449	—	—	—	—	—	—	—	213,449	213,449
	5th cycle of deferred variable remuneration plan linked to multi-year targets (2020)	60,739	60,739	—	—	—	—	—	—	—	60,739	60,739
	6th cycle of deferred variable remuneration plan linked to multi-year targets (2021)	—	—	999,259	999,259	639,526	639,526	3.104	1,985	—	359,733	359,733

		Financial instruments at start of year 2021		Financial instruments granted at start of year 2021		Financial instruments consolidated during 2021				Instruments matured but not exercised	Financial instruments at end of year 2021	
Name	Name of Plan	No. of instruments	No. of equivalent shares	No. of instruments	No. of equivalent shares	No. of instruments	No. of equivalent shares / handed over	Price of the consolidated shares	Net profit from shares handed over or consolidated financial instruments (EUR thousand)	No. of instruments	No. of instruments	No of equivalent shares
Mr. Rodrigo Echenique Gordillo	2nd cycle of deferred variable remuneration plan linked to multi-year targets (2017)	107,764	107,764	—	—	49,033	49,033	3.104	152	58,731		
	3rd cycle of deferred variable remuneration plan linked to multi-year targets (2018)	164,462	164,462	—	—						164,462	164,462
	4th cycle of deferred variable remuneration plan linked to multi-year targets (2019)	98,092	98,092	—	—						98,092	98,092

Comments *(Not included in the electronic submission to the CNMV)*

After reviewing the results of the 2nd cycle of the deferred variable remuneration plan linked to multi-year targets (2017), the board of directors confirmed in 2021, upon recommendation from the remunerations committee, a 45.5% achievement of the long-term metrics of the plan (as the following level of achievement was met during 2017-2019 period: CET1 at 100% (the target was 11.30%); underlying EPS growth at 36.34% (the target was a 25% growth); and TSR metric at 0% (33% minimum target not reach), with a 33% weight each one; and the amounts of the pending deliveries for each executive director, payable in February 2021, 2022 and 2023 in connection with this plan.

iii) Long-term saving systems

Name	Remuneration from consolidation of rights to savings system
Ms Ana Botín-Sanz de Sautuola y O'Shea	1,041
Mr José Antonio Álvarez Álvarez	783

	Contribution over the year from the company (EUR thousand)				Amount of accumulated funds (EUR thousand)			
	Savings systems with consolidated economic rights		Savings systems with unconsolidated economic rights		2021		2020	
Name	2021	2020	2021	2020	Systems with consolidated economic rights	Systems with unconsolidated economic rights	Systems with consolidated economic rights	Systems with unconsolidated economic rights
Ms Ana Botín-Sanz de Sautuola y O'Shea	1,041	1,155	—	—	48,075	—	49,444	—
Mr José Antonio Álvarez Álvarez	783	864	—	—	18,821	—	18,082	—

iv) Details of other items (Thousands of EUR)

Name	Item	Amount remunerated
Ms Ana Botín-Sanz de Sautuola y O'Shea	Life and accident insurance and fixed remuneration supplement insurance	459
	Other remuneration	22

Name	Item	Amount remunerated
Mr José Antonio Álvarez Álvarez	Life and accident insurance and fixed remuneration supplement insurance	817
	Other remuneration	7

b) Remuneration of the company directors for seats on the boards of other group companies:

i) Remuneration in cash (Thousands of EUR)

Name	Fixed remuneration	Per diem allowances	Remuneration for membership of Board's committees	Salary	Short-term variable remuneration	Long-term variable remuneration	Severance pay	Other grounds	Total year 2021	Total year 2020
Ms Homaira Akbari	213	—	—	—	—	—	—	—	213	184
D. Álvaro Antonio Cardoso de Souza	282	—	—	—	—	—	—	52	334	335
Mr. Ramón Martín Chávez Márquez	52	—	—	—	—	—	—	—	52	17
D. Henrique Manuel Drummond Borges Cirne de Castro	52	—	—	—	—	—	—	—	52	17
Ms. Pamela Walkden	36	—	—	—	—	—	—	—	36	—
D. Sergio Rial[1]	—	—	—	1,985	2,009	—	—	7	4,001	4,020
D.ª Gina Diez Barroso	—	—	—	—	—	—	—	—	—	14

Comments *(Not included in the electronic submission to the CNMV)*

1. Long-term variable remuneration includes amounts since the appointment as director.

ii) Table of changes in share/based remunerations schemes and gross profit from consolidated shares of financial instruments

		Financial instruments at start of year 2021		Financial instruments granted at start of year 2021		Financial instruments consolidated during 2021				Instruments matured but not exercised	Financial instruments at end of year 2021	
Name	Name of Plan	No. of instruments	No. of equivalent shares	No. of instruments	No. of equivalent shares	No. of instruments	No. of equivalent shares / handed over	Price of the consolidated shares	Net profit from shares handed over or consolidated financial instruments (EUR thousand)	No. of instruments	No. of instruments	No of equivalent shares
Mr. Sergio Rial	5th cycle of deferred variable remuneration plan linked to multi-year targets (2020)	472,500	472,500	—	—	—	—	—	—	—	472,500	472,500
	6th cycle of deferred variable remuneration plan linked to multi-year targets (2021)	—	—	625,000	625,000	400,000	400,000	5.022	2,009	—	225,000	225,000

Comments *(Not included in the electronic submission to the CNMV)*

After reviewing the results of the 2nd cycle of the deferred variable remuneration plan linked to multi-year targets (2017), the board of directors confirmed in 2021, upon recommendation from the remunerations committee, a 45.5% achievement of the long-term metrics of the plan (as the following level of achievement was met during 2017-2019 period: CET1 at 100% (the target was 11.30%); underlying EPS growth at 36.34% (the target was a 25% growth); and TSR metric at 0% (33% minimum target not reach), with a 33% weight each one; and the amounts of the pending deliveries for each executive director, payable in February 2021, 2022 and 2023 in connection with this plan.

iii) Long term saving systems

Name	Remuneration from consolidation of rights to savings system
Mr Sergio Rial	1,153

	Contribution over the year from the company (EUR thousand)				Amount of accumulated funds (EUR thousand)			
	Savings systems with consolidated economic rights		Savings systems with unconsolidated economic rights		2020		2019	
Name	2020	2019	2020	2019	Systems with consolidated economic rights	Systems with unconsolidated economic rights	Systems with consolidated economic rights	Systems with unconsolidated economic rights
Mr Sergio Rial	1,153	693	—	—	5,202	—	3,900	—

iv) Detail of other items (Thousands of EUR)

Name	Item	Amount Remunerated 2021
Mr Sergio Rial	Fundo de Pensão do Governo	159
	Other remuneration	7

c) Summary of remuneration (Thousands of EUR)

The summary should include the amounts corresponding to all the items of remuneration included in this report that have been accrued by the director, in thousand euros.

	Remuneration accrued in the company						Remuneration accrued in group companies					
Name	Total cash remuneration[1]	Gross profit on consolidated shares or financial instruments[1]	Contributions to the long-term savings plan	Remuneration for other items	Total 2021	Total 2020	Total cash remuneration	Gross profit on consolidated shares or financial instruments	Contributions to the long-term savings plan	Remuneration for other items	Total 2021	Total 2020
Ms Ana Botín-Sanz de Sautuola y O'Shea	7,533	3,233	1,041	481	12,288	8,090	—	—	—	—	—	—
Mr José Antonio Álvarez Álvarez	5,941	2,180	783	824	9,728	6,877	—	—	—	—	—	—
Mr Bruce Carnegie-Brown	700	—	—	—	700	595	—	—	—	—	—	—
Ms Homaira Akbari	248	—	—	—	248	202	213	—	—	—	213	184
Mr Francisco Javier Botín-Sanz de Sautuola y O'Shea	129	—	—	—	129	122	—	—	—	—	—	—
Mr Álvaro Antonio Cardoso de Souza	183	—	—	—	183	243	334	—	—	—	334	335
Mr Ramón Martín Chávez Márquez	374	—	—	—	374	37	52	—	—	—	52	17
Ms Sol Daurella Comadrán	239	—	—	—	239	214	—	—	—	—	—	—
Mr Henrique Manuel Drummond Borges Cirne de Castro	267	—	—	—	267	217	52	—	—	—	52	17
Ms Gina Díez Barroso	130	—	—	—	130	4	—	—	—	—	—	14
Mr Luis Isasi Fernández de Bobadilla	1,406	—	—	—	1,406	943	—	—	—	—	—	—
Mr Ramiro Mato García-Ansorena	499	—	—	—	499	430	—	—	—	—	—	—
Mr Sergio Rial	879	—	—	—	879	63	4,001	2,009	1,153	7	7,170	6,558
Ms Belén Romana García	533	—	—	—	533	417	—	—	—	—	—	—
Mrs Pamela Ann Walkden	303	—	—	—	303	214	36	—	—	—	36	—
Mr Rodrigo Echenique Gordillo	292	152	—	—	444	2,595	—	—	—	—	—	—
Mr Ignacio Benjumea Cabeza de Vaca	—	—	—	—	—	275	—	—	—	—	—	—
Mr Guillermo de la Dehesa Romero	—	—	—	—	—	108	—	—	—	—	—	—
Ms Esther Giménez-Salinas i Colomer	—	—	—	—	—	191	—	—	—	—	—	—
Total	**19,656**	**5,565**	**1,824**	**1,305**	**28,350**	**21,837**	**4,688**	**2,009**	**1,153**	**7**	**7,857**	**7,125**

Comments *(Not included in the electronic submission to the CNMV)*

1. Includes deferred amounts from the 2017 deferred and conditional variable remuneration plan subject to long term metrics for Ana Botín, José Antonio Álvarez and Rodrigo Echenique.

C.2 Indicate the evolution in the last five years of the amount and percentage variation of the remuneration accrued by each of the directors of the listed company who have held this position during the year, the consolidated results the company and the average remuneration on an equivalent basis with regard to full-time employees of the company and its subsidiaries that are not directors of the listed company.

Directors' remuneration (EUR Thousand)	2021	% var. 21/20	2020	% var. 20/19	2019	% var. 19/18	2018	% var. 18/17	2017
• **Executive Directors**									
Ana Botín-Sanz de Sautuola y O'Shea	12,288	52%	8,090	(19)%	9,954	(10)%	11,011	4%	10,582
José Antonio Álvarez Álvarez	9,728	41%	6,877	(17)%	8,270	(8)%	9,001	1%	8,893
Sergio Rial	8,049	22%	6,621	—	—	—	—	—	—
• **External Directors**[1]									
Bruce Carnegie-Brown	700	18%	595	(15)%	700	(4)%	732	—	731
Francisco Javier Botín-Sanz de Sautuola y O'Shea	129	6%	122	(11)%	137	13%	121	(2)%	124
Sol Daurella Comadrán	239	12%	214	(11)%	240	12%	215	4%	207
Belén Romana García	533	28%	417	(21)%	525	27%	414	39%	297
Homaira Akbari	461	19%	386	71%	226	14%	199	25%	159
Ramiro Mato García-Ansorena	499	16%	430	(14)%	500	11%	450	—	36
Álvaro Cardoso de Souza	517	(11)%	578	(14)%	673	355%	148	—	—
Henrique Manuel Drummond Borges Cirne de Castro	319	36%	234	172%	86	—	—	—	—
Pamela Ann Walkden	339	59%	214	529%	34	—	—	—	—
Luis Isasi Fernández de Bobadilla	1,406	49%	943	—	—	—	—	—	—
Ramón Martín Chávez Márquez	426	689%	54	—	—	—	—	—	—
Gina Díez Barroso	130	622%	18	—	—	—	—	—	—
Company's performance									
Underlying profit attributable to the Group (EUR mn)	8,654	70%	5,081	(38)%	8,252	2%	8,064	7%	7,516
Consolidated results of the Group[2] (EUR mn)	14,547	—	(2,076)	—%	12,543	(12)%	14,201	17%	12,091
Ordinary RoTE	12.73%	71%	7.44%	(37)%	11.79%	(2)%	12.08%	2%	11.82%
Employees' average remuneration[3] (EUR)	**55,673**	**18%**	**47,130**	**(12)%**	**53,832**	**2%**	**52,941**	**(5)%**	**55,484**

1.Non-executive directors' remuneration fluctuations are caused by joining or leaving the Board of Directors and the difference in the amount of meetings they assist during the year. Hence there is no correlation between their remuneration and the company performance.
2.Group operating profit/(loss) before tax.
3.Employee average remuneration includes all concepts, including other remuneration. Full-time equivalent data. The percentage of variable remuneration over fixed remuneration in an average employee is lower than that of the executive directors. Variable remuneration data accrued in the current year. Evolutive data impacted by exchange rate performance in the group's geographies.
(Notes not included in the electronic submission to the CNMV)

This annual report on remuneration has been approved by the board of directors of the company, at its meeting on 24 February 2022.

State if any directors have voted against or abstained from approving this report.

Yes ☐ No ☑

[THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY]

Economic and financial review



1. Economic, regulatory and competitive context 322

2. Group selected data 325

3. Group financial performance 327

3.1 Situation of Santander 327

3.2 Results 329

3.3 Balance sheet 342

3.4 Liquidity and funding management 346

3.5 Capital management and adequacy. Solvency ratios 353

3.6 Special Situations and Resolution 365

4. Financial information by segments 368

4.1 Description of segments 368

4.2 Summary of the Group's main business areas' income statements 370

4.3 Primary segments 372

4.4 Corporate Centre 390

4.5 Secondary segments 392

4.6 Appendix 401

5. Research, development and innovation (R&D&I) 410

6. Significant events since year end 412

7. Trend information 2022 413

8. Alternative performance measures (APM) 421

1. Economic, regulatory and competitive context

In 2021, Santander operated in an environment marked by (i) fiscal and monetary policies implemented to counter the adverse effects of the covid-19 pandemic; (ii) the ongoing recovery from the pandemic, which has been inconsistent across countries and sectors; (iii) new covid-19 variants and significant outbreaks; and (iv) an upturn in inflation in the second half of the year, which reached a three-decade high in mature markets.

Inflationary pressures have intensified as a result of a number of factors, including the renewed demand for consumer goods; labour shortages; tensions in the supply chains of microchips and other key items; transportation issues; and increases in energy, certain raw materials and food prices.

Under these circumstances, withdrawal of the expansionary fiscal and monetary policies implemented in response to the covid-19 pandemic began, especially in the last quarter of 2021, particularly in countries that experienced the heaviest pressure on prices.

Economic performance by geography was as follows:

- **Eurozone** (GDP: 5.2% estimated in 2021). GDP growth was driven by the lifting of lockdown measures and expansionary monetary and fiscal policies. The ECB kept interest rates stable despite the 5.1% rise in inflation in January 2022. However, at the monetary policy meeting held in February, the ECB showed more concern and was less positive regarding the outlook for inflation. In December 2021, the ECB had announced a reduction in its asset purchases starting in spring 2022.
- **Spain** (GDP: 5.0% in 2021). Economic recovery continued in 2021, a trend which is expected to return GCP to pre-pandemic levels in 2022. The labour market improved at a faster rate, with employment exceeding pre-pandemic levels. Inflation reached 6.7% in December, largely due to energy prices.
- **United Kingdom** (GDP: 7.5% in 2021). Strong economic growth offset the severe decline in 2020. Tensions in the labour market, particularly in some sectors, posed a greater risk for higher inflation (which exceeded 5% and is one of the main reasons behind the Bank of England's interest rate hike from 0.1% to 0.25% at the end of the year) to take hold.
- **Portugal** (GDP: 4.9% in 2021). Economic recovery continued. The labour market recovered quickly (unemployment at 6.5%) and inflation jumped to 2.7% in December. The socialist party won the country's parliamentary elections held in January 2022 with an absolute majority, providing stability for the next 4 years.
- **Poland** (GDP: 5.7% in 2021). The economy was remarkably buoyant despite a relatively moderate decline in 2020. Inflation ended the year at 8.6%, leading the central bank to raise the official interest rate to 2.25%.
- **United States** (GDP: 5.7% in 2021). Fiscal impulses and the reopening of the economy favoured a vigorous economic recovery which was somewhat dampened by supply-side problems from summer onwards. Supply chain and labour constraints pushed inflation to 7.0%. Unemployment falling to 3.9% in November drove the Federal Reserve (Fed) to start withdrawing monetary stimulus.
- **Mexico** (GDP: 4.8% preliminary in 2021). Strong GDP growth, partially reversing the decline in 2020. Inflation picked up considerably (7.4%). Banco de México raised its official benchmark from a low of 4.0% in the first half of 2021 to 5.5% at the end of the year.
- **Brazil** (GDP: 4.6% estimated in 2021). Outstanding economic recovery, especially since the drop in 2020 was lower than in the region as a whole. However, growth stalled as the year progressed due to the withdrawal of the 2020 fiscal stimulus and, in particular, to the inflation upturn (10.1% in December) and the consequent official interest rate hike, from 2% to 9.25% by the end of 2021, and an additional hike in January 2022 to 10.75%.
- **Chile** (GDP: 12.0% estimated in 2021). Sharp GDP growth stemmed from exceptional fiscal and monetary measures. Inflation rebounded to 7.2%. Banco Central de Chile raised the official interest rate from 0.5% to 4% by the end of 2021, with a further increase to 5.5% in January 2022.
- **Argentina** (GDP: 10.0% estimated in 2021). Strong recovery after recording one of the region's largest declines in 2020, driven by the reopening of service sector activities and fiscal stimulus. Inflation remained high at monthly rates of around 3%.

The exchange rates of our main currencies against the euro in 2021 and 2020 were:

Exchange rates: 1 euro/currency parity

	Average		Period-end	
	2021	2020	2021	2020
US dollar	1.182	1.140	1.133	1.227
Pound sterling	0.859	0.889	0.840	0.898
Brazilian real	6.372	5.814	6.319	6.373
Mexican peso	23.980	24.364	23.152	24.438
Chilean peso	897.123	902.072	964.502	871.819
Argentine peso	112.383	79.555	116.302	103.159
Polish zloty	4.564	4.441	4.597	4.559

In mature markets, vaccination campaigns' favourable impact on the recovery of international travel acted as a support lever for equities, (especially in the US, where there was a strong fiscal impulse in addition to monetary stimulus). Spain, however, lagged behind other European countries and its stock market has not yet recovered pre-covid levels.

Inflationary pressures built up by rising commodity prices and by global supply chain bottlenecks due to a post-covid demand spike (especially for goods) pushed up bond yields in early 2021. Inflation is proving a more persistent problem than initially expected and central banks have started to withdraw monetary stimulus. Long-term debt yields remained subdued, as the withdrawal of stimulus is perceived as a risk to medium-term growth and there is still some uncertainty about the pandemic caused by new variants. German *bund* yields remained negative. The US dollar appreciated against the euro, boosted by the growth differential benefitting the US and expectations that the Fed will be ahead of the ECB in normalizing monetary policy.

Latin American countries' assets struggled amid heightened uncertainty stemming from rising inflation and tightening financial conditions, stimulus withdrawal in the US, the economic risk of new covid-19 variants, and some political tensions. Uncertainty was reflected in the fact that central bank interest rate hikes did not lead to currency appreciation in the countries.

The international banking environment is entering a phase of normalization and banks are gradually returning to their traditional business. In general, as support measures helped cushion the blow of the pandemic in the private sector, loan portfolios deteriorated less initially forecasted. This, together with economic recovery, is enabling banks to lower provisions, which improved profitability relative to 2020.

We estimate that this, together with stronger solvency in 2021, will leave the banking industry in a strong position to face a potential economic slowdown, based on the stress tests carried out by the main central banks.

Even so, global inflationary pressures and the consequent tightening of monetary policy in most economies pose management challenges for banks in the short term, particularly in developing markets with high indebtedness.

The challenges faced by the banking industry (considered more medium-term) have gained momentum in recent years and require institutions to act swiftly. The digital transformation accelerated during the pandemic, pushing entities to offer the best digital customer experience in the wake of a surge in new competitors.

The climate transition also requires a significant effort as institutions must develop new portfolio classification models to understand each entity's exposure to the transitional and physical risks that companies and households will face due to climate change in the coming years. This will be reflected in the first climate change stress exercises that the main central banks will conduct in 2022.

Regulatory environment

As in 2020, sustainability and digitalization took centre stage in a regulatory landscape once again influenced by the covid-19 pandemic, with debates on key prudential topics, in view of the need to ensure banks' ability to help keep the economy afloat during times of crisis.

Prominent actions came in three areas:

- Prudential: the European Commission published its proposal to implement the Basel III reform, which aims to reduce excessive variability of risk-weighted assets and favour comparability among banks.
- Sustainability: Europe continued to lead the way in talks on sustainability. Of note was the adoption of the Taxonomy Regulation that sets the criteria for classifying economic activities as environmentally sustainable. It also dictates the information that financial and non-financial companies will have to disclose about the environmental impact of their activities. Furthermore, the green asset ratio (GAR) is of utmost importance to the banking industry as it will show the percentage of exposures aligned with the EU Taxonomy.
- Digitalization: because covid-19 has sped up digitalization, the authorities are keen to regulate platforms and risks associated with new, private currencies that could enter into wide circulation (e.g. stablecoins). Central banks continue to explore the possibility of issuing digital currencies. A significant marker in the age of the digital economy is the deal struck by the OECD to ensure that all multinational enterprises pay tax wherever they earn profits, regardless of physical presence.

For more details, see note 1.e to the consolidated financial statements.

Summary of Santander and public policy

Santander has always been highly supportive of robust, high-quality regulation that supports bank strength and solvency, underpins robust consumer protection and market stability standards, and creates transparency on risk and resilience for investors and supervisors. We are committed to engaging constructively and transparently with public policy makers and regulators on the aims, design and implementation of banking rules and policy frameworks that impact our banks' or our customers' interests. All our public policy engagements are oriented to providing decision-makers, mainly through official consultations, with valuable insights and data of the banking industry with transparency and integrity.

1

Capital and bank resilience

We believe that the reforms of the last decade have made financial institutions more robust in terms of capital. However, the covid-19 crisis which began in 2019 has raised some issues regarding the functioning of the regulatory framework that need to be carefully assessed. Additionally, the EU still has work to do to build the foundations of a true banking union. We continue to advocate for:

- An approach to continue working on the implementation of Basel III standards that does not materially increase new post-crisis capital requirements and takes into account the demands of digitalization, the green transformation and the post-covid recovery.
- Careful reflection on how aspects of the framework established after the 2009 crisis worked in the covid-19 context, for example, the capital buffers, as well as supervisory decisions taken during the crisis such as restrictions on dividend payouts.
- Banking regulation needs to recognize some of the realities of banks with a global footprint, such as the recognition of the Multiple Point of Entry resolution framework.
- A common deposit insurance scheme for EU banks that breaks the bank/sovereign loop.

2

Sustainability and sustainable finance

We believe that decarbonization is a first order social and environmental challenge in which banks have an important role to play and are fully committed to the objectives. We continue to advocate for:

- A fair transition; in which the costs and impacts of change are anticipated and addressed proactively.
- International coordination on key policy frameworks to the greatest extent possible, especially on green taxonomies, climate disclosures and climate-risk stress testing.
- Robust, credible and comparable ESG data availability as a key enabler to make informed decisions and particularly to direct financial flows towards net zero emissions economies.
- A supervisory approach to climate-related risks in banking that avoids front-loading requirements faster than wider regulatory reforms are consolidated.

3

The digital landscape

We believe digital transformation is a force for innovation and customer choice in banking. Banks have to be able to compete under fair terms with any player providing financial services. We continue to advocate for:

- *Ex ante* competition rules that address the way in which gatekeepers could engage with business users and consumers. For example, in order to ensure fair access to data and critical infrastructure.
- A level playing field based on the principle of "same rules, same risks, same regulation and same supervision" to ensure that, when technology firms take on banking or payments activities and risks, they are regulated the same as banks or incumbent payments providers.
- An open finance regime in the EU and elsewhere in which consumers and users are given true power over all their relevant data, not just that held by banks, whose data is already open.
- A technology-neutral approach to regulation which allows banks to use technology (e.g. cloud, artificial intelligence) under the same conditions as technology companies and other competitors.
- The direct supervision of technology providers such as cloud computing services that provide critical infrastructure to the financial services sector.
- Discussions on Central Bank Digital Currencies should take into consideration the role the financial system plays in financing the economy.

2. Group selected data

BALANCE SHEET (EUR million)	2021	2020	% 2021 vs 2020	2019
Total assets	1,595,835	1,508,250	5.8	1,522,695
Loans and advances to customers	972,682	916,199	6.2	942,218
Customer deposits	918,344	849,310	8.1	824,365
Total funds [A]	1,153,656	1,056,127	9.2	1,050,765
Total equity	97,053	91,322	6.3	110,659

INCOME STATEMENT (EUR million)	2021	2020	% 2021 vs 2020 [B]	2019
Net interest income	33,370	31,994	4.3	35,283
Total income	46,404	44,279	4.8	49,229
Net operating income	24,989	23,149	7.9	25,949
Profit before tax	14,547	(2,076)	—	12,543
Profit attributable to the parent	8,124	(8,771)	—	6,515

EPS, PROFITABILITY AND EFFICIENCY (%)	2021	2020	% 2021 vs 2020	2019
EPS (euro) [C]	0.438	(0.538)	—	0.347
RoE	9.66	(9.80)		6.62
RoTE	11.96	1.95		11.44
RoA	0.62	(0.50)		0.54
RoRWA	1.69	(1.33)		1.33
Efficiency ratio [D]	46.2	47.0		47.0

UNDERLYING INCOME STATEMENT [D] (EUR million)	2021	2020	% 2021 vs 2020 [E]	2019
Net interest income	33,370	31,994	4.3	35,283
Total income	46,404	44,600	4.0	49,494
Net operating income	24,989	23,633	5.7	26,214
Profit before tax	15,260	9,674	57.7	14,929
Profit attributable to the parent	8,654	5,081	70.3	8,252

UNDERLYING EPS AND PROFITABILITY [D] (%)	2021	2020	% 2021 vs 2020	2019
Underlying EPS (euro) [C]	0.468	0.262	79.1	0.449
Underlying RoE	10.29	5.68		8.38
Underlying RoTE	12.73	7.44		11.79
Underlying RoA	0.65	0.40		0.65
Underlying RoRWA	1.78	1.06		1.61

SOLVENCY (%)	2021	2020	2019
Fully-loaded CET1 ratio	12.12	11.89	11.41
Fully-loaded total capital ratio	16.41	15.73	14.78

CREDIT QUALITY (%)	2021	2020	2019
Cost of credit	0.77	1.28	1.00
NPL ratio	3.16	3.21	3.32
Coverage ratio	71	76	68

THE SHARE, MARKET CAPITALIZATION AND DIVIDEND	2021	2020	% 2021 vs 2020	2019
Number of shareholders	3,936,922	4,018,817	(2.0)	3,986,093
Shares (millions)	17,341	17,341	0.0	16,618
Share price (euro) [C]	2.941	2.538	15.9	3.575
Market capitalization (EUR million)	50,990	44,011	15.9	61,986
Tangible book value per share (euro) [C]	4.12	3.79		4.18
Price / Tangible book value per share (X)	0.71	0.67		0.86

CUSTOMERS (thousands)	2021	2020	% 2021 vs 2020	2019
Total customers	152,862	148,256	3.1	144,795
Loyal customers [F]	25,448	22,838	11.4	21,556
Loyal retail customers	23,311	20,901	11.5	19,762
Loyal SME & corporate customers	2,137	1,938	10.3	1,794
Digital customers [G]	47,443	42,362	12.0	36,817
Digital sales / Total sales (%)	54	44		36

OPERATING DATA	2021	2020	% 2021 vs 2020	2019
Number of employees	197,070	191,189	3.1	196,419
Number of branches	9,879	11,236	(12.1)	11,952

A. Includes customer deposits, mutual funds, pension funds and managed portfolios.

B. In constant euros: Net interest income: +7.1%; Total income: +7.7%; Net operating income: +12.0%; Profit before tax: -/+; Attributable profit: -/+

C. 2019 data adjusted for the capital increase in December 2020.

D. In addition to IFRS measures, we present non-IFRS measures including those which we refer to as underlying measures. These underlying measures allow in our view a better year-on-year comparability as they exclude items outside the ordinary course of business which are grouped in the 'net capital gains and provisions' line and are further detailed at the end of section 3.2 'Results' and in section 8 'Alternative Performance Measures' – of this chapter.

E. In constant euros: Net interest income: +7.1%; Total income: +6.9%; Net operating income: +9.4%; Profit before tax: +64.5%; Attributable profit: +77.8%.

F. Active customers who receive most of their financial services from the Group according to the commercial segment to which they belong. Various engaged customer levels have been defined taking profitability into account.

G. Every physical or legal person, that, being part of a commercial bank, has logged into its personal area of internet banking or mobile phone or both in the last 30 days.

3. Group financial performance

Santander follows IFRS to report its results (see note 1.b to the consolidated financial statements). While the results generally guide the overview of our financial situation in this consolidated directors' report, we also use non-IFRS measures and Alternative Performance Measures (APMs) to assess our performance (see section 8 'Alternative Performance Measures' of this chapter). Thus, the main adjustments to our IFRS results consist of:

- Underlying results measures: we present what we call underlying results measures which, in our view, provide a better year-on-year comparison because they exclude items outside the ordinary course of business that are grouped in the net capital gains and provisions line, and are further detailed at the end of section 3.2 'Results' of this chapter.

  We also present underlying results by business area in section 4 'Financial information by segment' in accordance with IFRS 8 and reconcile them in aggregate terms to our IFRS consolidated results in note 51.c to the consolidated financial statements.

- Local currency measures: we use certain non-IFRS financial indicators in local currency to assess the ongoing operating performance of our business. They include the results from our subsidiary banks outside the eurozone (excluding the exchange rate impact). Because changes in exchange rates have a non-operating impact on results, we believe evaluating performance in local currency provides management and investors an additional and meaningful assessment of performance. Section 8 'Alternative Performance Measures' of this chapter explains how we exclude the exchange rate impact from financial measures in local currency.

We have rounded certain figures in this consolidated directors' report to present them more clearly. Accordingly, in certain instances, the amounts given in the totals columns and rows of tables may not match the total figure given for that column or row.

3.1 Situation of Santander

Santander is one of the largest banks in the eurozone. At the end of 2021, we had EUR 1,595,835 million in assets, EUR 1,153,656 million in total funds and a market capitalization of EUR 50,990 million.

Our purpose is to help people and businesses prosper in a way that is Simple, Personal and Fair. We do not merely meet our legal and regulatory obligations, but also aspire to exceed expectations. We focus on areas where our activity can have the greatest impact, supporting economic growth in an inclusive and sustainable way.

We engage in all types of typical banking activities, operations and services. Our track record, business model and strategic execution drive our aim to be the best open digital financial services platform, by acting responsibly and earning the lasting loyalty of our stakeholders (customers, shareholders, people and communities).

In 2021, with the global economy and society still feeling the effects of the covid-19 pandemic, we continued to play an active role in economic recovery and continued to support our 153 million customers and society.

Our priority for our 197,070 employees is to keep them safe and healthy in line with local government recommendations and based on three pillars: (i) development and implementation of health and safety protocols; (ii) remote working where necessary; and (iii) track and tracing (diagnostic tests, health apps and even vaccination centres in our corporate buildings for employees and the general public).

We are living in an increasingly digital world, and the covid-19 pandemic has spurred this transformation. As such, more than ever, our aim is to continue to offer our customers digital products and services that will meet their needs and support them in their digital learning. However, Santander continues to invest in ensuring access to financial services for our customers who are not digitally savvy, so that no one is left behind.

We interact with our customers through several channels. We have 9,879 branches and in recent years, have worked and invested to ensure our branches satisfy our customers' needs.

We have universal branches and specialist centres for certain customer segments, such as businesses and universities. We are also promoting new collaborative spaces with excellent digital capabilities (e.g. Work Café, SmartBank and Ágil branches). Additionally, our contact centres, which provide best-in-class service quality, continue to serve our customers.

In addition, and in order to achieve greater penetration, we have also signed agreements with other companies and organizations, such as Correos and MAPFRE in Spain, which allowed us to increase our physical points of service by more than 7,000.

Through this process, while we enhance our branches, we are continuously investing in our digital capabilities and technological infrastructure to optimize our product and service proposition, reducing our cost to serve while remaining among the top banks in customer satisfaction in almost all our core markets.

As a result, the number of digital and loyal customers as well as digital activity continued to increase. We have more than 25 million loyal customers (+11% year-on-year), and have grown in both individuals and companies. Digital customers rose 12% in the year, exceeding 47 million. Similarly, digital sales accounted for 54% of total sales (44% in 2020 and 36% in 2019).

The world is also increasingly aware of the different environmental, social and corporate governance factors (most commonly known as ESG). We focus on delivering profitable growth responsibly and creating value for our 3.9 million shareholders. For more details, see the 'Responsible banking' chapter.

Our strategic priorities are essential to increasing our core businesses' profitability by offering simple, fair and innovative products.

Our strategy is based on three strategic initiatives: One Santander, Digital Consumer Bank and PagoNxt:

- **One Santander**: a global project encompassing the three regions where we operate, that aims to sustainably create a bank that is better for our customers and more profitable and efficient for our shareholders. It consists of enhanced customer service, an omni-channel strategy and a common operating model in each region, enabling us to market simpler products.

- **Digital Consumer Bank** is the leading European bank in consumer finance, created on the back of Santander Consumer Finance's (SCF) scale and leadership position in the consumer business in Europe and the business and technology of Openbank's digital platform.

  Its objectives include simplifying the legal and operating structure, redefining the business platform (auto, consumer and retail) to strengthen our leadership positions or grow faster with a fully-digital approach and maintaining high profitability and efficiency.

- **PagoNxt** is our legally and operationally independent global payments platform. It aims to bring together all of Santander's most innovative payments assets under one roof.

  Its strategy is to continue to expand our global platforms; consolidate our retail leadership positions with Getnet; deploy One Trade's international payments services; implementing the instant functionality of Payments Hub in various markets; and continue to gradually migrate our global payments services and financial inclusion platform (Superdigital) in Latin America.

Santander also has two transversal global businesses: Santander Corporate and Investment Banking (SCIB) and Wealth Management and Insurance (WM&I), that add value to our local businesses.

SCIB integrates global corporate banking businesses for large companies and financial institutions that require tailor-made services and value-added wholesale products adapted to their complexity and sophistication. It is a highly profitable business that has delivered sustainable returns throughout the cycle. Its long-term strategy is to become our clients' strategic advisor of choice. Its priorities are expanding the content and products it offers to further transform us into our clients' strategic advisors to make strategic decisions and transform their businesses according to today's demands for sustainability and digitalization. In addition, we aim to improve our position in the markets where we operate.

WM&I comprises our asset management, private banking and insurance businesses. It is very capital efficient, with significant growth potential and high returns. Our aim remains to become the best responsible wealth and protection manager in Europe and Latin America. That's why we continue to innovate and enhance our product proposition (especially in terms of ESG products). We are also increasing our sales through digital channels.

These strategic priorities, coupled with the pillars of our business model (scale, geographical presence and business diversification) will provide numerous opportunities for growth and greater profitability, while we continue to act responsibly and earn the trust of our stakeholders while generating more value for our shareholders.

3.2 Results

Executive summary

Profit (2021 vs 2020)

Strong profit growth across regions and businesses

Attributable profit	Underlying attrib. profit
EUR 8,124 mn	EUR 8,654 mn
-EUR 8,771 mn in 2020	EUR 5,081 mn in 2020

Performance (2021 vs 2020). In constant euros

Strong underlying profit performance backed by total income, cost control and lower provisions

Total income	Costs	Provisions
+6.9%	+4.1%	-37.1%

Efficiency

The Group's efficiency ratio strengthened, mainly driven by Europe

Group	Europe
46.2%	51.0%
-0.8 pp vs 2020	-5.4 pp vs 2020

Profitability

Higher profitability compared to 2020

RoTE	Underlying RoTE	RoRWA	Underlying RoRWA
12.0%	12.7%	1.69%	1.78%
+10.0 pp	+5.3 pp	+3.0 pp	+0.7 pp

Changes vs 2020

Condensed income statement

EUR million

			Change			
	2021	2020	Absolute	%	% excl. FX	2019
Net interest income	33,370	31,994	1,376	4.3	7.1	35,283
Net fee income (commission income minus commission expense)	10,502	10,015	487	4.9	8.1	11,779
Gains or losses on financial assets and liabilities and exchange differences (net)	1,563	2,187	(624)	(28.5)	(26.5)	1,531
Dividend income	513	391	122	31.2	31.5	533
Income from companies accounted for using the equity method	432	(96)	528	—	—	324
Other operating income / expenses	24	(212)	236	—	—	(221)
Total income	**46,404**	**44,279**	**2,125**	**4.8**	**7.7**	**49,229**
Operating expenses	(21,415)	(21,130)	(285)	1.3	3.1	(23,280)
Administrative expenses	(18,659)	(18,320)	(339)	1.9	3.6	(20,279)
Staff costs	*(11,216)*	*(10,783)*	*(433)*	*4.0*	*5.8*	*(12,141)*
Other general administrative expenses	*(7,443)*	*(7,537)*	*94*	*(1.2)*	*0.5*	*(8,138)*
Depreciation and amortization	(2,756)	(2,810)	54	(1.9)	(0.3)	(3,001)
Provisions or reversal of provisions	(2,814)	(2,378)	(436)	18.3	22.9	(3,490)
Impairment or reversal of impairment of financial assets not measured at fair value through profit or loss (net)	(7,407)	(12,382)	4,975	(40.2)	(38.4)	(9,352)
Impairment of other assets (net)	(231)	(10,416)	10,185	(97.8)	(97.8)	(1,623)
Gain or losses on non-financial assets and investments (net)	53	114	(61)	(53.5)	(53.0)	1,291
Negative goodwill recognized in results	—	8	(8)	(100.0)	(100.0)	—
Gains or losses on non-current assets held for sale not classified as discontinued operations	(43)	(171)	128	(74.9)	(75.2)	(232)
Profit or loss before tax from continuing operations	**14,547**	**(2,076)**	**16,623**	**—**	**—**	**12,543**
Tax expense or income from continuing operations	(4,894)	(5,632)	738	(13.1)	(10.8)	(4,427)
Profit from the period from continuing operations	**9,653**	**(7,708)**	**17,361**	**—**	**—**	**8,116**
Profit or loss after tax from discontinued operations	—	—	—	—	—	—
Profit for the period	**9,653**	**(7,708)**	**17,361**	**—**	**—**	**8,116**
Profit attributable to non-controlling interests	(1,529)	(1,063)	(466)	43.8	47.7	(1,601)
Profit attributable to the parent	**8,124**	**(8,771)**	**16,895**	**—**	**—**	**6,515**

Main income statement items

Total income

Total income amounted to EUR 46,404 million in 2021, up 5% year-on-year. If the exchange rate impact is excluded, total income increased 8%, with growth in all regions and main country units, except Mexico, highlighting our geographical and business diversification. Net interest income and net fee income accounted for 95% of total income. By line:

Net interest income

Net interest income amounted to EUR 33,370 million, 4% higher than in 2020.

The tables below show the average balances for each year, calculated as the monthly average over the period (which we believe should not differ materially from using daily balances), and generated interest.

They also include the average balances and average interest rates in 2021 and 2020, based on the domicile of the entities at which the relevant assets or liabilities are accounted for. Domestic balances relate to our entities domiciled in Spain, reflecting our domestic activity. International balances relate to those entities domiciled outside of Spain (reflecting our foreign activity), and are divided into mature markets (Europe, except Spain and Poland, and the US) and developing markets (South America, Mexico and Poland).

Average balance sheet - assets and interest income

EUR million

	2021			2020		
Assets	Average balance	Interest	Average rate	Average balance	Interest	Average rate
Cash and deposits on demand and loans and advances to central banks and credit institutions	**272,567**	**2,682**	**0.98%**	**223,096**	**2,232**	**1.00%**
Domestic	113,703	809	0.71%	97,511	650	0.67%
International - Mature markets	111,358	542	0.49%	79,703	512	0.64%
International - Developing markets	47,506	1,331	2.80%	45,882	1,070	2.33%
of which						
Reverse repurchase agreements	*38,236*	*707*	*1.85%*	*44,989*	*483*	*1.07%*
Domestic	*23,390*	*29*	*0.12%*	*31,050*	*47*	*0.15%*
International - Mature markets	*5,101*	*15*	*0.29%*	*4,791*	*49*	*1.02%*
International - Developing markets	*9,745*	*663*	*6.80%*	*9,148*	*387*	*4.23%*
Loans and advances to customers	**943,071**	**38,649**	**4.10%**	**930,563**	**38,788**	**4.17%**
Domestic	254,232	4,799	1.89%	251,536	4,913	1.95%
International - Mature markets	513,910	16,090	3.13%	509,016	17,136	3.37%
International - Developing markets	174,929	17,760	10.15%	170,011	16,739	9.85%
of which						
Reverse repurchase agreements	*36,660*	*60*	*0.16%*	*46,207*	*105*	*0.23%*
Domestic	*9,521*	*7*	*0.07%*	*10,691*	*5*	*0.05%*
International - Mature markets	*25,622*	*18*	*0.07%*	*34,295*	*65*	*0.19%*
International - Developing markets	*1,517*	*35*	*2.31%*	*1,221*	*35*	*2.87%*
Debt securities	**168,834**	**5,724**	**3.39%**	**172,940**	**5,022**	**2.90%**
Domestic	42,740	313	0.73%	46,390	341	0.74%
International - Mature markets	40,579	446	1.10%	49,667	619	1.25%
International - Developing markets	85,515	4,965	5.81%	76,883	4,062	5.28%
Hedging income		**(723)**			**(343)**	
Domestic		20			21	
International - Mature markets		(91)			(116)	
International - Developing markets		(652)			(248)	
Other interest		**131**			**42**	
Domestic		(29)			10	
International - Mature markets		13			21	
International - Developing markets		147			11	
Total interest-earning assets	**1,384,472**	**46,463**	**3.36%**	**1,326,599**	**45,741**	**3.45%**
Domestic	410,675	5,912	1.44%	395,437	5,935	1.50%
International - Mature markets	665,847	17,000	2.55%	638,386	18,172	2.85%
International - Developing markets	307,950	23,551	7.65%	292,776	21,634	7.39%
Other assets	**179,427**			**210,953**		
Assets from discontinued operations	**—**			**—**		
Average total assets	**1,563,899**	**46,463**		**1,537,552**	**45,741**	

The average balance of interest-earning assets in 2021 was 4% higher than in 2020. Domestic and mature markets grew 4% (mainly in cash and demand deposits and in loans and advances to central banks and credit institutions) and developing markets increased 5% owing to volume growth in local currency in all country units.

The average return on interest-earning assets decreased from 3.45% in 2020 to 3.36% in 2021, with decreases in domestic (-6 bps) and mature international markets (-30 bps) while developing international markets increased 26 bps. By balance sheet item, cash, demand deposits and loans and advances to central banks and credit institutions fell 2 bps; and loans and advances to customers -7 bps, primarily driven by interest rates even lower than 2020. Debt securities rose 49 bps supported by developing markets.

The average balance of interest-bearing liabilities in 2021 was 4% higher year-on-year, also spurred by overall growth in the three markets (domestic: +6%; mature international: +2%; and developing international: +4%), boosted by customer deposits and deposits from central banks and credit institutions.

The average cost of interest-bearing liabilities fell 9 bps to 0.98% owing to the domestic (-8 bps) and mature international (-33 bps) markets while developing international markets were up 44 bps. By balance sheet item, there were reductions in central banks and credit institutions deposits (-27 bps); customer deposits (-6 bps); and marketable debt securities (-1 bp).

The change in interest income/(expense) shown in the table below was calculated as follows:

- To obtain the change in volumes we apply the interest rate of the previous period to the difference between the average balances from the current and previous periods.
- To obtain the change in interest rate we apply the difference between the rates from the current and previous periods to the average balance from the previous year.

Interest income grew in the year driven by higher volumes, as interest rates had a negative impact. Interest expense dropped due to lower interest rates.

As a result, net interest income increased 4% favoured by both volumes and the interest rate effect, as shown in the table below summarizing the performance of net interest income by market. Excluding the exchange rate impact, growth was 7%.

This 7% increase in constant euros was due to higher credit and deposit volumes and the lower cost of deposits, partially offset by lower revenue due to even lower average interest rates in most of our markets.

By country, and at constant exchange rates, net interest income in the UK increased 22% due to the liability cost management and greater volumes (mainly in mortgages), +13% in Brazil due to higher volumes, +10% in Chile on the back of its margin and inflation management, +4% in Poland due to the pick up in interest rates in recent months, while in Spain there was a slight increase (+1%), because of its spread management.

In the US, net interest income decreased slightly, affected by disposals (Puerto Rico and the Bluestem portfolio). Excluding the impact of these disposals, net interest income would have increased 5%. In Mexico, we saw a 2% decrease due to lower average interest rates and ALCO portfolio sales in 2020 and there were also declines in Portugal, driven by lower interest rates in 2021.

Average balance sheet - liabilities and interest expense

EUR million

	2021			2020		
Liabilities and stockholders' equity	Average balance	Interest	Average rate	Average balance	Interest	Average rate
Deposits from central banks and credit institutions [A]	**197,997**	**1,750**	**0.88%**	**187,128**	**2,147**	**1.15%**
Domestic	97,257	376	0.39%	90,747	394	0.43%
International - Mature markets	61,999	227	0.37%	61,877	445	0.72%
International - Developing markets	38,741	1,147	2.96%	34,504	1,308	3.79%
of which						
Repurchase agreements	*28,763*	*703*	*2.44%*	*34,160*	*759*	*2.22%*
Domestic	*12,316*	*18*	*0.15%*	*13,765*	*30*	*0.22%*
International - Mature markets	*1,252*	*8*	*0.64%*	*6,377*	*29*	*0.45%*
International - Developing markets	*15,195*	*677*	*4.46%*	*14,018*	*700*	*4.99%*
Customer deposits	**889,041**	**5,452**	**0.61%**	**837,397**	**5,599**	**0.67%**
Domestic	287,525	282	0.10%	269,979	332	0.12%
International - Mature markets	410,695	706	0.17%	385,956	1,662	0.43%
International - Developing markets	190,821	4,464	2.34%	181,462	3,605	1.99%
of which						
Repurchase agreements	*41,475*	*520*	*1.25%*	*38,641*	*432*	*1.12%*
Domestic	*7,918*	*—*	*0.00%*	*4,116*	*1*	*0.02%*
International - Mature markets	*19,311*	*6*	*0.03%*	*18,063*	*44*	*0.24%*
International - Developing markets	*14,246*	*514*	*3.61%*	*16,462*	*387*	*2.35%*
Marketable debt securities [B]	**234,887**	**4,838**	**2.06%**	**247,284**	**5,119**	**2.07%**
Domestic	104,602	1,538	1.47%	99,466	1,539	1.55%
International - Mature markets	102,330	1,670	1.63%	116,411	2,395	2.06%
International - Developing markets	27,955	1,630	5.83%	31,407	1,185	3.77%
of which						
Commercial paper	*17,794*	*135*	*0.76%*	*19,825*	*276*	*1.39%*
Domestic	*12,247*	*22*	*0.18%*	*13,813*	*87*	*0.63%*
International - Mature markets	*4,582*	*59*	*1.29%*	*4,729*	*134*	*2.83%*
International - Developing markets	*965*	*54*	*5.60%*	*1,283*	*55*	*4.29%*
Other interest-bearing liabilities	**7,944**	**216**	**2.72%**	**10,650**	**281**	**2.64%**
Domestic	4,146	70	1.69%	6,331	117	1.85%
International - Mature markets	1,948	30	1.54%	2,245	28	1.25%
International - Developing markets	1,850	116	6.27%	2,074	136	6.56%
Hedging expenses		**(368)**			**(294)**	
Domestic		(153)			(37)	
International - Mature markets		(147)			(205)	
International - Developing markets		(68)			(52)	
Other interest		**1,205**			**895**	
Domestic		306			313	
International - Mature markets		109			95	
International - Developing markets		790			487	
Total interest-bearing liabilities	**1,329,869**	**13,093**	**0.98%**	**1,282,459**	**13,747**	**1.07%**
Domestic	493,530	2,419	0.49%	466,523	2,658	0.57%
International - Mature markets	576,972	2,595	0.45%	566,489	4,420	0.78%
International - Developing markets	259,367	8,079	3.11%	249,447	6,669	2.67%
Other liabilities	**139,757**			**155,714**		
Non-controlling interests	**10,140**			**9,920**		
Shareholders' equity	**84,133**			**89,459**		
Liabilities from discontinued operations	**—**			**—**		
Average total liabilities and equity	**1,563,899**	**13,093**		**1,537,552**	**13,747**	

A. Interest includes expenses from assets reported in "Cash and deposits on demand and loans and advances to central banks and credit institutions" related to liquidity placed at the European Central Bank.
B. Does not include contingently convertible preference shares and perpetual subordinated notes because they do not accrue interest. We include them under 'Other liabilities'.

Volume and profitability analysis

EUR million

	2021 vs. 2020		
	Increase (decrease) due to changes in		
Interest income	Volume	Rate	Net change
Cash and deposits on demand and loans and advances to central banks and credit institutions	**325**	**125**	**450**
Domestic	113	46	159
International - Mature markets	173	(143)	30
International - Developing markets	39	222	261
of which			
Reverse repurchase agreements	*20*	*204*	*224*
Domestic	*(10)*	*(8)*	*(18)*
International - Mature markets	*3*	*(37)*	*(34)*
International - Developing markets	*27*	*249*	*276*
Loans and advances to customers	**706**	**(845)**	**(139)**
Domestic	52	(166)	(114)
International - Mature markets	163	(1,209)	(1,046)
International - Developing markets	491	530	1,021
of which			
Reverse repurchase agreements	*(6)*	*(39)*	*(45)*
Domestic	*(1)*	*3*	*2*
International - Mature markets	*(13)*	*(34)*	*(47)*
International - Developing markets	*8*	*(8)*	*—*
Debt securities	**348**	**354**	**702**
Domestic	(27)	(1)	(28)
International - Mature markets	(105)	(68)	(173)
International - Developing markets	480	423	903
Hedging income	**(380)**	**—**	**(380)**
Domestic	(1)	—	(1)
International - Mature markets	25	—	25
International - Developing markets	(404)	—	(404)
Other interest	**89**	**—**	**89**
Domestic	(39)	—	(39)
International - Mature markets	(8)	—	(8)
International - Developing markets	136	—	136
Total interest-earning assets	**1,088**	**(366)**	**722**
Domestic	98	(121)	(23)
International - Mature markets	248	(1,420)	(1,172)
International - Developing markets	742	1,175	1,917

Volume and cost analysis

EUR million

	2021 vs. 2020		
	Increase (decrease) due to changes in		
Interest expense	Volume	Rate	Net change
Deposits from central banks and credit institutions	**176**	**(573)**	**(397)**
Domestic	27	(45)	(18)
International - Mature markets	1	(219)	(218)
International - Developing markets	148	(309)	(161)
of which			
Repurchase agreements	*23*	*(79)*	*(56)*
Domestic	*(3)*	*(9)*	*(12)*
International - Mature markets	*(30)*	*9*	*(21)*
International - Developing markets	*56*	*(79)*	*(23)*
Customer deposits	**314**	**(461)**	**(147)**
Domestic	21	(71)	(50)
International - Mature markets	100	(1,056)	(956)
International - Developing markets	193	666	859
of which			
Repurchase agreements	*(55)*	*143*	*88*
Domestic	*—*	*(1)*	*(1)*
International - Mature markets	*3*	*(41)*	*(38)*
International - Developing markets	*(58)*	*185*	*127*
Marketable debt securities	**(333)**	**52**	**(281)**
Domestic	77	(78)	(1)
International - Mature markets	(268)	(457)	(725)
International - Developing markets	(142)	587	445
of which			
Commercial paper	*(28)*	*(113)*	*(141)*
Domestic	*(9)*	*(56)*	*(65)*
International - Mature markets	*(4)*	*(71)*	*(75)*
International - Developing markets	*(15)*	*14*	*(1)*
Other interest-bearing liabilities	**(56)**	**(9)**	**(65)**
Domestic	(38)	(9)	(47)
International - Mature markets	(4)	6	2
International - Developing markets	(14)	(6)	(20)
Hedging expenses	**(74)**	**—**	**(74)**
Domestic	(116)	—	(116)
International - Mature markets	58	—	58
International - Developing markets	(16)	—	(16)
Other interest	**310**	**—**	**310**
Domestic	(7)	—	(7)
International - Mature markets	14	—	14
International - Developing markets	303	—	303
Total interest-bearing liabilities	**337**	**(991)**	**(654)**
Domestic	(36)	(203)	(239)
International - Mature markets	(99)	(1,726)	(1,825)
International - Developing markets	472	938	1,410

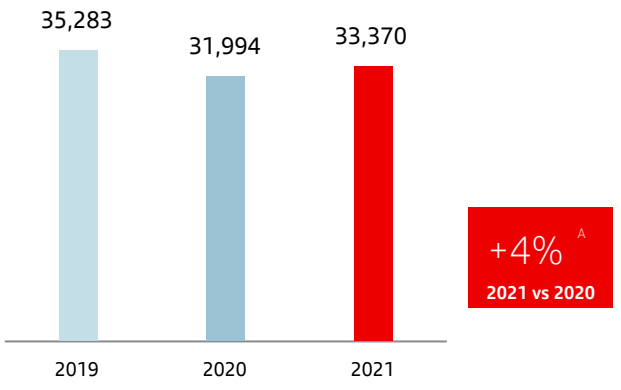
Net interest income. Volume, profitability and cost analysis summary

EUR million

	2021 vs. 2020		
	Increase (decrease) due to changes in		
	Volume	Rate	Net change
Interest income	**1,088**	**(366)**	**722**
Domestic	98	(121)	(23)
International - Mature markets	248	(1,420)	(1,172)
International - Developing markets	742	1,175	1,917
Interest expense	**337**	**(991)**	**(654)**
Domestic	(36)	(203)	(239)
International - Mature markets	(99)	(1,726)	(1,825)
International - Developing markets	472	938	1,410
Net interest income	**751**	**625**	**1,376**
Domestic	134	82	216
International - Mature markets	347	306	653
International - Developing markets	270	237	507

Net interest income

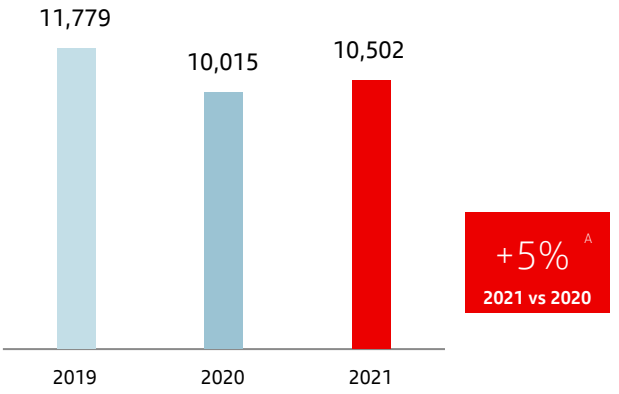
EUR million



A. Excluding exchange rate impact: +7%.

Net fee income

EUR million



A. Excluding exchange rate impact: +8%.

Net fee income

EUR million

			Change			
	2021	2020	Absolute	%	% excl. FX	2019
Asset management business, funds and insurance	3,649	3,416	232	6.8	9.3	3,815
Credit and debit cards	1,782	1,737	45	2.6	6.8	2,242
Securities and custody services	1,035	951	84	8.9	12.6	931
Account management and availability fees	1,850	1,649	201	12.2	16.0	1,675
Cheques and payment orders	642	594	48	8.1	12.3	633
Foreign exchange	522	500	22	4.4	8.9	612
Charges for past-due/unpaid balances and guarantees	266	295	(29)	(9.9)	(6.8)	522
Bill discounting	199	253	(54)	(21.3)	(14.5)	316
Other	557	620	(63)	(10.1)	(8.5)	1,033
Net fee income	**10,502**	**10,015**	**487**	**4.9**	**8.1**	**11,779**

Net fee income

Santander's net fee income increased 5% compared to 2020, reaching EUR 10,502 million. Excluding the exchange rate impact, it was 8% higher, showing recovery quarter after quarter from the second quarter lows in 2020, driven by the rebound in activity.

Broad-based increases, notably fees relating to card turnover and points of sale (+26% and +38%, respectively). Fees from our asset management and insurance business as well as SCIB increased at double digits, demonstrating the strength of fees from value-added products and services.

Specifically, Santander Corporate & Investment Banking increased 16% on the back of the strong growth in markets and investment banking results. Wealth Management & Insurance grew 12% including fees ceded to the branch network. Together, both businesses accounted for close to 50% of the Group's total (SCIB: 17%; WM&I: 32%).

By region, fees in Europe were up 9%, supported by growth in all countries except the UK (mainly due to regulatory changes in April 2020 that affect overdrafts). In North America, they decreased 1%, impacted by the disposals in the US; without them, growth in the region and the US would have been 6%, the same as in Mexico. Net fee income in South America was up 13% driven by all countries.

Gains or losses on financial assets and liabilities and exchange differences (net)

Gains or losses on financial assets and liabilities and exchange differences (net) accounted for 3% of total income. They were 29% lower than the previous year at EUR 1,563 million (-27% excluding the exchange rate impact) mainly due to decreases in Spain (-29%), Mexico (-47%), Brazil (-12%), Chile (-25%) and the Corporate Centre. This was due to the positive impact from FX hedging, portfolio sales and higher market volatility in 2020.

Gains and losses on financial assets and liabilities stem from valuing trading portfolio and marked-to-market derivative instruments, which include spot market foreign exchange transactions, sales of investment securities and liquidation of our hedging and other derivative positions.

For more details, see note 43 to the consolidated financial statements.

Exchange rate differences primarily show gains and losses from foreign exchange and the differences that arise from converting monetary items in foreign currencies to the functional currency, and from selling non-monetary assets denominated in foreign currency at the time of their disposal. Because Santander manages currency exposures with derivative instruments, the changes in this line item should be analysed together with Gains/(losses) on financial assets and liabilities.

For more details, see note 44 to the consolidated financial statements.

Dividend income

Dividend income was EUR 513 million, 31% higher than in 2020 (+32% excluding the exchange rate effect), recovering some income that was affected by the decrease, delay or cancellation of dividend payments due to the pandemic (especially in Europe).

Income from companies accounted for by the equity method

The income from companies accounted for by the equity method climbed to EUR 432 million in 2021 (in contrast to -EUR 96 million in 2020) owing to the higher contribution from the Group's associated entities.

Other operating income/expenses

Other operating income/expenses recorded a gain of EUR 24 million compared to a loss of EUR 212 million in 2020 due to higher results obtained in insurance and leasing. In 2021, contributions made to the Single Resolution Fund (SRF) in the second quarter and to the Deposit Guarantee Fund (DGF) in the fourth remained stable.

For more details, see note 45 to the consolidated financial statements.

Operating expenses

EUR million

			Change			
	2021	2020	Absolute	%	% excl. FX	2019
Staff costs	11,216	10,783	433	4.0	5.8	12,141
Other administrative expenses	*7,443*	*7,537*	*(94)*	*(1.2)*	*0.5*	*8,138*
Information technology	*2,182*	*2,075*	*107*	*5.2*	*4.9*	*2,161*
Communications	*401*	*473*	*(72)*	*(15.2)*	*(12.2)*	*518*
Advertising	*510*	*517*	*(7)*	*(1.4)*	*(1.2)*	*685*
Buildings and premises	*699*	*725*	*(26)*	*(3.6)*	*(3.1)*	*859*
Printed and office material	*90*	*100*	*(10)*	*(10.0)*	*0.0*	*116*
Taxes (other than tax on profits)	*558*	*534*	*24*	*4.5*	*3.6*	*522*
Other expenses	*3,003*	*2,980*	*23*	*0.8*	*0.7*	*3,277*
Administrative expenses	**18,659**	**18,320**	**339**	**1.9**	**3.6**	**20,279**
Depreciation and amortization	2,756	2,810	(54)	(1.9)	(0.3)	3,001
Operating expenses	**21,415**	**21,130**	**285**	**1.3**	**3.1**	**23,280**

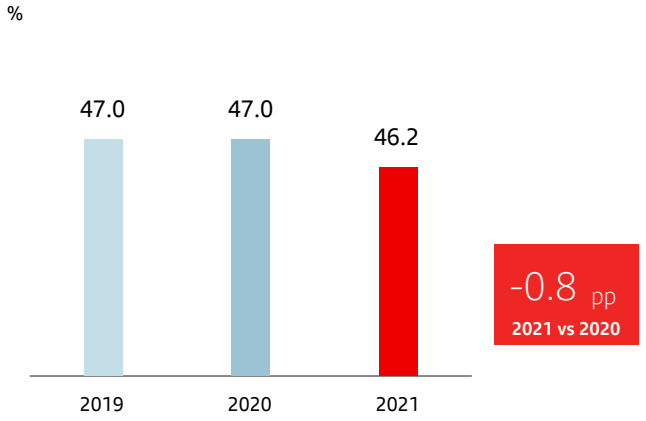
Operating expenses

Operating expenses increased 1% from 2020 to EUR 21,415 million. Excluding the exchange rate impact, costs rose 3% due to the general increase in inflation in 2021 and investments in technological and digital developments, including PagoNxt. However, in real terms (excluding the impact of inflation), however, costs fell 2%.

With an efficiency ratio of 46.2% - a 0.8 pp improvement on 2020 and 2019 (mainly driven by Europe) - we remained one of the most efficient global banks in the world.

We continue to make structural changes to reduce costs while improving customer satisfaction. Some businesses are migrating to regional platforms and simplifying products and services.

Efficiency ratio (cost to income)



The trends by region and market in constant euros were as follows:

- In Europe, costs were down 0.2% in nominal terms, -3% in real terms (excluding average inflation), as we continued with our cost reduction plan. In real terms, costs in Spain were down 11%, -4% in the UK and -6% in Portugal while costs in Poland increased 3% due to greater personnel costs. As a result, the region's efficiency ratio stood at 51.0%, a year-on-year decrease of 5.4 pp.
- In North America, costs increased 8%. In real terms, there was a net increase of 3% due to investments in digitalization, the 3% rise in the US and the 2% decrease in Mexico. The efficiency ratio was 45.2%.
- Soaring inflation in Argentina significantly distorted costs in South America (+8%). In real terms, costs declined by 5% in the region: Brazil, -8%, Chile, 0% and Argentina, -5%. The efficiency ratio in South America was 35.0%, a 1 pp decline compared to 2020.
- Lastly, Digital Consumer Bank's costs were 3% higher mainly due to perimeter effects and digital transformation investments. In real terms, they were flat and efficiency was stable at 45.0%.

Provisions or reversal of provisions

Provisions (net of provisions reversals) amounted to EUR 2,814 million (EUR 2,378 million in 2020). They include the charges for restructuring costs and charges related to Swiss franc mortgages in Poland and Digital Consumer Bank (EUR 319 million in 2021).

For more details, see note 25 to the consolidated financial statements.

Impairment or reversal of impairment of financial assets not measured at fair value through profit or loss (net)

Impairment or reversal of impairment on financial assets not measured at fair value through profit or loss (net) was EUR 7,407 million (EUR 12,382 million in 2020), a 40% decrease year-on-year in euros and -38% in constant euros.

This decrease was mainly due to the elevated level of additional loan-loss provisions recognized in 2020 based on the IFRS 9 forward-looking view as well as the collective and individual assessments to reflect expected credit losses arising from covid-19. In 2021, approximately EUR 750 million of those provisions were released.

For more details, see section 3 'Credit risk' in the 'Risk management and compliance' chapter.

Impairment of other assets (net)

The impairment of other assets (net) stood at -EUR 231 million, compared to -EUR 10,416 million in 2020 due a -EUR 10,100 million adjustment to the valuation of goodwill.

Gains or losses on non-financial assets and investments (net)

Net gains on non-financial assets and investments were EUR 53 million in 2021 (EUR 114 million in 2020).

For more details, see note 48 to the consolidated financial statements.

Impairment or reversal of impairment of financial assets not measured at fair value through profit or loss (net)

EUR million

	2021	2020	2019
Financial assets at fair value through other comprehensive income	19	19	12
Financial assets at amortized cost	7,388	12,363	9,340
Impairment or reversal of impairment of financial assets not measured at fair value through profit or loss and net gains and losses from changes	**7,407**	**12,382**	**9,352**

Impairment on other assets (net)

EUR million

	2021	2020	2019
Impairment of investments in subsidiaries, joint ventures and associates, net	—	—	—
Impairment on non-financial assets, net	**231**	**10,416**	**1,623**
Tangible assets	*150*	*174*	*45*
Intangible assets	*71*	*10,242*	*1,564*
Others	*10*	—	*14*
Impairment on other assets (net)	**231**	**10,416**	**1,623**

Negative goodwill recognized in results

No negative goodwill was recorded in 2021 (EUR 8 million in 2020).

Gains or losses on non-current assets held for sale not classified as discontinued operations

This item mainly includes impairment of foreclosed assets recorded and the sale of properties acquired upon foreclosure. It totalled -EUR 43 million in 2021 (-EUR 171 million in 2020).

Profit or loss before tax from continuing operations

Profit before tax was EUR 14,547 million in 2021, compared to -EUR 2,076 million in 2020 (affected by the adjustment in the valuation of goodwill). The results in 2021 were supported by higher income and lower provisions.

Tax expense or income from continuing operations

Total income tax was EUR 4,894 million (EUR 5,632 million in 2020, which included the -EUR 2,500 million valuation adjustment to deferred tax assets).

Profit attributable to non-controlling interests

Profit attributable to non-controlling interests increased 44% year-on-year (+48% excluding the exchange rate impact) to EUR 1,529 million, due to profit growth in countries with the highest minority interest (mainly the US).

For more details, see note 28 to the consolidated financial statements.

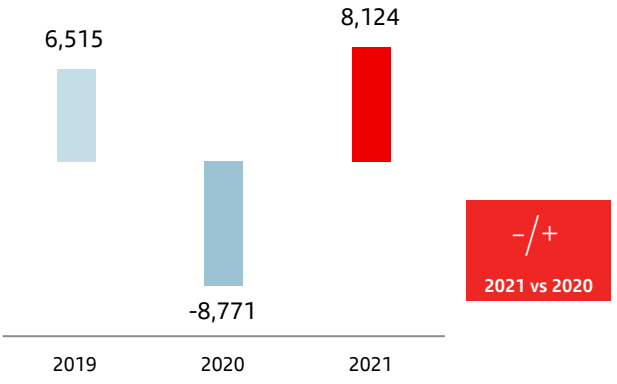
Profit attributable to the parent

Profit attributable to the parent amounted to EUR 8,124 million in 2021 (-EUR 8,771 million in 2020).

RoTE stood at 11.96% (1.95% in 2020), RoRWA at 1.69% (-1.33% in 2020) and earnings per share at EUR 0.438 (-EUR 0.538 in 2020), all three showing an improvement on 2019 as well.

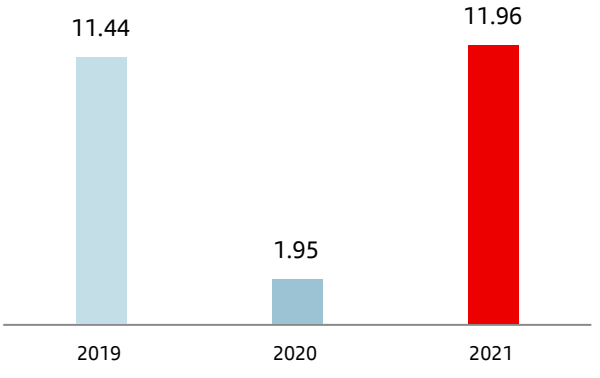
Profit attributable to the parent

EUR million



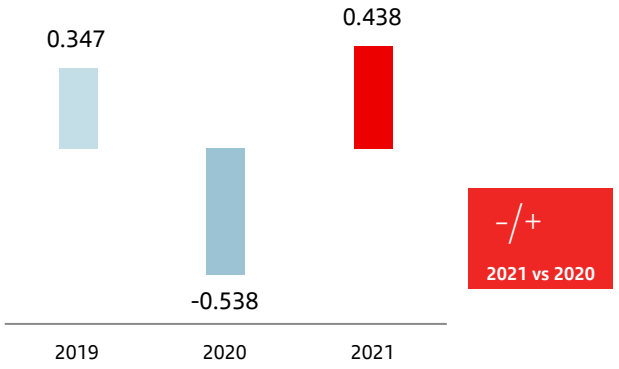
RoTE

%



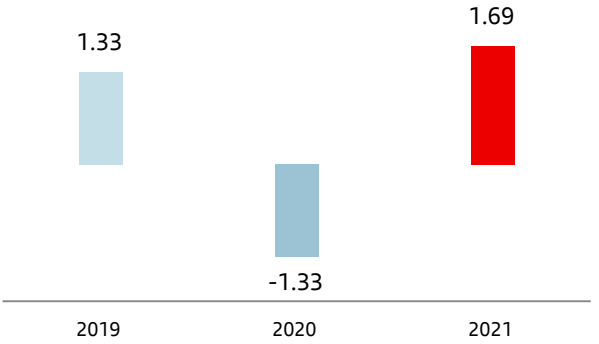
Earnings per share [A]

EUR



RoRWA

%



A. 2019 data adjusted for the capital increase in December 2020.

Below is the condensed income statement adjusted to items beyond the ordinary course of business (included under the net capital gains and provisions line) as described in note 51.c of the consolidated financial statements, where our segments' aggregate underlying consolidated results are reconciled to the statutory consolidated results.

Condensed underlying income statement

EUR million

			Change			
	2021	2020	Absolute	%	% excl. FX	2019
Net interest income	33,370	31,994	1,376	4.3	7.1	35,283
Net fee income	10,502	10,015	487	4.9	8.1	11,779
Gains (losses) on financial transactions and exchange differences	1,563	2,187	(624)	(28.5)	(26.5)	1,531
Other operating income	969	404	565	139.9	142.0	901
Total income	**46,404**	**44,600**	**1,804**	**4.0**	**6.9**	**49,494**
Administrative expenses and amortizations	(21,415)	(20,967)	(448)	2.1	4.1	(23,280)
Net operating income	**24,989**	**23,633**	**1,356**	**5.7**	**9.4**	**26,214**
Net loan-loss provisions	(7,436)	(12,173)	4,737	(38.9)	(37.1)	(9,321)
Other gains (losses) and provisions	(2,293)	(1,786)	(507)	28.4	30.7	(1,964)
Profit before tax	**15,260**	**9,674**	**5,586**	**57.7**	**64.5**	**14,929**
Tax on profit	(5,076)	(3,516)	(1,560)	44.4	51.2	(5,103)
Profit from continuing operations	**10,184**	**6,158**	**4,026**	**65.4**	**72.1**	**9,826**
Net profit from discontinued operations	—	—	—	—	—	—
Consolidated profit	**10,184**	**6,158**	**4,026**	**65.4**	**72.1**	**9,826**
Non-controlling interests	(1,530)	(1,077)	(453)	42.1	45.9	(1,574)
Net capital gains and provisions	(530)	(13,852)	13,322	(96.2)	(96.2)	(1,737)
Profit attributable to the parent	**8,124**	**(8,771)**	**16,895**	**—**	**—**	**6,515**
Underlying profit attributable to the parent [A]	**8,654**	**5,081**	**3,573**	**70.3**	**77.8**	**8,252**

A. Excluding net capital gains and provisions.

Underlying profit attributable to the parent

Profit attributable to the parent in 2021 and 2020 was affected by the following results that are outside the ordinary course of business and distort the year-on-year comparison:

- In 2021, -EUR 530 million for restructuring costs, fully recorded in Q1'21, mainly in the UK and Portugal.
- In 2020, -EUR 13,852 million from the valuation adjustment of goodwill ascribed to various Group entities in the amount of -EUR 10,100 million, the valuation adjustment to deferred tax assets of the Spanish consolidated fiscal group (-EUR 2,500 million) and -EUR 1,252 million in restructuring costs (mainly in Spain and the UK).

For more details, see note 51.c to the consolidated financial statements.

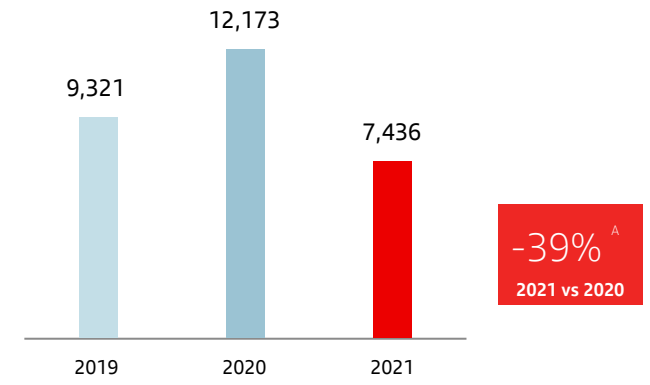
Excluding these results from the income statement lines where they are recorded, and incorporating them separately in the net capital gains and provisions line, **the adjusted or underlying profit attributable to the parent was EUR 8,654 million in 2021 (greater than the EUR 5,081 million 2020 and EUR 8,252 million in 2019).**

The Group's cost of credit was 0.77%, a significant improvement compared to 2020 and 2019 (1.28% and 1.00%, respectively).

This performance was better than expected in light of the lower provisions in most of our markets in the year, particularly in the US, the UK, Digital Consumer Bank and Chile, together with the release of provisions recognized in 2020 at the end of 2021.

Net loan-loss provisions

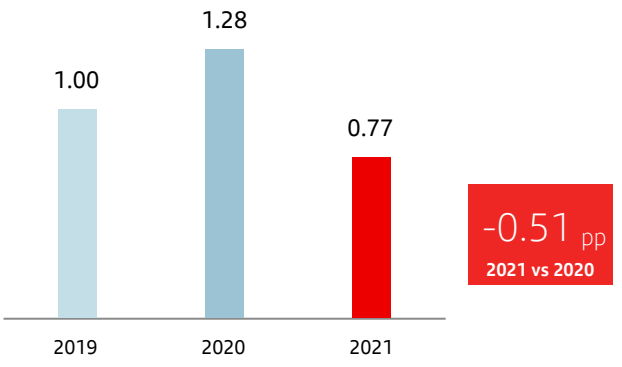
EUR million



A. Excluding exchange rate impact: -37%.

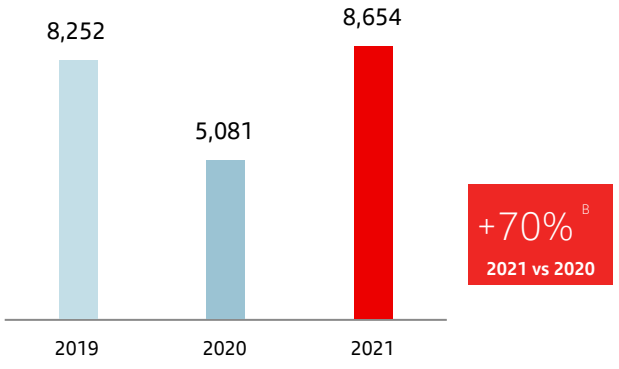
Cost of credit

%



Underlying profit attributable to the parent[A]

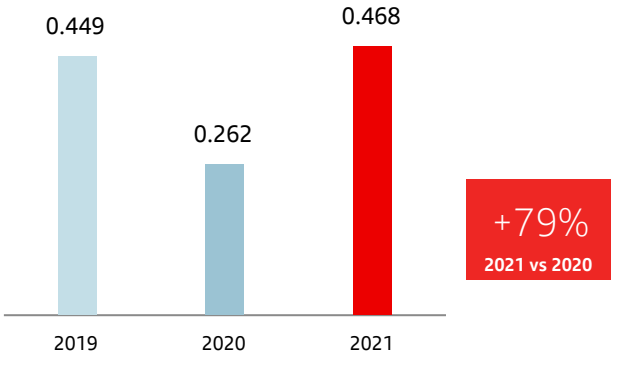
EUR million



A. Excluding net capital gains and provisions.
B. Excluding exchange rate impact: +78%.

Underlying earnings per share[A B]

EUR



A. Excluding net capital gains and provisions.
B. 2019 data adjusted for the capital increase in December 2020.

Before recording loan-loss provisions, Santander's net operating income[1] (i.e. total income less operating expenses) was EUR 24,989 million, 6% higher year-on-year, +9% excluding the FX impact, as follows:

By line:

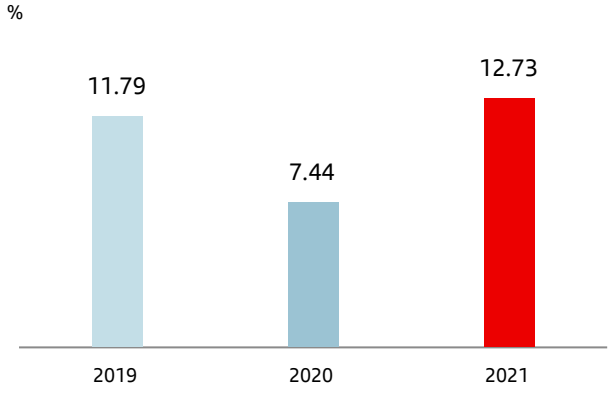
- Total income increased mainly due to net interest income (+7%) and net fee income (+8%) which continued to rebound.
- Higher inflation drove costs up. In real terms, they were down (except in Poland and the US).

By region:

- In Europe, net operating income increased 24% with better performance in all markets.
- In North America, net operating income fell 4%. It increased 1% in the US and was down by 9% in Mexico. Excluding the aforementioned disposals, net operating income was 11% higher in the US and +2% the region.
- In South America, we grew 13% with increases of 14% in Brazil, 10% in Chile and 34% in Argentina.
- In Digital Consumer Bank, net operating income increased by 3%.

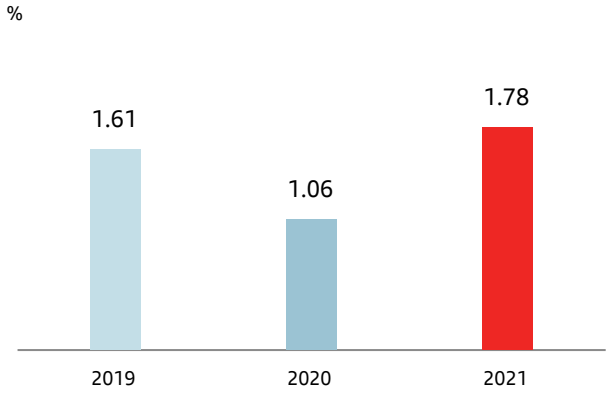
In 2021, the Santander's underlying RoTE was 12.73% (7.44% in 2020), underlying RoRWA was 1.78% (1.06% in 2020) and underlying earnings per share was EUR 0.468 (EUR 0.262 in 2020), all three showing an improvement on 2019 as well.

Underlying RoTE[A]



A. Excluding net capital gains and provisions.

Underlying RoRWA[A]



A. Excluding net capital gains and provisions.

1. As described in note 51.c of the consolidated financial statements, net operating income is used for the Group's internal operating and management reporting purposes but is not a line item in the statutory consolidated income statement.

3.3 Balance sheet

Balance sheet

EUR million

			Change		
Assets	**2021**	**2020**	**Absolute**	**%**	**2019**
Cash, cash balances at central banks and other deposits on demand	210,689	153,839	56,850	37.0	101,067
Financial assets held for trading	116,953	114,945	2,008	1.7	108,230
Non-trading financial assets mandatorily at fair value through profit or loss	5,536	4,486	1,050	23.4	4,911
Financial assets designated at fair value through profit or loss	15,957	48,717	(32,760)	(67.2)	62,069
Financial assets at fair value through other comprehensive income	108,038	120,953	(12,915)	(10.7)	125,708
Financial assets at amortized cost	1,037,898	958,378	79,520	8.3	995,482
Hedging derivatives	4,761	8,325	(3,564)	(42.8)	7,216
Changes in the fair value of hedged items in portfolio hedges of interest risk	410	1,980	(1,570)	(79.3)	1,702
Investments	7,525	7,622	(97)	(1.3)	8,772
Assets under insurance or reinsurance contracts	283	261	22	8.4	292
Tangible assets	33,321	32,735	586	1.8	35,235
Intangible assets	16,584	15,908	676	4.2	27,687
Tax assets	25,196	24,586	610	2.5	29,585
Other assets	8,595	11,070	(2,475)	(22.4)	10,138
Non-current assets held for sale	4,089	4,445	(356)	(8.0)	4,601
Total assets	**1,595,835**	**1,508,250**	**87,585**	**5.8**	**1,522,695**
Liabilities and equity					
Financial liabilities held for trading	79,469	81,167	(1,698)	(2.1)	77,139
Financial liabilities designated at fair value through profit or loss	32,733	48,038	(15,305)	(31.9)	60,995
Financial liabilities at amortized cost	1,349,169	1,248,188	100,981	8.1	1,230,745
Hedging derivatives	5,463	6,869	(1,406)	(20.5)	6,048
Changes in the fair value of hedged items in portfolio hedges of interest rate risk	248	286	(38)	(13.3)	269
Liabilities under insurance or reinsurance contracts	770	910	(140)	(15.4)	739
Provisions	9,583	10,852	(1,269)	(11.7)	13,987
Tax liabilities	8,649	8,282	367	4.4	9,322
Other liabilities	12,698	12,336	362	2.9	12,792
Liabilities associated with non-current assets held for sale	—	—	—	—	—
Total liabilities	**1,498,782**	**1,416,928**	**81,854**	**5.8**	**1,412,036**
Shareholders' equity	119,649	114,620	5,029	4.4	124,239
Other comprehensive income	(32,719)	(33,144)	425	(1.3)	(24,168)
Non-controlling interest	10,123	9,846	277	2.8	10,588
Total equity	**97,053**	**91,322**	**5,731**	**6.3**	**110,659**
Total liabilities and equity	**1,595,835**	**1,508,250**	**87,585**	**5.8**	**1,522,695**

Executive summary [A]

Loans and advances to customers (excl. reverse repos)

High liquidity in the system drove credit normalization following the uptick at the beginning of the pandemic

EUR 962 billion **+4%**

→ By segment:

Growth backed by individuals and large corporates

Individuals	SMEs and corporates	CIB and institutions
+5%	-2%	+9%

Customer funds (deposits excl. repos + mutual funds)

Strong increase in customer funds benefiting from the higher propensity to save amid the health crisis

EUR 1,070 billion **+7%**

→ By product:

Of note were demand deposits (which account for 67% of customer funds) and mutual funds

Demand	Time	Mutual funds
+9%	-5%	+13%

A. 2021 vs 2020 changes in constant euros

Loans and advances to customers totalled EUR 972,682 million in December 2021, up 6% compared to December 2020.

Santander uses gross loans excluding reverse repurchase agreements (EUR 962,382 million) to analyse traditional retail banking loans. To better assess management, the comments below do not take into account the exchange rate impact, as usual.

Gross loans and advances to customers, excluding the exchange rate effect and reverse repos, increased 4%. In particular:

- Europe: in Poland, they increased 6% driven by record mortgage loan sales, SMEs and SCIB. In Portugal, they rose 3%, due to mortgages and corporates (mainly SMEs). In the UK, they grew slightly (+0.5%), driven by residential mortgages, but they remained flat in Spain, with growth in individuals and institutions. In 'Other Europe', they increased 25% owing mainly to SCIB. Overall regional growth was 3%.

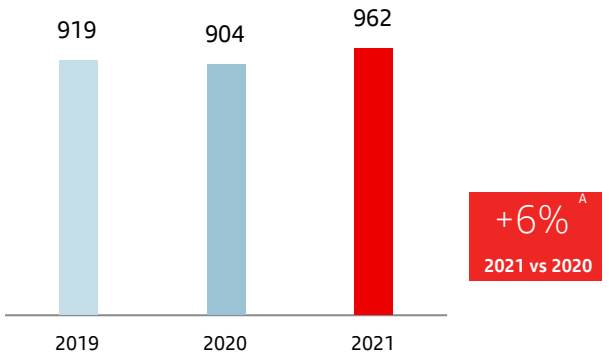
Loans and advances to customers

EUR million

			Change		
	2021	2020	Absolute	%	2019
Commercial bills	49,603	37,459	12,144	32.4	37,753
Secured loans	542,404	503,014	39,390	7.8	513,929
Other term loans	269,526	269,143	383	0.1	267,154
Finance leases	38,503	36,251	2,252	6.2	35,788
Receivable on demand	10,304	7,903	2,401	30.4	7,714
Credit cards receivable	20,397	19,507	890	4.6	23,876
Impaired assets	31,645	30,815	830	2.7	32,543
Gross loans and advances to customers (excl. reverse repos)	**962,382**	**904,092**	**58,290**	**6.4**	**918,757**
Reverse repos	33,264	35,702	(2,438)	(6.8)	45,703
Gross loans and advances to customers	**995,646**	**939,794**	**55,852**	**5.9**	**964,460**
Loan-loss allowances	22,964	23,595	(631)	(2.7)	22,242
Net loans and advances to customers	**972,682**	**916,199**	**56,483**	**6.2**	**942,218**

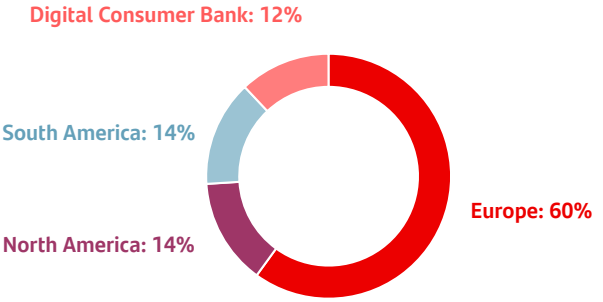
Gross loans and advances to customers (excluding reverse repos)

EUR billion



Gross loans and advances to customers (excluding reverse repos)

% of operating areas. December 2021



A. Excluding exchange rate impact: +4%.

- In North America, growth was 3% (+4% excluding the impact of Bluestem portfolio disposal). In the US, they grew 2% (+3% excluding disposal) propelled by auto financing. In Mexico, they were up 8% with widespread rises across segments (except SMEs).
- Growth in South America was 12%. In Argentina, lending increased 40% driven by individuals, SMEs and corporates. In Brazil, it climbed 13% owing to positive performance in all segments. In Chile, it was up 6% due to mortgages and SCIB. In Uruguay, it rose 14% backed by individuals.
- Digital Consumer Bank (DCB) declined 1%, as it continued to feel the effects of the covid-19 pandemic. However, new lending rose 10%. Performance across countries was mixed, with growth recorded in France and the UK. Openbank increased 48%.

By segment, gross loans and advances to customers excluding reverse repos maintained a balanced structure: individuals (63%), SMEs and corporates (22%) and SCIB and institutions (15%).

By the end of 2021, 40% of loans and advances to customers maturing in more than a year had floating interest rates, while the other 60% were fixed-rate:

- In Spain, 52% of loans and advances to customers had floating rates and 48% were fixed-rate.
- Elsewhere, 37% of loans and advances to customers had floating rates and 63% were fixed-rate.

For more details on the distribution of loans and advances to customers by business line, see note 10.b to the consolidated financial statements.

Tangible assets amounted to EUR 33,321 million in December 2021, up EUR 586 million compared to December 2020 and largely driven by the recorded rise in property, plant and equipment leased under operating leases.

Intangible assets stood at EUR 16,584 million, of which EUR 12,713 million corresponds to goodwill (which increased EUR 242 million in the year) and EUR 3,871 million to other intangible assets, mostly IT developments (up EUR 434 million).

Loans and advances to customers with maturities exceeding one year at 2021 year end

EUR million

	Domestic		International		TOTAL	
	Amount	Weight as % of the total	Amount	Weight as % of the total	Amount	Weight as % of the total
Fixed	80,934	48%	341,226	63%	422,160	60%
Variable	87,940	52%	198,115	37%	286,055	40%
TOTAL	**168,874**	**100%**	**539,341**	**100%**	**708,215**	**100%**

Total customer funds

EUR million

	2021	2020	Change Absolute	Change %	2019
Demand deposits	717,728	642,897	74,831	11.6	588,533
Time deposits	164,259	171,939	(7,680)	(4.5)	196,921
Mutual funds [A]	188,096	164,802	23,294	14.1	180,405
Customer funds	**1,070,083**	**979,638**	**90,445**	**9.2**	**965,859**
Pension funds [A]	16,078	15,577	501	3.2	15,878
Managed portfolios [A]	31,138	26,438	4,700	17.8	30,117
Repos	36,357	34,474	1,883	5.5	38,911
Total funds	**1,153,656**	**1,056,127**	**97,529**	**9.2**	**1,050,765**

A. Including managed and marketed funds.

In terms of liabilities, customer deposits grew 8% year-on-year to EUR 918,344 million in December 2021.

Santander uses customer funds (customer deposits including mutual funds but excluding repos) to analyse traditional retail banking funds, which stood at EUR 1,070,083 million.

Customer funds, excluding the effect of exchange rate movements, rose 7% in 2021 as follows:

- By product, customer deposits excluding repos were up 6%. Demand deposits grew 9% with rises in all markets, and time deposits fell 5%, as declines in Europe and North America more than offset growth in the main South American markets. Mutual funds surged 13% underpinned by net inflows and market recovery.
- Customer funds increased in all regions and most countries. Of note was the 9% jump in South America (Argentina: +52%; Uruguay: +15%; Chile: +11%; Brazil: +4%), and the 9% increase in North America (the US: +10%). Growth in Europe was 6% (Poland: +10%; Portugal and Spain: +8%; the UK was flat).
- Positive performance also in DCB, which rose 10%. Openbank grew 24%.

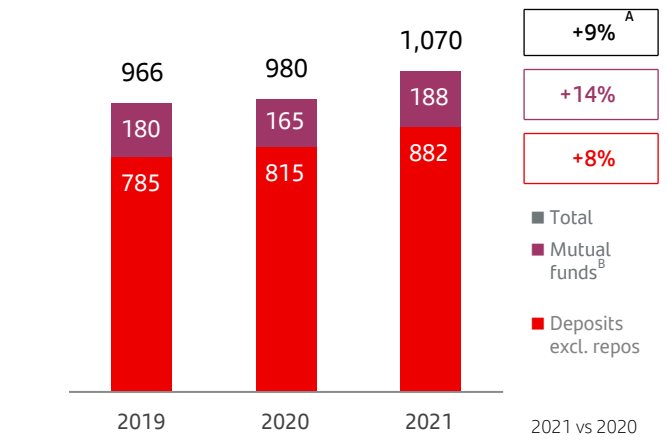
As a result, the weight of demand deposits as a percentage of total customer funds was 67%, while time deposits accounted for 15% of the total and mutual funds 18%.

In addition to capturing customer deposits, the Group, for strategic reasons, maintains a selective policy on issuing securities in international fixed income markets. We strive to adapt the frequency and volume of market operations to each unit's structural liquidity needs and to the receptiveness of each market.

For more details on debt issuances and maturities, see section 3.4 'Liquidity and funding management'.

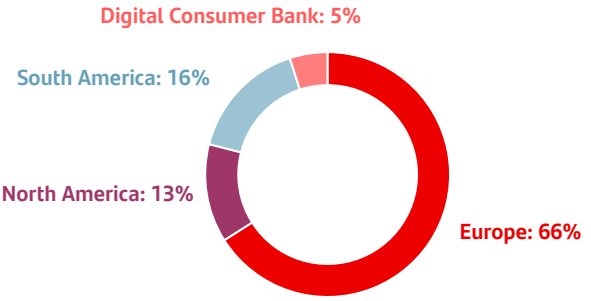
Customer funds (excluding repos)

EUR billion



Customer funds (excluding repos)

% of operating areas. December 2021



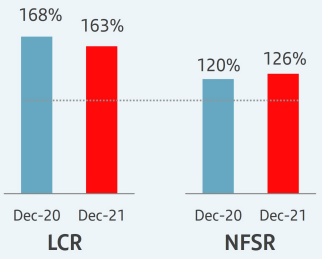
A. Excluding exchange rate impact: +7%.
B. Including managed and marketed funds.

3.4 Liquidity and funding management

Executive Summary

Regulatory ratios

The LCR and NSFR ratios amply exceed regulatory requirements (both 100%)



Debt issuances in 2021

We issued EUR 52 bn of debt in 2021, diversified by product, currency, country and maturity

EUR 29 bn	Medium- and long-term debt
EUR 23 bn	Securitizations

Comfortable and stable funding structure

High contribution of deposit funding

106%	LTD ratio

Liquidity management in Santander

Our structural liquidity management aims to optimize maturities and costs, and to avoid undesired liquidity risks in funding Santander's recurrent activity.

It follows these principles:

- Decentralized liquidity model.
- Medium- and long-term (M/LT) funding needs must be covered by medium- and long-term instruments.
- High contribution from customer deposits due to the retail nature of the balance sheet.
- Wholesale funding sources diversified by instrument and investor; market and currency; and maturity.
- Limited recourse to short-term funding.
- Sufficient liquidity reserves (including standing facilities/discount windows at central banks to be used in adverse situations).
- Group and subsidiary level compliance with regulatory liquidity requirements, as a new factor conditioning management.

To apply these principles effectively across the Group, we developed a unique management framework based on three fundamental pillars:

- Tight organization and governance that involve subsidiaries' senior managers in decision-making and integrate them into our global strategy. Decisions about structural risks, including liquidity and funding risk, falls on the local asset and liability committees (ALCOs), which coordinate with the global ALCO. The global ALCO is empowered by the board of directors under the corporate Asset and Liability Management (ALM) framework.

  This enhanced governance model is included within our risk appetite framework, which meets regulators and market's demands for stronger risk management and control systems, in response to the financial crisis.

- In-depth balance sheet analysis and liquidity risk measurement that support decisions and control to ensure liquidity levels cover short- and long-term needs with stable funding sources, as well as minimize the impact of their cost on earnings.

  Each geographic area has a conservative risk appetite framework, (based in its commercial strategy) which sets out the liquidity risk management framework. Subsidiaries must work within the framework limits to achieve their strategic objectives.

- Liquidity management adapted to the needs of each business. We develop a liquidity plan every year to achieve:
  - a solid balance sheet structure, with a diversified footprint in wholesale markets;
  - stable liquidity buffers and limited asset encumbrance; and
  - compliance with regulatory and other metrics included in each entity's risk appetite statement.

We monitor all of the plan's dimensions throughout the year.

Santander continues to carry out the Internal Liquidity Adequacy Assessment Process (ILAAP). It is integrated into our other risk management and strategic processes to measure liquidity in ordinary and stressed scenarios. The quantitative and qualitative items we consider are also inputs for the Supervisory Review and Evaluation Process (SREP).

Once a year, we must submit to supervisors a board-approved ILAAP assessment that shows our funding and liquidity structures will remain solid in all scenarios and our internal processes will ensure sufficient liquidity (based on analyses that each subsidiary conducts according to our local liquidity management model).

Our governance structure is robust and suited to identify, manage, monitor and control liquidity risks. It rests on common frameworks, conservative principles, clearly defined roles and responsibilities, a consistent committee structure, effective local lines of defence and well-coordinated corporate supervision.

We produce frequent, detailed liquidity monitoring reports for management, control, reporting and steering purposes. We also send the most relevant information regularly to senior managers, the executive committee and the board of directors.

Over the last few years, Santander and each subsidiary have developed a comprehensive special situations management framework that centralizes our governance for such scenarios. It contains contingency funding plans, that are integrated within our governance model, with feasible, pre-assessed actions that follow a defined timeline; are categorized and prioritized; and provide for sufficient liquidity and execution time to mitigate stress scenarios.

Funding strategy and liquidity in 2021

Funding strategy and structure

Our funding strategy in recent years has focused on extending our management model to all subsidiaries (including new additions).

It is based on a model of autonomous subsidiaries that are responsible for covering their own liquidity needs. This structure has enabled our solid retail banking model to maintain sound liquidity positions in the Group and our core country units, even amid market stress.

We have had to adapt funding strategies to commercial business trends, market conditions and new regulatory requirements. In 2021, we improved specific aspects, without significant changes in liquidity management or funding policies and practices. This will enable us to face 2022 from a strong starting point, with no growth restrictions.

In general, our subsidiaries continue to apply the same funding and liquidity management strategies:

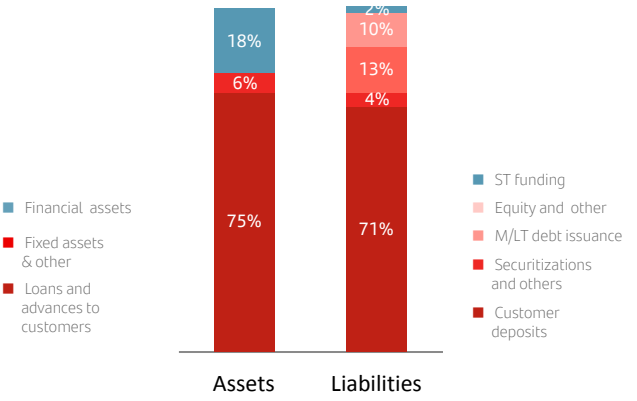
- maintaining sufficient and stable medium- and long-term wholesale funding levels.
- ensuring the right volume of assets which can be discounted in central banks as part of the liquidity buffer.
- generating liquidity from the retail business.

These developments have strengthened Santander's funding structure:

- Customer deposits are our main source of funding. They are highly stable because they mainly arise from retail customer activity. At the end of December 2021, they represented just over two-thirds of net liabilities (i.e. of the liquidity balance sheet) and nearly 95% of loans and advances to customers. Their weight (as a percentage of loans and advances to customers) grew compared to end 2020. For more details, see the 'Liquidity in 2021' section.

Group's liquidity balance sheet

%. December 2021



- M/LT funding accounted for nearly 17% of net liabilities at the end of 2021, similar to 2020. It amply covers the retail funding gap (i.e. loans and advances to customers not funded by customer deposits).

The outstanding balance of M/LT debt issued in the market (to third parties) at the end of 2021 was EUR 173,652 million. Our maturity profile is comfortable and well balanced by instruments and markets with a weighted average maturity of 4.8 years (similar to the average maturity of 4.7 years at the end of 2020).

These tables show our funding by instrument over the last three years and by maturity profile:

Group. Medium- and long-term debt issuances [A]

EUR million

	2021	2020	2019
Preferred	10,238	8,925	9,411
Subordinated	16,953	13,831	12,640
Senior debt	104,553	95,208	107,166
Covered bonds	41,908	49,388	50,847
Total	**173,652**	**167,351**	**180,064**

A. Placed in markets. Does not include securitizations, agribusiness notes and real estate credit notes.

Group. Distribution by contractual maturity. December 2021 [A]

EUR million

	0-1 month	1-3 months	3-6 months	6-9 months	9-12 months	12-24 months	2-5 years	more than 5 years	Total
Preferred	—	49	—	—	—	—	—	10,189	**10,238**
Subordinated	—	—	—	129	—	652	6,128	10,044	**16,953**
Senior debt	3,033	3,734	2,918	1,097	4,169	18,222	42,792	28,586	**104,553**
Covered bonds	104	1,695	2,087	1,850	1,090	3,380	15,280	16,421	**41,908**
Total	**3,137**	**5,478**	**5,006**	**3,076**	**5,260**	**22,255**	**64,200**	**65,240**	**173,652**

A. If an issuance has a put option in favour of the holder, its maturity is considered (not the contractual maturity).
Note: There are no additional guarantees for any of the debt issued by the Group's subsidiaries.

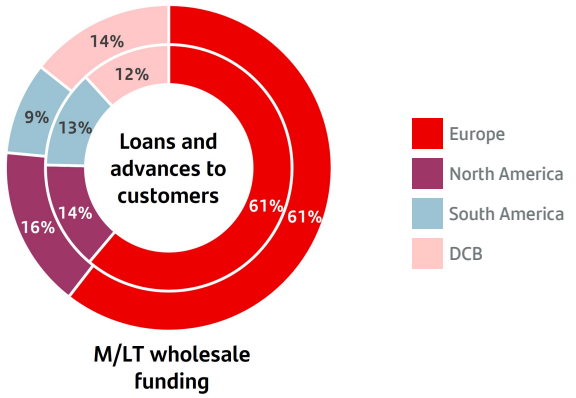
The lower weight of covered bonds in recent years in favour of other instruments is mainly due to the gradual construction of the MREL and TLAC requirements, as instruments with loss-absorbing capacity cannot have additional guarantees. Additionally, loan portfolios that are currently being used as collateral in central bank funding cannot be reused to issue secured instruments to the market.

In addition to the M/LT wholesale debt issuances, we have securitizations placed in the market as well as collateralized and other specialist funding totalling EUR 48,286 million (which includes EUR 6,935 million in debt instruments placed with private banking clients in Brazil). The average maturity is around 1.6 years.

This chart shows the similarity of the geographic breakdown of our loans and advances to customers and M/LT wholesale funding across our footprint. This distribution is almost identical to 2020 both in loans and advances and M/LT wholesale funding.

Loans and advances to customers and M/LT wholesale funding

%. December 2021



Wholesale funding from short-term issuance programmes is a residual part of Santander's funding structure, which is related to treasury activities and comfortably covered by liquid assets.

The outstanding short-term wholesale funding balance at the end of 2021 was EUR 27,296 million. 50% was in European Commercial Paper, US Commercial Paper and domestic programmes issued by Banco Santander, S.A.; 22% in certificates of deposit and commercial paper programmes in the UK; 19% in Santander Consumer Finance (SCF) commercial paper programmes; and 9% in issuance programmes in other country units.

Liquidity in 2021

The key liquidity takeaways in 2021 are:

- Basic liquidity ratios remain at comfortable levels.
- Regulatory ratios were well above minimum requirements.
- Our use of encumbered assets in funding operations was moderate.

In 2021, the transition back to business as usual began, after a 2020 marked by the frenetic activity of governments, regulators and central banks following the World Health Organization's declaration of covid-19 as an epidemic and subsequently a pandemic.

At the end of 2021, central banks (albeit at different rates) began to withdraw or think about how to withdraw some of the stimulus measures (especially those relating to injecting liquidity into the system), put in place during the most acute phase of the crisis, without causing second-round effects.

With markets fully open in 2021, we regularly monitored our liquidity position in the special situations committees and the meetings held by the Group's executive committee and board of directors. We also supplied information to the ECB at the regular monitoring meetings held by the Group during the supervisory dialogue process.

Our liquidity position has remained solid at all times. Moreover, the commercial activity in the year (discussed below), contributed liquidity in the year.

i. Basic liquidity ratios at comfortable levels

At the end of 2021, Santander recorded:

- A stable credit to net assets ratio (i.e. total assets minus trading derivatives and inter-bank balances) of 75%. Such a high level compared to our competitors in Europe speaks to the retail nature of our balance sheet.
- A net loan-to-deposit ratio (LTD) of 106%, a very comfortable level (well below 120%) and down from the 108% in 2020. Lending grew moderately in constant euros in almost all our markets (except consumer businesses which were affected by the semiconductor and supply chain problems). However, deposit growth more than compensated the increase in lending.
- A customer deposits plus M/LT funding to net loans and advances ratio of 117% (similar to last year).
- Limited recourse to short-term wholesale funding (just over 2% of total funding) in line with previous years.
- Lastly, our structural surplus defined as the excess of structural funding sources (deposits, M/LT funding and capital) against structural liquidity needs from fixed assets and loans had an average balance of EUR 207,233 million in the year.

Our consolidated structural surplus stood at EUR 208,540 million. Fixed-income assets (EUR 149,057 million), equities (EUR 20,357 million) and net interbank deposits (EUR 60,423 million) were partly offset by short-term wholesale funding (-EUR 27,296 million). This totalled around 16% of our net liabilities (slightly up from the end of 2020).

This table shows Santander's basic liquidity monitoring metrics in recent years:

Group's liquidity monitoring metrics

%

	2021	2020	2019
Loans [A] / Net assets	75%	76%	77%
Loans [A] to deposit ratio (LTD)	106%	108%	114%
Customer deposits and medium and long term funding / Loans [A]	117%	116%	113%
Short term wholesale funding / Net liabilities	2%	2%	3%
Structural liquidity surplus (% of net liabilities)	16%	15%	13%

A. Loans and advances to customers.

The table below shows the principal liquidity ratios of our main country units as at the end of 2021:

Main country units' liquidity metrics

%. December 2021

	LTD ratio	Deposits + M/LT funding / Loans [A]
Spain	74%	149%
United Kingdom	108%	107%
Portugal	93%	115%
Poland	79%	130%
United States	125%	111%
Mexico	87%	126%
Brazil	98%	118%
Chile	128%	100%
Argentina	56%	178%
Digital Consumer Bank	206%	77%
Group	**106%**	**117%**

A. Loans and advances to customers

In 2021, the key drivers of Santander's and our subsidiaries' liquidity (excluding the exchange rate impact) were:

- Recovery in lending, except for Digital Consumer Bank (DCB), which remained stable, affected by the semiconductor crisis and supply chain problems which slowed production of cars and consumer goods. There was also generalized growth in customer deposits. As a result, the retail funding gap provided liquidity in the year.
- Issuances continued at a similar rate to the previous year and, overall, were in line with our funding plan for the year. By region, North America and DCB issued less than planned given business performance, while South America was more active in capital markets.

In 2021, Santander issued EUR 51,954 million in M/LT funding (at year-average exchange rates).

By instrument, the stock of M/LT fixed income debt (i.e. covered bonds, senior debt, subordinated debt and capital hybrid instruments) decreased by around 5% to EUR 29,030 million at the end of the year. The greater activity in senior, both preferred and TLAC eligible bonds, and in hybrids was not enough to offset low covered bond issuances. Securitizations and structured finance totalled EUR 22,924 million in 2021, a 35% increase year-on-year.

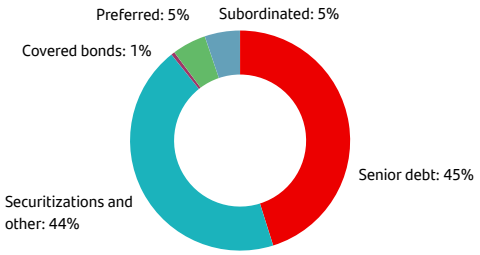
By country unit, Spain and Brazil issued the most M/LT fixed income debt (not including securitizations), followed by the UK. In the year, the greatest absolute increases were recorded in by our units in Spain and Brazil. The main year-on-year decreases occurred in the UK and SCF.

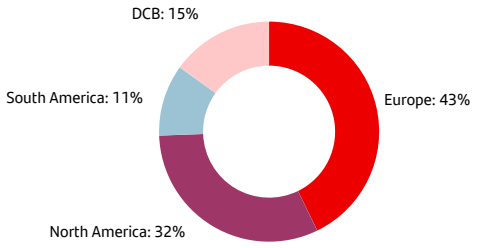
SCF and SC USA were the main issuers of securitizations.

The charts below provide show issuances by instrument and region:

Distribution by instrument and region

%. December 2021





Covered bonds issued in 2021 accounted for 1% of total issuances, well below the 14% in 2020. Only Santander Brasil issued covered bonds in 2021. The main issuers in previous years, Spain and the UK, issued no covered bonds in 2021, for the reasons stated above (regarding central bank collateral). Senior debt accounted for 45% of total issuances, compared to 42% in 2020. The weight of TLAC eligible senior debt compared to senior preferred debt was lower than in 2020.

In 2021, the Group issued EUR 16,574 million in subordinated instruments, including EUR 11,282 million in senior non-preferred debt from Banco Santander, S.A. and senior preferred from the holding in the UK; EUR 2,698 million in subordinated debt; and EUR 2,593 million in AT1 eligible hybrid instruments issued by the parent bank.

In summary, we retained comfortable access to all our markets. In 2021, we issued and securitized debt in 17 currencies, involving 20 major issuers from 14 countries and an average maturity of 4.5 years (slightly lower than 4.8 years in 2020).

ii. Compliance with regulatory ratios

Within the liquidity management model, over the last few years Santander has been managing the implementation, monitoring and compliance with the liquidity requirements established under international financial regulations ahead of schedule.

Liquidity Coverage Ratio (LCR)

As the regulatory LCR requirement has been at the maximum level of 100% since 2019, we have set a risk appetite of 110% for the Group and subsidiaries.

Our strong short-term liquidity base and our core subsidiaries' autonomous management led to compliance levels above 100% (both at Group and local level) throughout the year. Our LCR in December 2021 was 163%, well above the regulatory requirement.

The table below shows that all our subsidiaries substantially exceeded the required minimum in 2021 and the comparison versus 2020. Santander UK's figures only include activities that the Financial Services and Markets Act 2000 leaves within the Ring-Fenced Bank.

Liquidity Coverage Ratio (LCR)

%

	December 2021	December 2020
Parent bank	151%	175%
United Kingdom	168%	152%
Portugal	138%	122%
Poland	197%	187%
United States	150%	129%
Mexico	184%	207%
Brazil	141%	167%
Chile	148%	155%
Argentina	258%	222%
Santander Consumer Finance	319%	314%
Group	**163%**	**168%**

NSFR (Net Stable Funding Ratio)

The final definition of the net stable funding ratio (NSFR) was approved by the Basel Committee in October 2014 and transposed to EU law in June 2019 when the Official Journal of the European Union published the Regulation (EU) 2019/876 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No 648/2012.

Accordingly, entities must have a net stable funding ratio, greater than 100% from June 2021.

The NSFR is a structural measurement that gives banks an incentive to ensure long-term stability and proper management of maturity mismatches by funding long-term assets with long-term liabilities. It is the quotient of available stable funding (ASF) and required stable funding (RSF).

ASF comprises sources of funding (i.e. capital and other liabilities) considered stable over one year. RSF primarily refers to any asset deemed illiquid over one year, thus needing to be matched with stable sources of funding.

In 2021, we defined a risk appetite limit of 101.5% both at the consolidated and subsidiary level.

The high weight of customer deposits (which are more stable); permanent liquidity needs deriving from commercial activity funded by medium- and long-term instruments; and limited recourse to short-term funding help maintain our balanced liquidity structure as reflected in our consolidated and subsidiary NSFRs above 100% in December 2021.

The table below provides details by main subsidiary as well as a comparison with 2020. Santander UK's figures only include activities that the Financial Services and Markets Act 2000 leaves within the Ring-Fenced Bank. Additionally, note that 2020 figures were calculated under the Basel methodology while 2021 calculations incorporate requirements as transposed to European law.

Net Stable Funding Ratio

%

	December 2021	December 2020
Parent bank	118%	116%
United Kingdom	138%	129%
Portugal	124%	123%
Poland	156%	150%
United States	128%	120%
Mexico	134%	132%
Brazil	116%	119%
Chile	124%	120%
Argentina	180%	174%
Santander Consumer Finance	115%	114%
Group	**126%**	**120%**

III. Asset Encumbrance

Santander's use of assets as collateral in structural funding sources of the balance sheet is moderate.

In keeping with the 2014 European Banking Authority (EBA) guidelines on disclosure of encumbered and unencumbered assets, the concept of asset encumbrance includes on-balance-sheet assets pledged as collateral in operations to obtain liquidity, off-balance-sheet assets received and reused for a similar purpose, and other assets with liabilities for reasons other than funding.
The tables below show the asset encumbrance data we must submit to the EBA as of December 2021:

Group. Disclosure on asset encumbrance as at December 2021

EUR billion

	Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets
Assets	**365.1**	**—**	**1,230.7**	**—**
Loans and advances	262.8	—	984.4	—
Equity instruments	8.4	8.4	13.1	13.1
Debt instruments	61.0	61.1	102.9	102.8
Other assets	32.9	—	130.3	—

Group. Collateral received as at December 2021

EUR billion

	Fair value of encumbered collateral received or own debt securities issued	Fair value of collateral received or own debt securities issued available for encumbrance
Collateral received	**80.7**	**31.5**
Loans and advances	1.2	0.0
Equity instruments	5.4	7.0
Debt instruments	74.2	24.5
Other collateral received	—	0.0
Own debt securities issued other than own covered bonds or ABSs	**0.0**	**0.6**

Group. Encumbered assets/collateral received and associated liabilities as at December 2021

EUR billion

	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
Total sources of encumbrance (carrying amount)	**325.2**	**445.9**

On-balance-sheet encumbered assets amounted to EUR 365.1 billion; 72% are loans and advances (e.g. mortgages and corporate loans). Off-balance-sheet encumbrance stood at EUR 80.7 billion and mainly relates to debt securities received as collateral in reverse repurchase agreements and rehypothecated ("reused"). Both types of encumbered assets amount to EUR 445.9 billion, giving rise to associated liabilities of EUR 325.2 billion.

At the end December 2021, total asset encumbrance in funding operations was 26.1% of the Group's extended balance sheet under EBA criteria (total assets plus guarantees received: EUR 1,708.0 billion), lower than the 26.6% at the end of 2020 mainly due to balance sheet growth.

Rating agencies

Rating agencies influence Santander's access to wholesale funding markets and the cost of its issuances.

The agencies listed below regularly review our ratings. Debt ratings depend on several internal factors (business model, strategy, capital, income generation capacity, liquidity, etc.) but also on external factors related to economic conditions, the industry and sovereign risk across our footprint.

Sometimes the methodology applied by the agencies limits ratings to the sovereign's rating of country where the bank is headquartered. However, as a testament of our financial strength and diversification, Banco Santander, S.A. is still rated above the Kingdom of Spain's sovereign rating (where it is headquartered) by Moody's, DBRS and Standard & Poor's (S&P) and on par with it by Fitch.

At the end of 2021, the ratings from the main agencies were:

Rating agencies

	Long term	Short term	Outlook
DBRS	A (High)	R-1 (Middle)	Stable
Fitch Ratings	A- (Senior A)	F2 (Senior F1)	Stable
Moody's	A2	P-1	Stable
Standard & Poor's	A+	A-1	Negative
Scope	AA-	S-1+	Stable
JCR Japan	A+	—	Stable

In 2021, S&P upgraded the long-term rating to A+ due to a change in its methodology. DBRS, Fitch, Moody's and JCR Japan confirmed their ratings.

As for the outlook, Fitch changed from negative to stable due to the stabilization of the operating environment in Santander's main markets, while in December S&P, after having raised it in June, downgraded it back to negative due to the worsening of the sovereign's outlook, keeping Santander 1 notch above the Kingdom of Spain.

Funding outlook for 2022

Despite some lingering uncertainties, Santander has begun 2022 with a comfortable liquidity position and a positive funding outlook for the year.

We expect lending to rise moderately in all our core markets, coupled with a solid performance in deposits leading to limited demand for liquidity from our retail business. The largest liquidity needs will come from our largest country units: Spain, Brazil and Digital Consumer Bank.

The maturities in upcoming quarters are manageable, aided by limited recourse to short-term funding and an expected medium- and long-term issuance dynamic slightly greater than last year. We will manage each country, optimizing liquidity to maintain a solid balance sheet structure across our footprint.

Additionally, our funding plans take into account costs and diversification by instrument, country and market as well as the construction of liability buffers with loss-absorbing capacity in resolution (whether capital eligible or not). They are designed to ensure Santander and each subsidiary always satisfy regulatory requirements and those stemming from our risk appetite framework.

For example, Banco Santander, S.A.'s 2022 funding plan is designed to cover the greater TLAC/MREL requirements and pre-finance issuances that lose loss-absorbing capacity, and to cover any needs arising from potential increases in RWAs (which form the base for both ratios). As such, the plan includes between EUR 9 billion and EUR 10 billion of senior preferred and non-preferred debt, between EUR 3 billion and EUR 3.5 billion of hybrid instruments (depending on RWA growth to ensure the continued fulfilment of the 1.5% AT1 and 2% T2 buffers). The plan does not contemplate any covered bond issuances.

With regard to the rest of the Group: Santander Consumer Finance, plans to issue between EUR 5 billion and EUR 6 billion in senior instruments, as well as the possibility of up to EUR 0.5 billion in covered bonds; in the UK we expect to issue between EUR 3 billion and EUR 4 billion in senior debt (either from the bank or from its holding company) and between EUR 0.5 billion and EUR 0.75 billion in covered bonds; and, lastly, Santander Holdings USA plans to issue between EUR 2 billion and EUR 2.5 billion in senior debt.

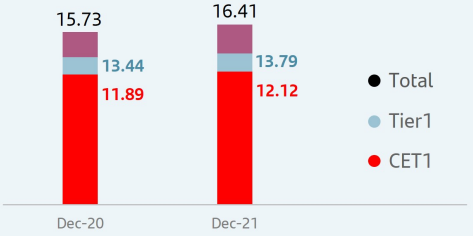
Notwithstanding the above, Banco Santander, S.A. and the Group remain alert to opportunities to optimize the cost of outstanding issuances and may therefore decide to carry out additional issuances or reduce them.

3.5 Capital management and adequacy. Solvency ratios

Executive summary

Fully-loaded capital ratio

The fully-loaded CET1 reached 12%



Fully-loaded CET1

Strong organic generation driven by profit and RWA management

Organic generation* +118 bps

TNAV per share

The TNAV per share was **EUR 4.12**, +11% year-on-year including dividends

* Includes negative impact from shareholder remuneration

The aim of capital management and adequacy at Santander is to guarantee solvency and maximize profitability, while complying with internal capital targets and regulatory requirements.

Capital management is a key strategic tool for decision-making at both the local and corporate levels.

At Santander, we have a common framework covering actions, criteria, policies, functions, metrics and processes for capital management.

Our most notable capital management activities are:

- establishing **capital adequacy** and capital contribution **targets** aligned with minimum regulatory requirements and internal policies, to guarantee robust capital levels consistent with our risk profile and efficient use of capital to maximize shareholder value.
- drawing up a **capital plan** to meet those objectives consistent with our strategic plan. Capital planning is an essential part of executing the three-year strategic plan.
- **assessing capital adequacy** to ensure that the capital plan is also consistent with our risk profile and risk appetite framework in stress scenarios.
- developing the **annual capital budget** as part of the Group's budgeting process.
- **monitoring and controlling the budget execution** at the Group and country level and drawing up action plans to correct any deviations from the budget.
- **integrating capital metrics** into our business management to ensure alignment with the Group's objectives.
- **preparing internal capital reports**, and reports for the supervisory authorities and the market.
- **planning and managing other loss absorbing instruments** (MREL and TLAC).

Santander's capital function is carried out on three levels:

Regulatory capital

The first step in managing regulatory capital is to analyse the capital base, the capital adequacy ratios under the current regulatory criteria and the scenarios used in capital planning to make the capital structure as efficient as possible, both in terms of costs and compliance with regulatory requirements. Active capital management includes strategies for allocation and efficient use of capital, together with securitizations, asset sales and issuances of equity instruments (hybrid equity instruments and subordinated debt).

Economic capital

The objective of the economic capital model is to ensure that we adequately allocate our capital to cover all risks to which we are exposed as a result of our activity and risk appetite. It also aims to optimize economic value added at the Group and business unit level.

Profitability and pricing

Creating value and maximizing profitability is one of Santander's main objectives, carefully selecting the most appropriate markets and portfolios based on profitability, taking into account risk. Profitability and pricing are therefore integral parts of the key capital model processes.

The main measures we took in 2021 were:

Issuances of capital hybrid and other loss-absorbing instruments

In 2021, Banco Santander, S.A. issued EUR 4,464 million in hybrid instruments. This comprised EUR 1,852 million in T2 subordinated debt and EUR 2,612 million in contingently convertible preferred shares (CoCos). Part of these CoCos were intended to replace the early amortization of a EUR 1,500 million issuance called in September 2021.

Banco Santander, S.A. also issued EUR 7,934 million in senior non-preferred debt.

Dividends and shareholder remuneration

On 28 September 2021, the board announced its 2021 shareholder remuneration policy to pay out an interim distribution of approximately 40% of the Group's underlying profit (half through a cash dividend and half through a shares buyback).

- **Interim remuneration.** Accordingly, it authorized the payment of an interim dividend of EUR 4.85 cents per share (i.e. 20% of the Group's underlying profit for H1'21), in cash and charged against 2021 profits; it was paid on 2 November 2021. The board also voted to launch the First Buyback Programme worth EUR 841 million (20% of the Group's underlying profit for H1'21) once the ECB approved it on 28 September 2021. The number of shares acquired (259,930,273 shares) makes up approximately 1.499% of our share capital.
- **Final remuneration**. The board of directors voted to submit a resolution at the 2022 AGM for the approval of a complementary cash dividend of EUR 5.15 cents per share (gross), equalling an approximate total of EUR 865 million; and a Second Buyback Programme for EUR 865 million, to be approved by the ECB.

For more details, see section 3.3 'Dividends' on the Corporate governance chapter.

Strengthen capital management culture

Focus ahead will remain on disciplined capital allocation and shareholder remuneration while we maintain our fully-loaded CET1 target between 11%-12%.

The continuous improvement in the capital ratios reflects our profitable growth strategy and a culture of active capital management at all levels of the organization.

In order to have a more global vision and simplify our structure, we created a new team, '**Capital and Profitability Management**', in charge of our capital analysis, adequacy and management, coordination with subsidiaries in all matters related to capital and monitoring and measuring returns.

All the countries and business units have drawn up **individual capital plans** focused on achieving a business that maximizes the return on equity.

Santander gives a significant weight to capital and **incentives**. Certain aspects relating to capital management and returns are taken into account when setting the variable remuneration payable to members of senior management:

- The relevant metrics include our **CET1 ratio**, the county units' capital contributions to the Group ratio, the return on tangible equity (**RoTE**) and profit after tax.
- The **qualitative aspects considered** include the proper management of regulatory changes affecting capital, effective management of capital relating to business decisions, sustainable capital generation over time and effective capital allocation.

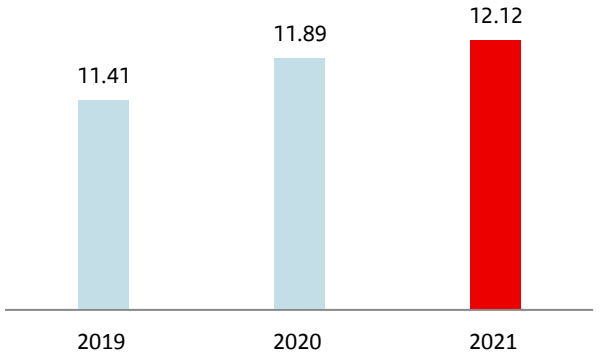
Action plans

In addition, we have developed a three-year action plan for the continuous improvement of infrastructures, processes and methodologies that support all aspects related to capital, with the aim of further enhancing active capital management, responding more quickly to the numerous and increasing regulatory requirements and efficiently carrying out all associated activities.

We continue to improve our processes and controls associated with capital data quality. Additionally, we continuously develop risk management initiatives at both the consolidated and local levels to strengthen and fine-tune different activities.

Fully-loaded CET1 ratio

%



Regulatory phased-in CET1 ratio [A]

%

11.65	12.34	12.51

Main capital data and solvency ratios

EUR million

	Fully loaded		*Phased-in* [A]	
	2021	2020	2021	2020
Common equity (CET1)	70,208	66,783	72,402	69,399
Tier1 (T1)	79,939	75,510	82,452	78,501
Eligible capital	95,078	88,368	97,317	91,015
Risk-weighted assets	579,478	561,850	578,930	562,580
CET1 capital ratio	12.12%	11.89%	12.51%	12.34%
T1 capital ratio	13.79%	13.44%	14.24%	13.95%
Total capital ratio	16.41%	15.73%	16.81%	16.18%
Leverage ratio	5.21%	5.13%	5.37%	5.33%

A. The phased-in ratios include the transitory treatment of IFRS 9, calculated in accordance with article 473 bis of the Regulation on Capital Requirements (CRR) and subsequent amendments introduced by Regulation 2020/873 of the European Union. Additionally, the Tier 1 and total phased-in capital ratios include the transitory treatment according to chapter 2, title 1, part 10 of the aforementioned CRR.

Fully-loaded capital ratios in 2021

If we do not apply the transitory IFRS 9 provisions, nor the subsequent amendments introduced by Regulation 2020/873 of the European Union, which has a 39 bp impact, the fully-loaded CET1 ratio was 12.12%.

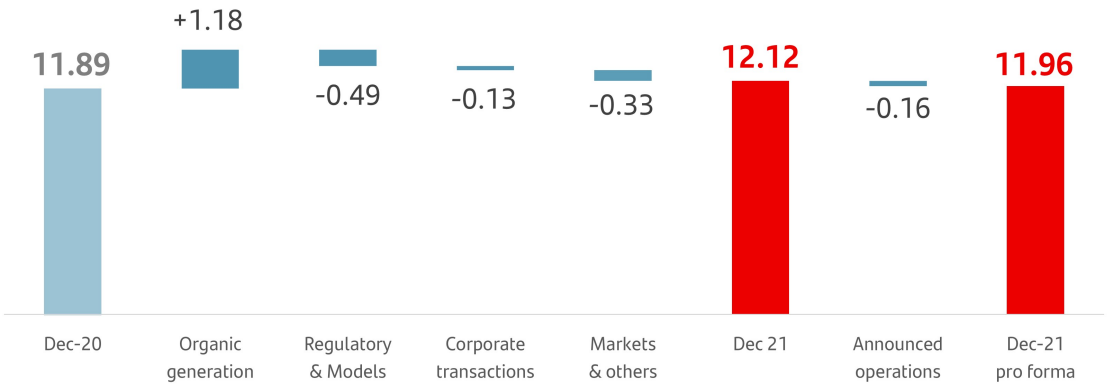
Of note in the year was organic generation of 118 basis points, supported by the results obtained in the year and management of risk-weighted assets. This figure includes a negative impact of 45 basis points related to shareholder remuneration. This strong generation was partially offset by regulatory and model impacts, the negative market impacts on available for sale (HTC&S) portfolios and non-recurring impacts (acquisition of minority interest in Mexico and restructuring costs).

If we include the acquisition of SC USA minority interests, which closed on 31 January 2022, and the announced acquisition of Amherst Pierpont, which is pending to completion, the CET1 ratio would be an estimated 16 basis points lower, bringing it to 11.96%.

The fully-loaded leverage ratio stood at 5.21%

Fully-loaded CET1 ratio in 2021

%

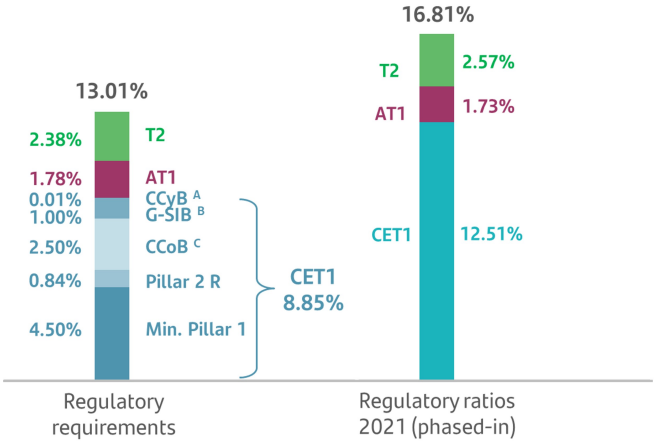


Regulatory capital ratios (phased-in)

The phased-in ratios are calculated by applying the CRR transitory schedules. At year-end, the total phased-in capital ratio was 16.81% and the (phased-in) CET1 ratio was 12.51%.

We have a strong capital base, comfortably meeting the minimum levels required by the European Central Bank on a consolidated basis (13.01% for the total capital ratio and 8.85% for the CET1 ratio). This resulted in a CET1 management buffer of 366 bps, compared to the pre-covid-19 buffer of 189 bps.

Taking into account the shortfall in AT1, Santander exceeded the 2021 minimum regulatory requirements by 360 bps.



A. Countercyclical buffer.
B. Global systemically important banks (G-SIB) buffer.
C. Capital conservation buffer.

The phased-in leverage ratio stood at 5.37%.

Regulatory capital (phased-in). Flow statement

EUR million

	2021
Capital Core Tier 1 (CET 1)	
Starting amount (31/12/2020)	**69,399**
Shares issued in the year and share premium	(4,034)
Treasury shares and own shares financed	(840)
Reserves	2,640
Attributable profit net of dividends	6,394
Other retained earnings	152
Minority interests	67
Decrease/(increase) in goodwill and other intangible assets	(353)
Other	(1,023)
Ending amount (31/12/2021)	**72,402**
Additional Capital Tier 1 (AT1)	
Starting amount (31/12/2020)	**9,102**
AT1 eligible instruments	1,248
T1 excesses - subsidiaries	(299)
Residual value of intangible assets	—
Deductions	—
Ending amount (31/12/2021)	**10,050**
Capital Tier 2 (T2)	
Starting amount (31/12/2020)	**12,514**
T2 eligible instruments	2,073
Generic funds and surplus loan-loss provisions-IRB	75
T2 excesses - subsidiaries	203
Deductions	—
Ending amount (31/12/2021)	**14,865**
Deductions from total capital	—
Total capital ending amount (31/12/2021)	**97,317**

The following tables show the total risk-weighted assets (comprising the denominator of capital requirements based on risk) as well as their distribution by geographic segment.

Risk-weighted assets

EUR million

	RWAs		Minimum capital requirements
	2021	2020	2021
Credit risk (excluding CCR)	**477,977**	**470,333**	**38,238**
Of which: standardized approach (SA)	262,869	259,362	21,029
Of which: the foundation IRB (FIRB) approach	9,483	8,841	759
Of which: slotting approach	14,672	14,529	1,174
Of which: equities under the simple risk weighted approach	2,219	2,750	178
Of which: the advanced IRB (AIRB) approach	173,956	168,096	13,916
Counterparty credit risk (CCR)	**15,674**	**10,239**	**1,254**
Of which: standardized approach	13,639	9,278	1,091
Of which: internal model method (IMM)	—	—	—
Of which: exposures to a CCP	268	241	21
Of which: credit valuation adjustment (CVA)	1,767	720	141
Of which: other CCR	—	—	—
Settlement risk	**1**	**—**	**0**
Securitization exposure in the banking book (after the cap)	**11,151**	**9,751**	**892**
Of which: SEC-IRBA approach	5,226	4,731	418
Of which: SEC-ERBA approach	1,366	1,607	109
Of which: SEC-SA approach	2,676	1,821	214
Of which: 1250% deduction	1,883	1,592	151
Position, foreign exchange and commodities risks (Market risk)	**17,224**	**17,983**	**1,378**
Of which: standardized approach	6,844	5,047	547
Of which: internal model approach (IMA)	10,380	12,936	830
Large exposures	**—**	**—**	**—**
Operational risk	**58,786**	**55,865**	**4,703**
Of which: basic indicator approach	—	—	—
Of which: standardized approach	58,786	55,865	4,703
Of which: advanced measurement approach	—	—	—
Amounts below the thresholds for deduction	**21,032**	**22,382**	**1,683**
Total	**578,930**	**562,580**	**46,314**

Includes equities under the PD/LGD approach
Fully loaded CRR, phased-in IFRS 9

Capital requirements by geographical distribution

EUR million

	TOTAL	EUROPE	o/w: Spain	o/w: United Kingdom	NORTH AMERICA	o/w: US	SOUTH AMERICA	o/w: Brazil	Rest of the world
Credit risk (excluding CRR)	**38,238**	**22,926**	**9,688**	**5,824**	**6,831**	**5,205**	**7,592**	**5,103**	**888**
Of which: internal ratings-based (IRB) approach [A]	**16,684**	**13,090**	**5,789**	**4,320**	**1,320**	**540**	**1,530**	**1,241**	**745**
Central governments and central banks	—	—	—	—	—	—	—	—	—
Institutions	776	454	92	95	138	67	54	11	131
Corporates	9,428	6,392	3,586	1,306	1,175	470	1,472	1,229	389
of which: Corporates - Specialized Lending	1,345	1,029	362	426	205	56	62	—	49
of which: Corporates – SME	1,593	1,427	1,226	55	108	1	57	54	1
Retail - Secured by real estate SME	232	231	222	1	1	1	—	—	1
Retail - Secured by real estate non-SME	3,650	3,636	884	2,515	3	2	2	—	8
Retail - Qualifying revolving	373	372	98	216	—	—	—	—	—
Retail - Other SME	578	564	388	—	—	—	1	—	14
Retail - Other non-SME	1,562	1,356	435	187	2	—	1	—	203
Other non-credit-obligation assets	85	85	85	—	—	—	—	—	—
Of which: standardized approach (SA)	**21,032**	**9,193**	**3,208**	**1,530**	**5,548**	**4,667**	**6,146**	**3,918**	**144**
Central governments or central banks	2,073	1,058	903	24	160	—	846	776	9
Regional governments or local authorities	25	8	4	—	—	—	16	13	—
Public sector entities	29	4	—	—	15	15	10	—	—
Multilateral Development Banks	—	—	—	—	—	—	—	—	—
International Organizations	—	—	—	—	—	—	—	—	—
Institutions	367	113	59	17	123	114	126	103	6
Corporates	3,450	1,760	329	491	692	674	975	399	23
Retail	7,868	2,973	324	516	2,631	2,280	2,167	1,714	96
Secured by mortgages on immovable property	2,614	860	180	54	792	586	962	279	1
Exposures in default	957	370	156	76	281	241	304	196	3
Items associated with particular high risk	111	13	2	2	10	10	88	16	—
Covered bonds	13	13	—	12	—	—	—	—	—
Claims on institutions and corporates with a short-term credit assessment	20	8	1	—	6	—	—	—	5
Collective investments undertakings (CIU)	17	17	6	—	—	—	—	—	—
Equity exposures under risk weighted approach	12	5	—	—	—	—	7	—	—
Other items	3,475	1,992	1,245	337	838	746	644	421	1
Of which: Equity IRB	**1,358**	**1,358**	**1,358**	**—**	**—**	**—**	**—**	**—**	**—**
Simple method	178	178	178	—	—	—	—	—	—
Under the PD/LGD method	428	428	428	—	—	—	—	—	—
Equity exposures under risk weighted approach	753	753	753	—	—	—	—	—	—
Counterparty credit risk (CRR)	**1,254**	**959**	**701**	**125**	**114**	**67**	**177**	**127**	**4**
Of which: standardized approach	1,091	832	670	78	104	60	153	111	2
Of which: internal model method (IMM)	—	—	—	—	—	—	—	—	—
Of which: CCPs	21	14	1	8	1	1	6	6	—
Of which: CVA	141	113	31	38	9	5	17	9	2
Settlement risk	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Securitization exposures in banking book (after cap)	**741**	**383**	**114**	**131**	**345**	**310**	**11**	**11**	**2**
Market risk	**1,378**	**1,027**	**653**	**14**	**11**	**11**	**340**	**96**	**—**
Of which: standardized approach	547	433	60	14	11	11	103	96	—
Of which: internal model method (IMM)	830	594	594	—	—	—	237	—	—
Operational risk	**4,703**	**2,001**	**834**	**546**	**1,170**	**879**	**1,149**	**622**	**383**
Of which: basic indicator approach	—	—	—	—	—	—	—	—	—
Of which: standardized approach	4,703	2,001	834	546	1,170	879	1,149	622	383
Of which: advanced measurement approach	—	—	—	—	—	—	—	—	—
Amounts below the thresholds for deduction and other non-deducted investments (subject to 250% risk weight)	**1,683**	**907**	**765**	**24**	**102**	**—**	**673**	**656**	**—**
Total	**46,314**	**27,296**	**11,991**	**6,641**	**8,471**	**6,472**	**9,270**	**5,960**	**1,277**

Note: Fully-loaded CRR, phased-in IFRS 9. A. Including counterparty credit risk.

This table presents the main changes to capital requirements by credit risk:

Credit risk capital movements [A]

EUR million

	RWAs	Capital requirements
Starting amount (31/12/2020)	**487,745**	**39,020**
Asset size	(15,078)	(1,206)
Model updates	4,407	353
Regulatory	14,058	1,125
Acquisitions and disposals	(1,729)	(138)
Foreign exchange movements	11,482	919
Other	—	—
Ending amount (31/12/2021)	**500,884**	**40,071**

A. Includes capital requirements from equity, securitizations and counterparty risk (excluding CVA and CCP).

Credit risk RWAs increased EUR 13,139 million in 2021, largely driven by exchange rate movements (+EUR 11,482 million), mainly due to the USD's and GBP's appreciation. Regulatory changes (methodology and policy) related to the implementation of the New Default Definition and changes in the calculation of counterparty credit risk exposure (SA-CCR) were also significant in the year. In models, changes arose from TRIM (Targeted Review of Internal Models) in Low Default Portfolios. In terms of asset size, of note was the impact from securitizations the Group carried out in the year.

In short, from a qualitative point of view, Santander's solid capital ratios are consistent with its business model, balance sheet structure and risk profile.

Economic capital

Economic capital is the capital required to cover risks from our activity with a certain level of solvency. We measure it through an internal model. To calculate the required capital, we determine our solvency level based on our long-term rating target of 'A' (above the Kingdom of Spain's); this represents a confidence level of 99.95% (above the regulatory level of 99.90%).

Our economic capital model measurements cover all significant risks incurred in our activity (concentration risk, structural interest rate risk, business risk, pensions risk, deferred tax assets (DTAs), goodwill and others that are beyond the scope of regulatory Pillar 1). It also considers diversification, which is key to determining and understanding our risk profile and solvency in view of our multinational operations and businesses.

Our total risk and related economic capital are less than the sum of the risk and capital of all individual units combined. Because our business spans several countries in a structure of separate legal entities with different customer and product segments and risk types, our earnings are less vulnerable to adverse situations for any given market, portfolio, customer type or risk. Despite increasing economic globalization, economic cycles are not the same and countries are affected differently. This has been evident during the covid-19 pandemic. Groups with a global presence tend to have stabler results and are more resistant to the eventual market or portfolio crises which translates into lower risk.

In contrast to regulatory criteria, we consider certain intangible assets, such as DTAs or goodwill, to retain value, even in a hypothetical resolution, owing to the geographic structure of our subsidiaries. Thus, we can value assets and estimate their unexpected loss and capital impact.

Economic capital is an essential tool for internal management and the development of our strategy, assessing solvency and managing portfolio and business risk. As such, it is a key part of the Supervisory Review and Evaluation Process (SREP).

Regarding Basel Pillar 2, we use our economic model for the internal capital adequacy assessment process (ICAAP). We plan business progression and capital needs under a central scenario and alternative stress scenarios to make sure we meet our solvency objectives even in adverse scenarios.

Economic capital derived metrics help us assess risk-return objectives, price operations based on risk, determine how economically viable projects are, and value country units and business lines to fulfil our overriding objective of maximizing shareholder value.

As a homogeneous risk measure, we can use economic capital to explain how we distribute risk throughout Santander, bringing together different activities and risk types under a single metric.

Given its relevance to internal management, Santander includes several economic capital-derived metrics from both a capital needs and a risk-return point of view, within a conservative risk appetite framework established at both Group and country unit level.

Required economic capital in December 2021 amounted to EUR 60,900 million. Compared to the available economic capital base of EUR 88,790 million, this implies a capital surplus of EUR 27,890 million.

Reconciliation of economic and regulatory capital

EUR million

	2021	2020
Net capital and issuance premiums	55,683	60,557
Reserves and retained profits	62,357	52,902
Valuation adjustments	(34,395)	(35,345)
Minority interests	6,736	6,669
Prudential filters	(637)	(592)
Other [A]	(954)	2,126
Base economic capital available	**88,790**	**86,316**
Deductions	(16,922)	(16,337)
Goodwill	*(13,911)*	*(13,621)*
Other intangible assets	*(2,153)*	*(2,090)*
DTAs	*(859)*	*(627)*
Other	535	(580)
Base regulatory (FL CET1) capital available [B]	**72,402**	**69,399**
Base economic capital available	88,790	86,316
Economic capital required [C]	60,900	60,386
Capital surplus [D]	27,890	25,931

A. Includes: deficit of provisions over economic expected loss, pension assets and other adjustments.

B. Including IFRS 9 transitional arrangements.

C. For a better comparison with regulatory capital, the differences in goodwill due to FX changes are included in the required economic capital. All figures according to EC 2021 methodology.

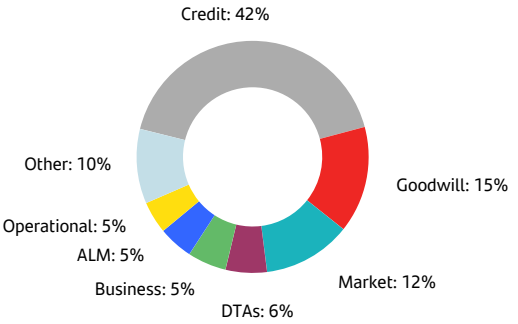
D. If we include the *pro forma* impact of the transactions announced in December 2021 (-16 bp impact on the Group's CET1), the economic capital base would be EUR 87,869 million and the excess capital EUR 26,969 million.

The main difference compared to regulatory CET1 is the treatment of goodwill, other intangible assets and DTAs; we consider them additional capital requirements rather than a deduction from available capital.

The charts below show Group's economic capital needs as at 31 December 2021, by region and risk type.

Distribution of economic capital needs by type of risk

December 2021, %



Our distribution of economic capital among core business areas is an indication of our business and risk diversification. Europe accounted for 47% of capital needs; North America, 21%; South America, 22%; and Digital Consumer Bank (DCB) 9%.

Outside our operating areas, the Corporate Centre mainly takes on goodwill risk and structural exchange rate risk (from maintaining stakes denominated in currencies other than the euro in foreign subsidiaries).

The benefit from diversification included in the economic capital model, including intra-risks (largely similar to geographic diversification) and inter-risk diversification amounted to approximately 25-30%.

Distribution of Group economic capital needs by region and risk type

EUR million. December 2021

Group. Total requirements: 60,900

Corporate Centre 16,042		Europe 21,242		North America 9,578		South America 9,872		DCB 4,166	
All risks:		All risks:		All risks:		All risks:		All risks:	
Goodwill	56%	Credit	49%	Credit	69%	Credit	56%	Credit	68%
Market	27%	Market	11%	Business	7%	Business	11%	Operational	7%
DTAs	15%	Pensions	10%	Fixed Assets	7%	DTAs	7%	Business	7%
Other	1%	ALM	9%	Operational	5%	Operational	7%	Fixed Assets	5%
		Others	21%	Others	12%	Others	18%	Others	12%

RoRAC and Economic Value Added

Since 1993, Santander has been using risk-adjusted return (RoRAC) methodology to:

- calculate economic capital consumption and return for business units, segments, portfolios and customers, to optimize capital allocation;
- measure the management of units through budgetary monitoring of capital consumption and RoRAC; and
- analyse and set prices to make decisions on operations (approvals) and customers (monitoring).

The RoRAC methodology helps us compare the return on operations, customers, portfolios and businesses on a like-for-like basis. We can identify what is obtaining a risk-adjusted return higher than its cost of capital and thus align risk and business management to maximize economic value added (EVA), which is senior management's ultimate goal.

We regularly assess the level and progression of EVA and RoRAC across the Group. EVA is the profit generated above the cost of economic capital employed, and is calculated as follows:

Economic Value Added = underlying consolidated profit – (average economic capital x cost of capital)

We calculate profit by making the necessary adjustments to consolidated profit to eliminate factors outside the ordinary course of business and thus obtain each subsidiary's underlying result for the year.

Additionally, for internal management purposes, we analyse the impact of items that are not covered by our economic capital model but affect reserves without being included in the income statement.

The minimum return on capital a transaction must obtain is determined by the cost of capital (i.e. the minimum compensation required by shareholders). We calculate it by adding the premium shareholders demand to invest in Santander to the risk-free return. The premium depends essentially on the degree of volatility in our share price with respect to market performance. Santander's cost of capital in 2021 was 10.08% (compared to 12.00% in 2020 impacted by higher volatility stemming from the covid-19 crisis).

On top of reviewing the cost of capital every year, Santander's management also estimates a cost of capital for each business unit based on its features (under the philosophy that subsidiaries manage capital and liquidity autonomously) to determine whether each business is capable of creating standalone value.

If a transaction or portfolio obtains a positive return, it contributes to our profits, but only adds economic value when that return exceeds the cost of capital.

This table shows economic value added and RoRAC of the Group's main geographical segments at the end of December 2021. The following figures reflect the economic value added in all the main segments:

Economic Value Added [A] and RoRAC

EUR million

	2021		2020	
Main segments	RoRAC	EVA	RoRAC	EVA
Europe	12.1%	495	6.2%	(1,401)
North America	34.3%	2,380	15.0%	187
South America	30.4%	1,744	26.1%	883
Digital Consumer Bank	33.2%	1,149	33.8%	972
Total Group	**15.0%**	**3,327**	**8.5%**	**(2,529)**

A. The economic value added is calculated with the cost of capital of each unit. The Group's total RoRAC includes the operating units and the Corporate Centre, reflecting the Group's economic capital and its return.

Capital planning and stress tests

Capital stress test exercises are a key tool in banks' dynamic assessments of their risks and solvency. These forward-looking reviews are based on unlikely-but-plausible macroeconomic and idiosyncratic scenarios. They require robust planning models that can translate the effects defined in the projected scenarios to elements that affect solvency.

The ultimate aim of these exercises is to thoroughly assess risks and solvency to determine capital requirements if a bank fails to meet its regulatory and internal capital objectives.

Internally, Santander has a capital stress and planning process to respond to various regulatory exercises which is a key tool integrated within management and strategy.

Internal capital stress and planning aims to ensure sufficient current and future capital, even in unlikely-but-plausible economic scenarios. We estimate results in various business environments (including severe recessions as well as expected macroeconomic environments), based on our initial situation (financial statements, capital base, risk parameters and regulatory and economic ratios) to determine our solvency ratios, usually for a three-year period.

Planning offers a comprehensive view of our capital for the analysed period and in each of the defined scenarios based on regulatory capital and economic capital metrics.

This chart describes the structure in place:

1	**Macroeconomic scenario**	• Central and recession • Idiosyncratic: based on specific risks the entity faces • Multi-year horizon • Reverse stress tests
2	**Balance sheet and income statement forecasts**	• Projection of volumes. Business strategy • Margins and funding costs • Fees and operating expenses • Market shocks and operational losses • Credit losses and provisions. PIT LGD and PD models • IFRS 9 models and migration among stages
3	**Capital requirements forecasts**	• Consistent with projected balance sheet • Regulatory and economic risk parameters (PD, LGD and EAD)
4	**Solvency analysis**	• Available capital base. Profits and dividends • Regulatory and legislative impacts • Capital and solvency ratios • Compliance with capital objectives • Regulatory and economic view
5	**Action plan**	• In the event of failure to comply with internal objectives or regulatory requirements

This structure supports the ultimate objective of capital planning, by making it an important strategic element that:

- ensures current and future solvency, even in adverse economic scenarios;
- ensures comprehensive capital management, analyses specific effects and integrates them into strategic planning;
- enables a more efficient use of capital;
- helps formulate capital management strategy; and
- facilitates communication with the market and supervisors.

Senior managers are fully involved in and closely supervise capital planning under a framework that ensures proper governance and is subject to the robust levels of challenge, review and analysis.

In capital planning and stress analysis exercises, calculating the required provisions under these stress scenarios is key, especially to cover losses on credit portfolios. It is particularly important for income statement forecasts under adverse scenarios.

To calculate loan-loss provisions of the credit portfolio, we use a methodology that ensures provisions cover loan losses projected by internal expected loss models, based on exposure at default (EAD), probability of default (PD) and loss given default (LGD parameters), at all times.

In 2018, we adapted this methodology to incorporate changes brought in by the new IFRS 9 regulations, with models to calculate balances by stages (S1, S2, S3) as well as the movements between them and the loan-loss provisions in accordance with the new standards.

Our capital planning and stress analysis culminate with an analysis of solvency under various scenarios over a set period to measure capital adequacy and ensure we meet all internal capital and regulatory requirements.

Should we fail to meet our capital objectives, we would draw up an action plan with the measures needed to attain the minimum capital desired. We analyse and quantify those measures as part of internal exercises even if we don't need to use them as we exceed the minimum capital thresholds.

Santander carries out its internal stress and capital planning transversally throughout the Group, at the consolidated and local level. Our country units use it as an internal management tool, particularly to respond to local regulatory requirements.

Since the beginning of the economic crisis in 2008, we have undergone eight external stress tests. All proved our strength and solvency in the most extreme and severe macroeconomic scenarios showing that, owing to our business model and geographic diversification, we would still be capable of generating a profit for shareholders while satisfying the most demanding regulatory requirements.

We have also conducted internal stress tests every year since 2008 as part of our ICAAP (Basel Pillar 2). Every test has proven our capacity to confront the most difficult exercises on a global and local level. These capital planning processes are carried out using shared tools throughout the Group.

Due to the special situation resulting from the covid-19 crisis, capital planning capacities and stress tests have allowed us to analyse various pandemic scenarios and ensure capital adequacy under the various possible scenarios derived from the crisis.

In 2021, we incorporated the analysis of the potential impact of climate risks (transition risk and physical risk) into the internal stress exercises in addition to being expressly considered in the definition of macroeconomic scenarios, in line with industry best practices and supervisory expectations.

ECB/EBA 2021 stress test

In July 2021, the European Banking Authority (EBA) published the results of the stress tests carried out on the European Union's 50 leading banks. As in the previous exercise, it did not impose any minimum capital threshold to pass, rather the final results represent an additional variable for the ECB to determine each bank's minimum capital requirement (as part of the Supervisory Review and Evaluation Process - SREP). This exercise included two macroeconomic scenarios (base and adverse), taking the banks' end-2020 balance sheet positions as a starting point, with a three-year time horizon (finishing in 2023). The very improbable adverse scenario considers a sharp deterioration in the macroeconomic environment and financial markets in Europe and the other countries where we operate. For example, the simulation included a cumulative fall in GDP of 3.6%, the impact of an increase in unemployment to 12.1% and a cumulative decline in housing prices of 16.1% in 2023 for the eurozone as a whole.

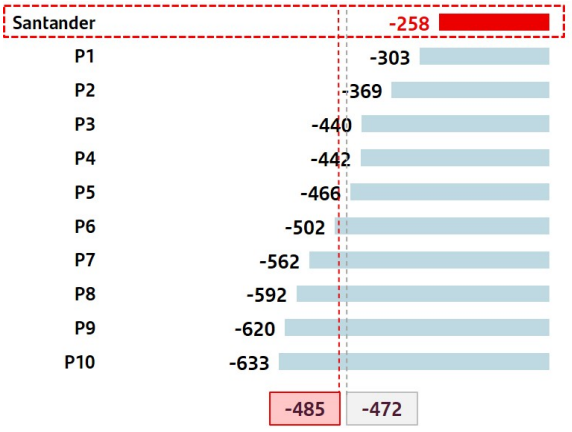
In the adverse scenario, Santander destroyed the least capital among its peers. Our fully-loaded CET1 capital ratio fell 258 basis points (vs the system average of -485 basis points) from 11.89% in 2020 to 9.31% in 2023.

Under the base scenario, Santander also generated the most capital among its peers.

We also generated more profit than our peers and we were the only bank not to incur a cumulative loss over the three-year horizon. In short, we are more resilient than our peers in Europe due to our highly recurrent revenue and profit, a testimony to the strength of our business model and diversification.

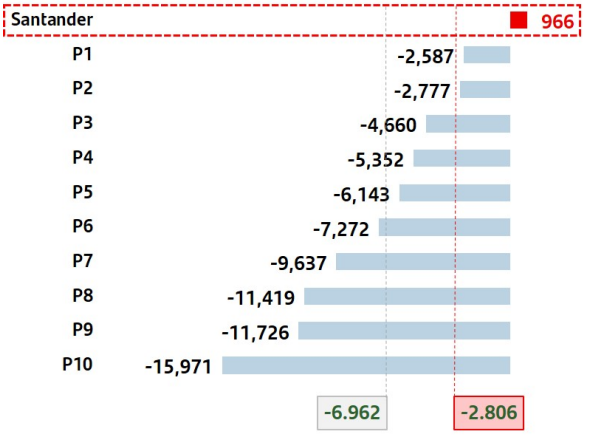
Fully-loaded ratio 2020 vs. 2023

Adverse scenario. Basis points



Profit after tax (accumulated 3 years)

Adverse scenario. EUR million





Total Loss Absorbing Capacity (TLAC) and Minimum Required Eligible Liabilities (MREL)

In November 2015, the FSB published the TLAC term sheet based on the previously published principles for crisis management frameworks. It aims to ensure global systemically important banks (G- SIBs) will have the capacity to absorb losses and recapitalize as required to maintain critical functions during and immediately after resolution proceedings without compromising customer funds, public funds or financial stability.

The TLAC term sheet requires each G-SIB to have an individually set minimum TLAC level which is the greater of (a) 16% of risk-weighted assets from 1 January 2019 and 18% from 1 January 2022, or (b) 6% of the Basel III Tier 1 leverage ratio exposure measure from 1 January 2019, and 6.75% from 1 January 2022.

Some jurisdictions have already transposed the TLAC term sheet into law (as is the case in Europe via the CRR 2 and BRRD 2, and in the US); however, other jurisdictions where we operate (e.g. Brazil), have yet to do so.

In Europe, the final texts of CRR 2 and BRRD 2, which amend the resolution framework, were published in June 2019. One of the main objectives of this revision was to implement the TLAC requirement in Europe.

The CRR 2, which came into force in June 2019, dictates the 16%/18% minimum requirement for G-SIBs as set in the TLAC term sheet. It must be made up of subordinated liabilities (with the exception of a percentage of senior debt - 2.5%/3.5%).

As of 31 December 2021, the TLAC of the resolution group headed by Banco Santander, S.A. stood at 26.86% of risk-weighted assets and 11.83% of the leverage ratio exposure.

The BRRD 2 was transposed into law in Spain in 2021.

G-SIBs also have a Pillar 2 requirement in addition to the minimum CRR requirement, owing to the MREL methodology in the BRRD 2.

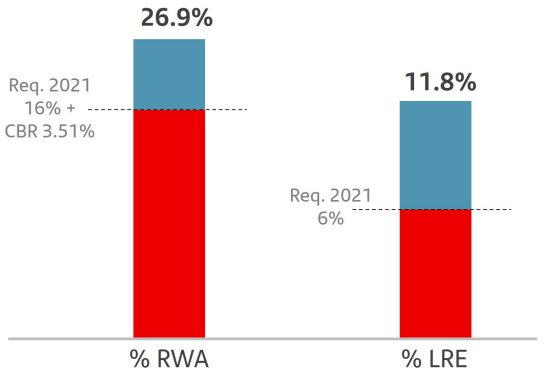
In December 2021, Banco de España formally communicated the (binding) MREL requirement for the Banco Santander, S.A. Resolution Group (sub-consolidated), which needed be met from 1 January 2022. It was set at highest of 29.85% of the Resolution Group's RWAs[1] and 13.82% of the Resolution Group's leverage ratio exposure, based on 31 December 2019 data.

As of 31 December 2021, Banco Santander, S.A. met its MREL requirements having issued eligible instruments during the year. Specifically, 35.35% of RWAs and 18.47% of the leverage ratio exposure respectively.

Of the total MREL requirement, a minimum subordination level was fixed as the larger of 9.04% of RWAs and 6.02% of the leverage ratio exposure. However, the Resolution Group's minimum subordination is determined by TLAC, not by MREL, as the TLAC subordination requirement is greater In December 2021, the MREL subordinated figures of the Resolution Group headed by Banco Santander, S.A. were 32.22% and 16.83% respectively.

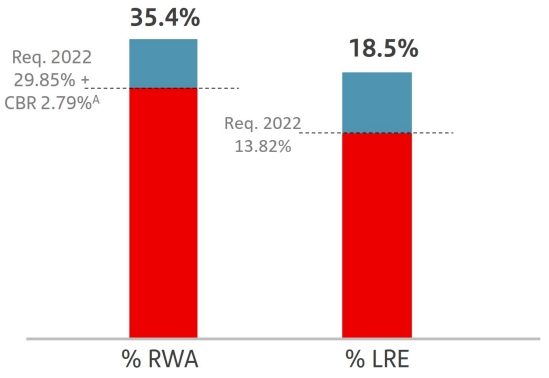
TLAC 2021

%



MREL 2021

%



A. The CBR of 2.79% is obtained by multiplying the 3.51% CBR by the post-MPE Add-on RWAs and dividing the result by the Resolution Group's total RWAs

1. When the requirement is set in terms of RWAs, the CET1 used to cover the combined capital buffers cannot be used to comply with the MREL requirement at the same time.

3.6 Special Situations and Resolution

Corporate Special Situations and Resolution Framework, crisis management, Recovery and Resolution Planning

This section summarizes the main developments in preparing for a potential crisis, focusing on governance mechanisms, activities to prepare and strengthen recovery plans, and initiatives relating to preparing and improving resolvability plans.

Corporate framework for special situations and resolution

As part of our corporate frameworks that regulate the internal governance of important matters that impact the Group's risk profile, we updated the special situations and resolution corporate framework. The board of directors ratified it in Q2 2021. Following corporate level approval, country units now adhere to the updated framework. The process of transposing and adapting the documents of the new crisis management and resolution regulatory tree to local requirements is being finalized.

The lessons learned so far from the covid-19 pandemic moved us to make significant changes to the framework which focus on: (i) early and pre-emptive identification of threats; (ii) coordination mechanisms between units; (iii) simplifying governance procedures; and (iv) promoting a crisis management preparation culture internally, including preparation for resolution and improving resolvability.

The framework enables our units, to comprehensively aggregate and clearly interpret the different mechanisms for monitoring, escalating and managing both financial and non-financial events as well as governance. It helps link the different action plans (e.g. contingency plans, business continuity plans, recovery plan, etc.).

We base crisis governance on a collective decision-making model, that is organized into and operated under severity levels to facilitate flexibility and sequential decision-making. For example, in the most severe stages of a hypothetical crisis, the "Gold" committee, composed of the Group's main executives and supported by the "Silver" forum and other specialist "Bronze" teams, would be the leading decision-making body.

Furthermore, the framework aims to encourage (i) the sharing of best practices between units; and (ii) the continuous collaboration between local and corporate teams (including coordination in the recovery and resolution planning phases) to continue developing our management and control model in the most effective way.

Several training exercises were carried out in 2021, both at corporate and local levels, facilitating the necessary dissemination of the changes and collaborative discussions.

Regardless of these changes, Santander's defining characteristic is its pursuit of excellence. We regularly run simulation and testing exercises to be better prepared for stress situations and to reinforce the collective awareness and culture of the crisis management function.

Recovery plans

Context. Santander drew up its twelfth corporate recovery plan in 2021. It sets out measures we have at our disposal to survive a very severe crisis without extraordinary public aid, in accordance with article 5.3 of the BRRD.

Its primary aim is to test the feasibility, effectiveness and credibility of recovery measures as well as the suitability of the recovery indicators and their respective thresholds, above which decision-making will be escalated to cope with stress situations.

It sets out macroeconomic and financial crisis scenarios which incorporate idiosyncratic and/or systemic events that could lead the Group to trigger the plan.

The recovery plan should not be considered an instrument separate from our structural mechanisms to measure, manage and supervise risk. It includes the risk appetite framework (RAF), the risk appetite statement (RAS), the risk profile assessment (RPA), the business continuity management system (BCMS), the internal assessments of capital and liquidity (ICAAP and ILAAP) and other tools. It is also integrated into the Group's strategic plans.

Progress in 2021. In May, continuing the operational relief offered last year in response to the covid-19 pandemic, the ECB asked banks to focus efforts on the parts of the recovery plan that are essential for crisis preparation and management. We therefore focused on governance and escalation, indicators, measures and scenarios. With regard to the scenarios, the ECB asked banks to develop two stress scenarios related to the possible economic and financial consequences of the covid-19 pandemic: one systemic and one including an idiosyncratic element.

Like last year, and despite this easing of requirements, we prepared a comprehensive plan in 2021 that comprised all chapters and fully covered all of the ECB's recommendations. Specifically:

- New special situations and resolution framework.
- Two new indicator categories (macroeconomic and market) and new capital and asset quality indicators.
- New chapter explaining the Group's subsidiary model and how local crises in the subsidiaries could affect the consolidated capital and liquidity ratios.
- Three stress scenarios to cover a wider range of crisis situations: idiosyncratic, regional and combined (global crisis plus idiosyncratic).
- Greater detail on total recovery capacity including a thorough analysis showing recovery capacity in each time bucket.
- New recovery measures.

The **key takeaways** from our review of the 2021 corporate plan were:

- No material interdependencies between country units.
- Ample recovery capacity in all scenarios from available measures, with an advantage in a recovery situation afforded by our geographic diversification model.
- Sufficient capacity in each subsidiary to emerge from a recovery situation on its own, strengthening capital and liquidity within our autonomous subsidiaries model.
- Sufficiently robust governance to manage financial and non-financial stresses varying in nature and intensity.
- Amid a serious financial or solvency event, no one subsidiary is important enough to trigger the corporate plan by causing the severest recovery indicator levels to be breached.

These factors prove our business model and geographic diversification strategy, based on autonomous subsidiaries, remain firm in a recovery situation.

Regulation and governance. Santander's recovery plan complies with EU regulations and follows the non-binding recommendations of the Financial Stability Board (FSB) and other international bodies.

We submitted our latest plan to the Single Supervisory Mechanism in October 2021; the EBA has six months to make formal considerations.

It comprises the corporate plan (Banco Santander, S.A.) and local plans for the UK, Brazil, Mexico, the US, Germany, Argentina, Chile, Portugal, Norway and a recovery plan summary for Poland (as required). All country units (except Santander Chile and SC Germany) must draw up a local plan in compliance with local regulations and corporate requirements.

Though the board of Banco Santander, S.A. approves the corporate plan, relevant content and figures are previously submitted to and discussed by the Silver forum, Gold committee, risk control committee and the risk supervision, regulation and compliance committee. Local plans are approved by corresponding local bodies in coordination with the Group (as they are included in the corporate plan).

Resolution plans

Santander cooperates with the relevant authorities to prepare resolution plans, providing them with all information they request. The members of the Crisis Management Group (CMG) upheld their decision on our Multiple Point of Entry (MPE) strategy[1] to be used in a hypothetical resolution.

This is based on our legal and business structure, organized into nine resolution groups that can be resolved independently without involving other parts of the organization.

Working meetings with the SRB and their communications (working priorities letters) confirmed that there are no impediments to the bank's resolvability. In fact, the SRB highlighted the significant progress the Group has made in recent years (especially in 2020 and 2021) to improve its resolvability.

In 2021, we prepared our first three-year multi-year plan. Banco Santander, S.A.'s board of directors approved it in February 2021. It set out the following actions:

1) Ensure the bank establishes processes and develops capabilities to: (i) estimate liquidity needs for implementing the resolution strategy; (ii) duly provide information regarding the liquidity position in resolution; and (iii) identify and mobilize the available collateral to obtain funding during and after resolution.

In 2021, we identified key liquidity entities (KLEs) that (i) provide liquidity to other entities in the Group; (ii) depend on the liquidity received from other entities in the Group; or (iii) perform liquidity management functions for the Resolution Group.

We also identified the key liquidity drivers in resolution, which are factors that could potentially trigger a substantial change or deterioration in the bank's liquidity position in resolution.

Finally, we developed a methodology to identify, process and analyse relevant data to estimate the liquidity position in resolution.

2) Ensure information systems can quickly provide the high-quality information required in resolution.

We continued to make our governance of information provided to the resolution authority for drawing up resolution plans stronger and more systematic, including the following projects in 2021:

1. Automation of Santander Consumer Finance's liability data report and additional liability report.
2. Automation of Banco Santander, S.A.'s TLAC/MREL reports.
3. Automated production of the necessary data to carry out a valuation exercise in resolution.
4. Automated production of the dataset for bail-in.

1. With the exception of Santander US whose resolution plans correspond to the individual entities.

3) Guarantee operational continuity in resolution situations.

In 2021, we identified essential services that support core business lines, as well as their operational assets and critical personnel. We also redrafted any service contracts that did not contain the operational continuity clause to include said clause.

We continued to work on making contingency plans for market infrastructure services more operational and executive.

4) Foster a culture of resolvability.

Santander continued to involve more senior managers in resolution planning. We escalated the multi-year plan, which includes the resolution work streams, to the board. We also presenting its progress to other high-level committees (such as the Gold committee, Silver forum, and other bodies). The board and senior management also received resolution training in 2021.

4. Financial information by segment

4.1 Description of segments

We base segment reporting on financial information presented to the chief operating decision maker, which excludes certain statutory results items that distort year-on-year comparisons and are not considered for management reporting. This financial information (underlying basis) is computed by adjusting reported results for the effects of certain gains and losses (e.g. capital gains, write-downs, impairment of goodwill, etc.). These gains and losses are items that management and investors ordinarily identify and consider separately to better understand the underlying trends in the business (see also note 51.c to the Santander financial statements).

Santander has aligned the information in this chapter with the underlying information used internally for management reporting and with that presented in the Group's other public documents.

Santander's executive committee has been selected to be its chief operating decision maker. The Group's operating segments reflect its organizational and managerial structures. The executive committee reviews internal reporting based on these segments to assess performance and allocate resources.

The segments are split by geographic area in which profits are earned and type of business. We prepare the information by aggregating the figures for Santander's various geographic areas and business units, relating it to both the accounting data of the business units integrated in each segment and that provided by management information systems. The same general principles as those used in the Group are applied.

On 9 April 2021, we announced that, starting and effective with the financial information for the first quarter of 2021, we would carry out a change in our reportable segments to reflect our new organizational and management structure.

These changes in the reportable segments aim to align the segment information with their management and have no impact on the Group's accounting figures.

a. Main changes in the composition of Santander's segments made in April 2021

The main changes, which have been applied to management information for all periods included in the consolidated financial statements, are the following:

Primary segments

1. Creation of the new Digital Consumer Bank (DCB) segment, which includes:
   - Santander Consumer Finance (SCF), previously included in the Europe segment, and the consumer finance business in the United Kingdom, previously recorded in the country.
   - Our fully-digital bank Openbank and the Open Digital Services (ODS) platform, which were previously included in the Santander Global Platform segment.
2. Santander Global Platform (SGP), which incorporated our global digital services under a single unit, is no longer a primary segment. Its activities have been distributed as follows:
   - Openbank and Open Digital Services (ODS), which, as mentioned above, are now included under the new Digital Consumer Bank reporting segment.
   - The business recorded in Global Payment Services (Merchant Acquiring, International Trade and Consumer) has been allocated to the three main geographic segments, Europe, North America and South America, with no impact on the information reported for each country.

Secondary segments

1. Creation of the PagoNxt segment, which incorporates simple and accessible digital payment solutions to drive customer loyalty and allows us to combine our most disruptive payment businesses into a single autonomous company, providing global technology solutions for our banks and new customers in the open market, and which has been structured into three businesses, previously included in SGP:
   - Merchant Acquiring: acquiring solutions for merchants.
   - International Trade: solutions for SMEs and companies operating internationally.
   - Consumer: payment solutions for individuals aimed at underbanked populations.
2. Annual adjustment of the perimeter of the Global Customer Relationship Model between Retail Banking and Santander Corporate & Investment Banking and between Retail Banking and Wealth Management & Insurance.
3. Elimination of the Santander Global Platform reporting segment:
   - Openbank and ODS are now recorded in the Retail Banking segment.
   - The remaining Santander Global Platform businesses form the new PagoNxt reporting segment.

The Group recasted the corresponding information of earlier periods considering the changes included in this section. As stated above, group consolidated figures remain unchanged.

b. Current composition of Group segments

Primary segments

This primary level of segmentation, which is based on the Group's management structure, comprises five reportable segments: four operating areas plus the Corporate Centre. The operating areas are:

Europe: which comprises all business activity carried out in the region, except that included in Digital Consumer Bank. Detailed financial information is provided on Spain, the UK, Portugal and Poland.

North America: which comprises all the business activities carried out in Mexico and the US, which includes the holding company (SHUSA) and the businesses of Santander Bank, Santander Consumer USA, the specialized business unit Banco Santander International, Santander Investment Securities (SIS) and the New York branch.

South America: includes all the financial activities carried out by Santander through its banks and subsidiary banks in the region. Detailed information is provided on Brazil, Chile, Argentina, Uruguay, Peru and Colombia.

Digital Consumer Bank: includes Santander Consumer Finance, which incorporates the entire consumer finance business in Europe, Openbank and ODS.

Secondary segments

At this secondary level, Santander is structured into Retail Banking, Santander Corporate & Investment Banking (SCIB), Wealth Management & Insurance (WM&I) and PagoNxt.

Retail Banking: this covers all customer banking businesses, including consumer finance, except those of corporate banking which are managed through Santander Corporate & Investment Banking, asset management, private banking and insurance, which are managed by Wealth Management & Insurance. The results of the hedging positions in each country are also included, conducted within the sphere of their respective assets and liabilities committees.

Santander Corporate & Investment Banking (SCIB): this business reflects revenue from global corporate banking, investment banking and markets worldwide including treasuries managed globally (always after the appropriate distribution with Retail Banking customers), as well as equity business.

Wealth Management & Insurance: includes the asset management business (Santander Asset Management), the corporate unit of Private Banking and International Private Banking in Miami and Switzerland and the insurance business (Santander Insurance).

PagoNxt: this includes digital payment solutions, providing global technology solutions for our banks and new customers in the open market. It is structured in three businesses: Merchant Acquiring, International Trade and Consumer.

In addition to these operating units, both primary and secondary segments, the Group continues to maintain the area of Corporate Centre, that includes the centralized activities relating to equity stakes in financial companies, financial management of the structural exchange rate position, assumed within the sphere of the Group's assets and liabilities committee, as well as management of liquidity and of shareholders' equity via issuances.

As the Group's holding entity, this area manages all capital and reserves and allocations of capital and liquidity with the rest of businesses. It also incorporates goodwill impairment but not the costs related to the Group's central services (charged to the areas), except for corporate and institutional expenses related to the Group's functioning.

The businesses included in each of the primary segments in this report and the accounting principles under which their results are presented here may differ from the businesses included and accounting principles applied in the financial information separately prepared and disclosed by our subsidiaries (some of which are publicly listed) which in name or geographical description may seem to correspond to the business areas covered in this report. Accordingly, the results of operations and trends shown for our business areas in this document may differ materially from those of such subsidiaries.

As described in section 3 'Group financial performance' above, the results of our business areas presented below are provided on the basis of underlying results only and generally including the impact of foreign exchange rate fluctuations. However, for a better understanding of the changes in the performance of our business areas, we also provide and discuss the year-on-year changes to our results excluding such exchange rate impacts.

The statements included in this section regarding Santander's competitiveness and that of its subsidiaries have been produced by the Group based on public information (corporate websites of competing entities and information published by national banking institutions).

4.2 Summary of the Group's main business areas' income statements

2021

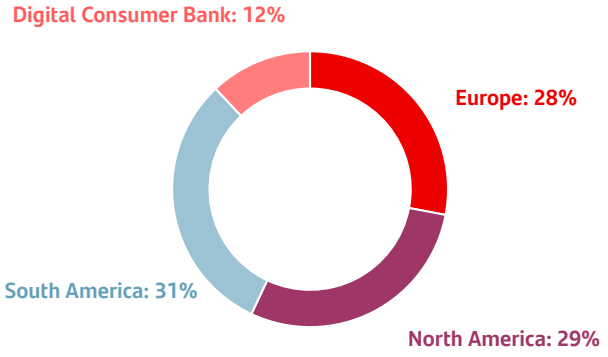
Main items of the underlying income statement

EUR million

Primary segments	Net interest income	Net fee income	Total income	Net operating income	Profit before tax	Underlying profit attributable to the parent
Europe	**10,952**	**4,344**	**16,312**	**7,994**	**4,411**	**2,978**
Spain	3,994	2,482	7,006	3,666	1,307	957
United Kingdom	4,431	434	4,863	2,271	2,197	1,570
Portugal	751	441	1,341	778	714	482
Poland	1,049	518	1,646	984	380	161
Other	726	470	1,455	294	(187)	(191)
North America	**8,204**	**1,644**	**10,986**	**6,019**	**4,664**	**3,053**
US	5,405	782	7,383	4,187	3,652	2,326
Mexico	2,799	828	3,579	1,936	1,126	835
Other	0	34	23	(104)	(114)	(108)
South America	**11,323**	**3,721**	**15,353**	**9,974**	**6,249**	**3,328**
Brazil	7,875	2,728	10,884	7,649	4,618	2,325
Chile	1,984	394	2,457	1,514	1,158	637
Argentina	1,070	420	1,393	587	311	274
Other	395	179	620	223	162	92
Digital Consumer Bank	**4,281**	**821**	**5,339**	**2,934**	**2,213**	1,332
Corporate Centre	**(1,390)**	**(28)**	**(1,586)**	**(1,931)**	**(2,277)**	**(2,037)**
TOTAL GROUP	**33,370**	**10,502**	**46,404**	**24,989**	**15,260**	**8,654**
Secondary segments						
Retail Banking	**31,389**	**7,010**	**39,636**	**22,443**	**13,265**	**7,869**
Corporate & Investment Banking	**2,995**	**1,750**	**5,692**	**3,392**	**3,251**	**2,167**
Wealth Management & Insurance	**375**	**1,276**	**2,166**	**1,264**	**1,247**	**907**
PagoNxt	**1**	**493**	**495**	**(178)**	**(227)**	**(253)**
Corporate Centre	**(1,390)**	**(28)**	**(1,586)**	**(1,931)**	**(2,277)**	**(2,037)**
TOTAL GROUP	**33,370**	**10,502**	**46,404**	**24,989**	**15,260**	**8,654**

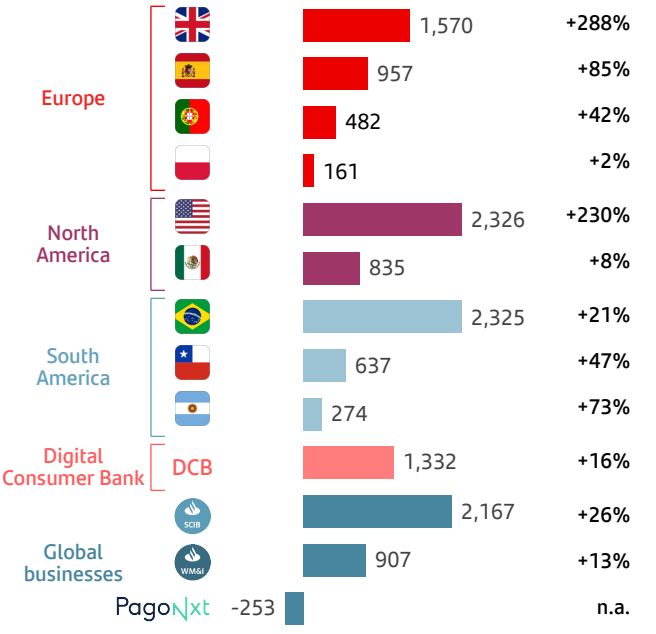
Underlying profit attributable to the parent distribution [A]

2021



Underlying profit attributable to the parent. 2021

EUR million. % change YoY in constant euros



A. As a % of operating areas. Excluding the Corporate Centre.

2020

Main items of the underlying income statement

EUR million

Primary segments	Net interest income	Net fee income	Total income	Net operating income	Profit before tax	Underlying profit attributable to the parent
Europe	**9,911**	**4,000**	**14,673**	**6,398**	**2,084**	**1,413**
Spain	3,957	2,314	6,782	3,175	715	517
United Kingdom	3,504	494	3,980	1,441	508	391
Portugal	787	388	1,296	706	483	338
Poland	1,037	452	1,524	895	370	162
Other	627	351	1,090	181	8	5
North America	**8,470**	**1,684**	**11,034**	**6,357**	**2,307**	**1,472**
US	5,645	889	7,360	4,281	1,250	731
Mexico	2,825	772	3,651	2,098	1,082	762
Other	1	24	23	(23)	(25)	(20)
South America	**10,723**	**3,589**	**14,868**	**9,511**	**5,267**	**2,907**
Brazil	7,625	2,824	10,866	7,325	4,045	2,113
Chile	1,787	335	2,263	1,363	785	432
Argentina	912	273	1,128	496	200	179
Other	399	158	611	327	238	183
Digital Consumer Bank	**4,263**	**771**	**5,166**	**2,837**	**1,929**	**1,133**
Corporate Centre	**(1,374)**	**(29)**	**(1,141)**	**(1,470)**	**(1,912)**	**(1,844)**
TOTAL GROUP	**31,994**	**10,015**	**44,600**	**23,633**	**9,674**	**5,081**

Secondary segments						
Retail Banking	**30,056**	**6,987**	**38,022**	**20,736**	**7,866**	**4,420**
Corporate & Investment Banking	**2,918**	**1,542**	**5,332**	**3,294**	**2,689**	**1,798**
Wealth Management & Insurance	**394**	**1,153**	**2,030**	**1,159**	**1,132**	**823**
PagoNxt	**(1)**	**362**	**356**	**(86)**	**(101)**	**(116)**
Corporate Centre	**(1,374)**	**(29)**	**(1,141)**	**(1,470)**	**(1,912)**	**(1,844)**
TOTAL GROUP	**31,994**	**10,015**	**44,600**	**23,633**	**9,674**	**5,081**

4.3 Primary segments



António Simões

Regional Head of Europe and CEO of Santander Spain

Europe

Underlying attributable profit

EUR 2,978 Mn

"One Europe is about the fundamental transformation of our business. In 2021, we laid the foundations of that change and moving towards a common operating model"

Strategy

Our strategy in Europe is to maintain the focus on customer experience and service quality, while making the necessary **structural changes to develop a common operating model** across the region

Business performance[1]

Customer funds rose 6% driven by retail deposits and mutual funds. **Loans and advances to customers were 3% higher,** with strong growth in individuals

Results[1]

Underlying attributable profit rose 110% year-on-year underpinned by NII and net fee income growth, efficiency improvement and the lower cost of credit

1. Excluding the exchange rate impact.

Strategy

The aim of One Santander is to create a better bank in Europe, that our customers and employees feel a deep connection with while delivering sustainable value to shareholders and society by:

- serving our customers better to grow our business, focusing on capital efficient opportunities (including SCIB and WM&I), simplifying our mass market value proposition, improving customer experience and engaging with PagoNxt;
- making headway with our omnichannel strategy, redefining customer interaction, accelerating our digital agenda and maintaining close relationships through our teams; and
- creating a common operating model, to serve our businesses through shared technology platforms and automated operations, leveraging shared services. This should enable us to become a more agile organization with one aligned team across Europe.

Our ongoing structural changes aim to deliver revenue growth and significant cost savings, resulting in positive operating jaws. This is consistent with the commitment we announced in October 2020 to deliver EUR 1 billion additional cost savings by 2022 year end.

In 2021, we laid the foundations for our transformation, through structure simplification, the convergence to our Everyday Banking value proposition across the countries, the launch of a common app in Spain, Portugal and Poland, and started to offer homogeneous payment products. As a result, we:

- improved service quality, reflected in achieving a top 3 NPS position in our core markets;
- increased revenue and improved efficiency 5.4 pp year-on-year; and
- doubled Europe's return on equity in terms of underlying RoTE, from 3.6% in 2020 to 7.4% in 2021.

The **strategy by country in 2021** was as follows:

Spain

Economic activity picked up in the year, particularly reflected in individuals.

- In individuals, higher demand for loans and positive trends in protection insurance drove commercial dynamism. All of this was channelled through our mobile app.
- In corporates, performance was largely shaped by ICO loans granted in 2020, coupled with the integrated management platform for Next Generation EU programmes (available to customers and non-customers).
- In Private Banking, we consolidated our position as market leader through customer attraction and digital interaction.
- In SCIB, we maintained our leadership in volumes and number of transactions in the main league tables.

In line with One Santander's regional strategy in Europe, we continued to make headway with business transformation and product simplification.

We incorporated the more than 3,000 MAPFRE points of sale where our products are offered. We also launched the rebranding campaign *Por ti, los primeros*.

We continued to push our digital transformation process and develop new product, services and process capabilities. Our app for individuals, rolled out in 2020, led the *Aqmetrix* ranking and was successfully exported to other countries such as Portugal and Poland. We also launched a new app and website for businesses, including a wider service proposition. As a result, *Euromoney* named us Best Digital Bank in Western Europe in 2021.

United Kingdom

We are delivering on our strategy, focusing on improved customer loyalty.

We continued to enhance our operating model, by digitalizing the business while simplifying its structure and automating processes.

- The number of digital customers reached 6.6 million, up 6% year-on-year.
- We completed the transfer of the wholesale banking business out of the UK perimeter, separating it from the retail banking and asset management businesses.
- We enhanced our Breakthrough initiative that helps companies (mainly SMEs) to re-focus their strategies post-pandemic.

We continued to run One Santander-related projects, such as the Transformation for Success programme aimed at boosting productivity.

Portugal

Against a backdrop of economic recovery, our main priority was to increase customer loyalty by:

- implementing a more agile and simpler commercial and digital transformation plan, that built on already high customer satisfaction;
- strengthening our position as the leading bank in lending, following double-digit growth in new mortgage lending and above-market increases in corporate loans, while maintaining high credit quality; and
- maintaining our leadership in efficiency without compromising quality customer service.

Loyal Customers	Europe	Spain	UK	Portugal	Poland
Thousands	10,286	2,772	4,389	860	2,266
YoY	+3%	+5%	-1%	+6%	+7%

Digital Customers	Europe	Spain	UK	Portugal	Poland
Thousands	16,216	5,412	6,635	1,000	2,998
YoY	+6%	+3%	+6%	+7%	+9%

Poland

Following the impact of the covid-19 crisis in 2020, we focused on returning to pre-pandemic activity levels and to position our brand as one of the banks with the highest customer satisfaction ratings, ranking top 3 in 2021 by NPS.

- We focused on digitalizing and simplifying our catalogue, which reduced the number of marketed products, processes and the complexity of the organization.
- In retail banking, we streamlined online processes for account openings which led to an increase in the number of digital customers (+9% year-on-year) and record new lending.
- In business and corporate banking, we focused on the development of the iBiznes24 app (launched in 2020) and used it to build a common platform to offer comprehensive services to our customers.

Business performance

The individuals segment recorded sharp growth in all countries. In line with our strategy, WM&I also grew strongly and CIB increased its revenue at double-digit rates.

Loans and advances to customers were 5% higher year-on-year. In gross terms, excluding reverse repurchase agreements and the exchange rate impact, they rose 3%. We saw broad-based growth in all countries especially in mortgages in the UK, individuals in Spain, mortgages and SMEs in Portugal and individuals, SMEs and CIB in Poland.

Customer deposits increased by 6% compared to 2020. Excluding repurchase agreements and the FX impact, they were up 5%, as demand deposits offset the drop in time deposits.

Mutual funds grew 16% in constant euros, with broad-based growth across countries, with customer funds up 6% (excluding the exchange rate impact).

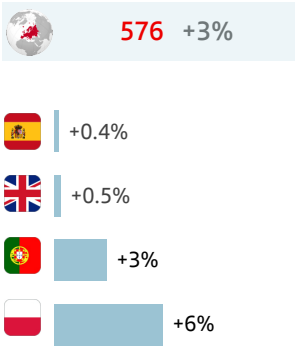
Results

Underlying attributable profit in 2021 was EUR 2,978 million (28% of the Group's total operating areas). Compared to 2020, underlying attributable profit was up 111% and +110% in constant euros, as follows:

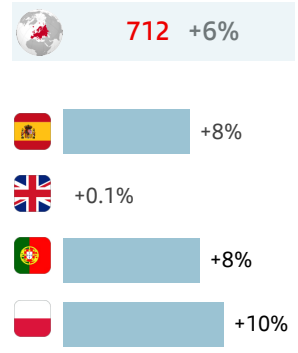
- Total income was up 11%, with increased net interest income (+10%), benefitting from higher volumes, interest rate management and the positive TLTRO impact. Net fee income rose 9% spurred by greater commercial activity and business growth in WM&I and CIB.
- Despite inflation, increased activity and necessary investments in IT, significant restructuring efforts in all countries and cost control left administrative expenses and amortizations flat by year-end. As a result, net operating income rose 24%.
- Net loan-loss provisions dropped 32% compared to 2020, due to covid-19-related provisions recorded in 2020 that were partially released in 2021.
- Other gains (losses) and provisions increased 32%, mainly due to Swiss franc mortgage-related charges.

Europe. Business performance.

December 2021. EUR billion and YoY % change in constant euros



Gross loans and advances to customers excl. reverse repos



Customer deposits excl. repos + mutual funds

Europe. Underlying income statement

EUR million and % change

	2021	2020	/ 2020 %	/ 2020 % excl. FX
Revenue	16,312	14,673	+11	+11
Expenses	-8,318	-8,275	+1	0
Net operating income	**7,994**	**6,398**	**+25**	**+24**
LLPs	-2,294	-3,344	-31	-32
PBT	4,411	2,084	+112	+111
Underlying attrib. profit	**2,978**	**1,413**	**+111**	**+110**

Detailed financial information in section 4.6 'Appendix'

Spain

Underlying attributable profit
EUR 957 Mn

Business performance

Activity in the individuals segment picked up in 2021, especially in residential mortgages (where we reached record highs in new lending), and in consumer credit (which recovered to pre-pandemic levels in Q2). As a result, we gained market share in both products.

In corporates, signs of recovery emerged in H2'21, with growth in working capital management (+15% year-on-year). However, the demand for loans slumped due to the extensions of grace periods in ICO funding and expectations regarding the Next Generation EU funds.

In transactional products, we gained significant market share and expanded our customer base in PoS, which was reflected in a 44% increase in turnover compared to the previous year. Both credit and debit card turnover rose 17% year-on-year.

Loans and advances to customers rose 0.4% versus 2020. In gross terms, excluding reverse repurchase agreements, growth was also 0.4%, driven by individuals and institutions.

Customer deposits increased 5% compared to 2020. Excluding repos, growth was also 5%. Mutual funds grew 16% driven by sustained net positive inflows in the last seven quarters. Customer funds rose 8%.

Results

Underlying attributable profit amounted to EUR 957 million (9% of the Group's total operating areas), 85% higher than 2020. By line:

- Total income increased 3% propelled by the positive performance in net fee income (+7%), driven by transactional fees, insurance, and mutual funds, and, to a lesser extent, net interest income (+1%), supported by TLTROs.
- Our cost reduction efforts continued to bear fruit (-7% year-on-year), improving the efficiency ratio by 5.5 pp to 47.7%. Net operating income increased 15%.
- Net loan-loss provisions fell 8%, which enabled the cost of credit to improve 9 bps year-on-year.
- Other gains (losses) and provisions increased due to higher operational risks and contingencies.

Spain. Underlying income statement

EUR million and % change

	2021	2020	/ 2020 %
Revenue	7,006	6,782	+3
Expenses	-3,340	-3,607	-7
Net operating income	**3,666**	**3,175**	**+15**
LLPs	-1,833	-2,001	-8
PBT	1,307	715	+83
Underlying attrib. profit	**957**	**517**	**+85**

Detailed financial information in section 4.6 'Appendix'

United Kingdom

Underlying attributable profit
EUR 1,570 Mn

Business performance

We delivered a very strong performance in 2021 against a challenging backdrop. Our strategy remains focused on customer loyalty, simplification, improved efficiency and sustainable growth, while delivering outstanding customer experience. We are transforming the business to meet changing customer needs and delivering on our purpose to help people and businesses prosper.

The increasing use of digital channels is demonstrated by our retention of 72% of refinanced mortgage loans thanks to new digital retention journeys, and we opened 90% of new current accounts and 98% of credit cards through digital channels. We also transformed our ways of working and reduced our head office and branch property estate.

Strong mortgage growth, with GBP 7.5 bn net mortgage lending (GBP 30.7 bn of gross new lending) in a buoyant housing market. This performance was not reflected in total lending balances due to the transfer of the CIB business to the London branch. In gross terms excluding repos and the FX impact, loans and advances to customers were 0.5% higher.

Customer deposits rose 5%. Excluding repurchase agreements and the exchange rate impact, customer deposits and total customer funds saw no material change. Mutual funds were 6% higher.

Results

Underlying attributable profit was EUR 1,570 million in 2021 (15% of the Group's total operating areas), four times that of 2020. In constant euros, growth was 288%, as follows:

- Total income was up 18%, driven by net interest income growth (+22%) from increased lending volumes and lower cost of funding.
- Administrative expenses and amortizations dropped 1%, due to efficiency savings from our transformation programme, offsetting ongoing investments in IT and the business, as well as costs related to greater activity. As a result, net operating income was up 52%.
- We recorded a net credit impairment write-back of EUR 245 million, due to the improved economic outlook and partial release of covid-19 provisions from 2020.
- The negative impact from other gains (losses) and provisions increased compared to 2020, owing to legal contingencies.

United Kingdom. Underlying income statement

EUR million and % change

	2021	2020	/ 2020 %	% excl. FX
Revenue	4,863	3,980	+22	+18
Expenses	-2,592	-2,539	+2	-1
Net operating income	**2,271**	**1,441**	**+58**	**+52**
LLPs	245	-677	—	—
PBT	2,197	508	+332	+318
Underlying attrib. profit	**1,570**	**391**	**+301**	**+288**

Detailed financial information in section 4.6 'Appendix'

Portugal

Underlying attributable profit
EUR 482 Mn

Business performance

Our digitalization-led transformation strategy was reflected in the number of digital customers (+7%). The simplification of our processes and commercial proposition drove double-digit growth in new mortgage lending and above-market increases in corporate loans, reaching new lending market shares greater than 20%.

Loans and advances to customers rose 3%, as well as in gross terms and excluding reverse repurchase agreements, while the NPL ratio improved to 3.4%.

We focused on ensuring the funds we capture are efficient in terms of costs and return on capital, recording strong growth in both mutual funds and insurance premiums.

Customer deposits increased 6% boosted by the jump in demand deposits. Mutual funds grew 33%. As a result, customer funds increased 8% versus 2020.

Results

Underlying attributable profit amounted to EUR 482 million (5% of the Group's total operating areas), 42% more year-on-year, backed by our efficiency (42%) and improved cost of credit.

- Total income was up 3%, underpinned by net fee income (+14%) that was boosted by transactional fees, insurance and mutual funds, and ALCO portfolio sales.
- We continued to implement our operating model transformation plan and improve the productivity of our network, leading to a 5% reduction in administrative expenses and amortizations. As a result, net operating income rose 10%.
- Credit quality improvement enabled loan-loss provisions to fall to EUR 38 million, driving the cost of credit to a low of 9 bps.
- Other gains (losses) and provisions amounted to a loss of -EUR 26 million compared to -EUR 29 million in 2020.

Portugal. Underlying income statement

EUR million and % change

	2021	2020	/ 2020 %
Revenue	1,341	1,296	+3
Expenses	-563	-590	-5
Net operating income	**778**	**706**	**+10**
LLPs	-38	-193	-80
PBT	714	483	+48
Underlying attrib. profit	**482**	**338**	**+42**

Detailed financial information in section 4.6 'Appendix'

Poland

Underlying attributable profit
EUR 161 Mn

Business performance

In 2021, we focused on recovering pre-pandemic levels. We rapidly enhanced our digital capabilities, regaining the third position in NPS, and aligned our commercial proposition with our customers' needs.

Loans and advances to customers rose 6%. In gross terms, excluding reverse repurchase agreements and exchange rate impact, growth was also 6%, driven by retail, where we hit record highs in mortgage sales, digital loans, bancassurance and SME lending. In CIB, we consolidated our market leadership as one of the country's preferred banks for executing capital market transactions.

Customer deposits increased 9% compared to 2020, +10% excluding repos and the exchange rate impact. Demand deposits spiked in wholesale banking, individuals and SMEs. Mutual fund growth remained positive, boosting growth in customer funds (+10% in constant euros).

Results

Underlying attributable profit amounted to EUR 161 million (2% of the Group's total operating areas). Compared to 2020, profit dropped 1% but grew 2% in constant euros, as follows:

- Total income was 11% higher driven by transactional and WM&I fee income, and net interest income, as NII pressures eased following interest rate hikes in Q4.
- Administrative expenses and amortizations were up 8% affected by high inflation and costs related to the rebound in activity. Net operating income rose 13%.
- Loan-loss provisions plummeted, which enabled cost of credit to improve.
- The negative impact from other gains (losses) and provisions (including the charges related to Swiss franc mortgages which distort the year-on-year comparison) increased 113% to -EUR 404 million.

Poland. Underlying income statement

EUR million and % change

	2021	2020	/ 2020 %	% excl. FX
Revenue	1,646	1,524	+8	+11
Expenses	-663	-629	+5	+8
Net operating income	**984**	**895**	**+10**	**+13**
LLPs	-200	-330	-39	-38
PBT	380	370	+3	+6
Underlying attrib. profit	**161**	**162**	**-1**	**+2**

Detailed financial information in section 4.6 'Appendix'



Héctor Grisi Checa

Regional Head of North America and CEO of Santander México

North America

Underlying attributable profit

EUR 3,053 Mn

"We provide a full range of financial services with particular focus on retail, private and corporate banking"

Strategy

In North America, the Group's strategy is to accelerate profitable growth in the region, increase **collaboration between countries,** create a joint value proposition and implement local priorities

Business performance [1]

Customer funds surged 9% boosted by retail and corporate deposits in the US and mutual funds. **Loans and advances to customers increased 3%,** driven by overall growth in Mexico and in auto in the US

Results [1]

Underlying attributable profit surged 109% year-on-year, driven largely by higher revenue in the US and lower LLPs in the region

1. Excluding the exchange rates impact.

Strategy

In North America, our aim is to create a joint value proposition that boosts profitable growth in the region by leveraging the US's and Mexico's individual strengths and the Group's global digital platforms.

In 2021, we continued with our strategy to deploy capital to the most profitable businesses.

- In Q1, the Group announced its intention to repurchase the outstanding c. 8.3% stake in Santander México it did not own. This transaction closed in Q4 with the Group having paid MXN 5.17 bn for Santander México shares and USD 138.5 million for its ADSs acquired in this operation, increasing its stake by 4.5% to 96.2%.
- In Q2, BSI completed the acquisition of the Miami office of Crédit Agricole's global wealth management company.
- In Q3, SHUSA entered into a definitive agreement with SC USA to acquire the remaining common SC USA stock that it did not own. This deal closed on 31 January 2022.
- Also in Q3, SHUSA reached an agreement to acquire Amherst Pierpont Securities however it remains subject to completion, regulatory approval and other conditions.

Synergies between countries leverage joint initiatives in our regional strategy, including:

- further development of the USMX trade corridor. Revenue increased as CIB and Commercial Banking continued to deepen relationships with existing customers;
- boosting customer attraction and retention through loyalty strategies, while broadening our tailored products and services proposition for a more straightforward customer experience. We are also working on developing payment solutions for the USMX trade corridor and leveraging PagoNxt in line with the Group's strategy;
- improved customer interaction through new segmentation. In the US, we launched a value proposition aimed at servicing affluent customers. In Mexico, we implemented a service model for high-income customers differentiating the value proposition into three segments for a more customer-focused experience; and
- leveraging our regional capabilities to optimize expenses, improve profitability and increase collaboration between the US and Mexico and with the Group and continue reducing duplication in the operating model, platform and architecture.

We are also consolidating IT functions across the region to address common challenges, comprising operations (know-how, digitalization, hubs, front-office and back-office) and the integration of the regional IT platform, MEXUS.

Our **strategy by country in 2021 was as follows**:

United States

Santander US is positioned to maintain profitability above cost of capital across core businesses.

We are refocusing our operations in the US around our consumer franchise and fee-based businesses that benefit from the Group's connectivity or have a distinct competitive advantage.

The simplification of our US businesses anchored in disciplined expense management and capital allocation is leading us to discontinue our home lending product operations and to review certain C&I segments.

The strategic investments we announced in 2021 will improve our competitiveness and capture revenue and cost synergies (Amherst Pierpont and SC USA minorities).

Our strategy has four key pillars:

- **Simplify our operating model (One Santander US)**: optimize our Auto business by integrating our origination and funding strategy across our bank and finance company platforms.
- **Drive organic growth across our profitable business lines:**
  - Consumer: Become a more relevant player in auto near-prime and prime segments through other OEM partnerships and relationships with large national dealer groups.
  - Commercial: Expand multifamily direct origination capabilities.
  - CIB: Deepen and up tier relationships with corporates; successfully integrate APS/SIS.
  - Wealth Management: Offshore market growth and capabilities to compete in the onshore market for Latin American individuals domiciled in the US.
- **Transformation of Consumer and Commercial Banking segments**: Enhance value proposition, customer service and digital capabilities and drive a customer-centric mindset across the organization to deliver customer growth and product penetration.
- **Long term optionality**: global Group initiatives to drive optionality in digital banking and payments.

Mexico

Multichannel innovation and digital channel momentum continued to strengthen our value proposition and introduce new products and services, allowing us to improve our customer attraction and loyalty strategy.

- We continued to make headway with projects to generate synergies between commercial areas, in particular the project to increase profitability through the attraction of new payrolls and portabilities. We also improved our value proposition for collections and payments through new commercial alliances.
- Our digital focus prompted campaigns to promote the use of electronic signatures and digital cards, such as the Like-U credit card, which allows customers to make online purchases, tailor benefits and support social causes.
- We strengthening our real-time capabilities and implementing direct communication via WhatsApp to provide more direct and fluid digital customer assistance.
- We confirmed a deal to partner with Samsung and MasterCard and launched Members Wallet, which includes such services as financing, payments, and balance and movement queries.

In **mortgages**, we are one of the main originators due to our innovative products and services, such as Hipoteca Plus and Hipoteca Free. We were the first bank in Mexico to offer an interest rate tailored to the customer's profile.

In **auto**, we doubled our market share in one year. It exceeded 12% in December, due in part to a new alliance with Honda (together with the already established partnerships with Mazda, Tesla, Suzuki, Peugeot, among others).

In **SMEs**, partnerships with Contpaqi and Getnet helped attract digital customers. We launched Getnet's G Store, an initiative that enables SMEs to digitalize their business through an online store, developed by a professional team. We signed commercial alliances with the main chambers of commerce and launched TDC Agro which provides financing adapted to production cycles.

We continued to promote **financial inclusion and empowerment** through Tuiio. We were named World's Best Bank for Financial Inclusion by *Euromoney*.

Loyal customers	North America	United States	Mexico
Thousands	4,226	373	3,853
YoY	+7%	+8%	+7%

Digital customers	North America	United States	Mexico
Thousands	6,706	1,036	5,499
YoY	+9%	+2%	+10%

Business performance

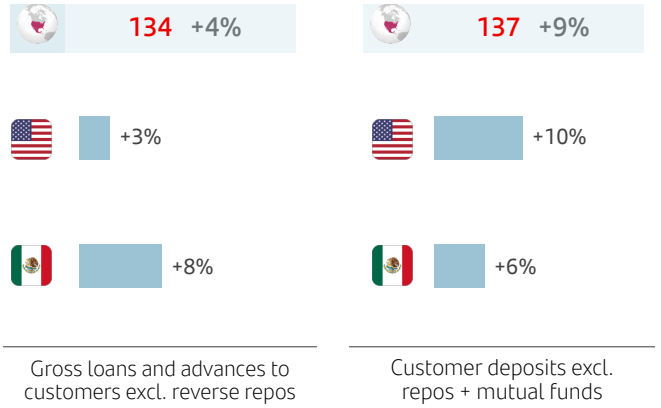
Loans and advances to customers grew strongly year-on-year, up 14%. In gross terms, excluding reverse repurchase agreements and the exchange rate impact, they rose 3% boosted by overall growth in Mexico (except SMEs) and lending growth in auto in the US. Without the impact of the Bluestem portfolio disposal, growth was 4%.

Customer deposits grew significantly compared to 2020 (+19%). Excluding repurchase agreements and the exchange rate impact, growth was 7% driven by retail and corporate deposits in the US and demand deposits in Mexico.

Mutual funds were up 15% in constant euros owing to our strong performances in both countries, reflecting the high level of liquidity in the market and success with our customer attraction and loyalty strategy. As a result, customer funds increased 9% in constant euros.

North America. Business performance

December 2021. EUR billion and YoY % change in constant euros [A]



Gross loans and advances to customers excl. reverse repos

Customer deposits excl. repos + mutual funds

A. Excluding Bluestem portfolio impact.

Results

Underlying attributable profit in 2021 was EUR 3,053 million (29% of the Group's total operating areas).

Compared to 2020, underlying attributable profit more than doubled; +107% in euros (+109% in constant euros). The year-on-year comparison by line was distorted due to the impact of the Bluestem portfolio and Puerto Rico disposals. Without them and the exchange rate impact, growth was 111%, as follows:

- Total income was up 5%. Net interest income grew 3% as price management and hedging in the US more than offset lower net interest income in Mexico due to the negative impact of lower interest rates and ALCO portfolio sales in 2020. Net fee income grew 6% and leasing results increased 48%;
- Administrative expenses and amortizations rose 10% primarily due to inflation and investments in digitalization. The efficiency ratio stood around 46%;
- As a result, net operating income increased 2%;
- Net loan-loss provisions plummeted 66% due to better market outlooks and a healthier operating environment, following heavy covid-19-related provisioning in 2020. The cost of credit improved notably to 0.93%, the NPL ratio stood at 2.42% and coverage was 135%; and
- Other gains (losses) and provisions were more negative in 2021 mainly due to the early amortization of buildings and integration costs in the US.

North America. Underlying income statement

EUR million and % change

			/ 2020	
	2021	2020	%	% excl. FX
Revenue	10,986	11,034	0	+1
Expenses	-4,967	-4,677	+6	+8
Net operating income	**6,019**	**6,357**	**-5**	**-4**
LLPs	-1,210	-3,917	-69	-68
PBT	4,664	2,307	+102	+105
Underlying attrib. profit	**3,053**	**1,472**	**+107**	**+109**

Detailed financial information in section 4.6 'Appendix'

United States

Underlying attributable profit
EUR 2,326 Mn

Business performance

Loans and advances to customers increased 14% compared to 2020. In gross terms and excluding reverse repurchase agreements and the impacts of both the exchange rate and the Bluestem portfolio disposal, they grew 3% year-on-year as lending growth in CIB and auto more than offset tepid corporate demand. Considering the Bluestem portfolio disposal impact, loans increased 2%.

Auto originations climbed 13% versus 2020 as our consumer business further leveraged its strong deposit base to support originations across the full credit spectrum.

Customer deposits soared 23% year-on-year. Excluding repurchase agreements and the exchange rate impact, customer deposits grew strongly (8% higher), boosted by retail deposits.

Mutual funds also increased 23% excluding the exchange rate impact.

Results

Underlying attributable profit in the year was EUR 2,326 million (22% of the Group's total operating areas), up 218% year-on-year in euros.

On a like-for-like basis, excluding the Puerto Rico and Bluestem portfolio disposals and the exchange rate impact, growth was 237%. By line, excluding divestiture impacts:

- Total income was up 11%. Though net interest income growth was impacted by loan volumes and interest rate pressure, it still increased 5% due to focused deposit price management. Net fee income increased 6% due to CIB and Wealth Management. Other operating income improved 53%, primarily due to outstanding auto lease results;
- Administrative expenses and amortizations increased 10% due to increased activity and investments in strategic initiatives (such as digital transformation), as well as a USD 60 million donation to our community foundation in Q3 and Q4. Excluding the latter, costs rose 8%, resulting in a 3 pp increase in operating leverage;
- Net loan-loss provisions plummeted 85% on the back of lower net charge-offs, better macroeconomic conditions and strong used vehicle prices;
- The negative impact of other gains (losses) and provisions increased by 31%, mainly due to the early amortization of buildings and integration costs.

United States. Underlying income statement

EUR million and % change

	2021	2020	/ 2020 %	/ 2020 % excl. FX
Revenue	7,383	7,360	0	+4
Expenses	-3,197	-3,079	+4	+8
Net operating income	**4,187**	**4,281**	**-2**	**+1**
LLPs	-419	-2,937	-86	-85
PBT	3,652	1,250	+192	+203
Underlying attrib. profit	**2,326**	**731**	**+218**	**+230**

Detailed financial information in section 4.6 'Appendix

Mexico

Underlying attributable profit
EUR 835 Mn

Business performance

Loans and advances to customers increased 15% year-on-year. In gross terms and excluding reverse repurchase agreements and the exchange rate impact, they climbed 8% year-on-year, driven by loans to individuals (mortgages +13%, consumption +17% and cards +3%) as well as corporates (companies +4% and CIB +14% offset a 15% decline in SMEs).

Customer deposits grew 9% year-on-year. Excluding repos and the impact of exchange rates, they rose by 5%, propelled by demand deposits (+8%).

Mutual funds were up 8% in constant euros, a sign of the success of our customer attraction and loyalty strategies, as well as efforts to reduce the cost of funding.

Results

Underlying attributable profit in 2021 was EUR 835 million (8% of the Group's total operating areas), 10% higher than 2020. Excluding the exchange rate impact, it increased 8%. By line:

- Total income fell 4%, impacted by lower gains on financial transactions (sales of ALCO portfolios in 2020) and net interest income (-2%), the latter a result of interest rate cuts and lower ALCO portfolio volumes. Net fee income increased by 6%, mainly due to transactional fees and insurance;
- Administrative expenses and amortizations increased 4%, well below inflation, mainly driven by technology costs and the increase in amortizations;
- As we move to a more normal operating environment, net loan-loss provisions were down 21%, following the high levels recorded in 2020 due to the pandemic;
- Other gains (losses) and provisions improved 49% mainly due to the sale of foreclosed assets and lower contingencies charges.

Mexico. Underlying income statement

EUR million and % change

	2021	2020	/ 2020 %	/ 2020 % excl. FX
Revenue	3,579	3,651	-2	-4
Expenses	-1,643	-1,552	+6	+4
Net operating income	**1,936**	**2,098**	**-8**	**-9**
LLPs	-791	-979	-19	-21
PBT	1,126	1,082	+4	+2
Underlying attrib. profit	**835**	**762**	**+10**	**+8**

Detailed financial information in section 4.6 'Appendix



Carlos Rey
Regional Head of South America

South America

Underlying attributable profit
EUR 3,328 Mn

"We remain leaders in the region with a unique footprint that is bolstered by the Group's assets. We reaffirm our commitment to society, sustainability and shareholders by delivering profitable growth"

Strategy

We continued to focus on delivering **profitable growth**, increasing customer **loyalty and acquisition**, and **controlling risks and costs** amid high inflation

Business performance[1]

The innovation of our products and services led to **double-digit growth** in **loans and advances to customers** and **customer deposits.** We are rolling out **ESG** initiatives in the region

Results[1]

Underlying attributable profit rose 24% year-on-year, driven by higher customer revenue, efficiency improvement and lower LLPs

1. Excluding the exchange rate impact.

Strategy

South America continued to show high growth potential and opportunities for banking penetration and financial inclusion progress. In this environment, we remained focused on growing our customer base by leveraging business opportunities, exchanging successful experiences across countries and boosting digitalization and customer loyalty.

We continued to generate synergies across business units according to our strategy:

- In consumer finance, Santander Brasil exported its new and used vehicle financing platform to other countries. We are also rolling out Cockpit in Chile, Argentina and Peru. We also made progress in Argentina and Peru on expanding the digital strategy for consumer credit and used vehicle finance. Santander Chile recorded strong insurance sales and in Uruguay, our consumer finance entity exceeded pre-pandemic growth.
- In payment methods, we focused on e-commerce strategies and on instant domestic and international transfers. We continued to consolidate Getnet in Brazil and expand it to other countries, based on Santander Brasil's successful model; its market share is above 15% and in 33% e-commerce. In Chile, we reached 20% market share in PoS in just 10 months. We are also Argentina's second largest company in payments processing.
- We continued to make headway in joint initiatives between CIB and corporates to deepen relations with multinational clients. That helped boost loyalty and customer acquisition in every market, (especially in Chile and Argentina).
- We continued to promote inclusive and sustainable businesses, such as Prospera, our micro-credit programme in Brazil (with 708,000 active customers), Uruguay (10,000 entrepreneurs) and Colombia (in 167 municipalities). We also launched a microfinance entity, Surgir, in Peru; a green SME product in Chile and the first vehicle loan that seeks to offset emissions by acquiring neutral carbon credits in Uruguay. In Argentina, we partnered with a major energy provider on renewable energy financing.

As a result, we were named the Best Bank for Sustainable Finance in Latin America in 2021 by *Euromoney*. Santander Chile was recognized by *Global Finance* as Outstanding Leader in Sustainable Finance in Latin America (alongside Santander México).

Our customer service enhancement initiatives and our expanded product and service proposition earned us a top 3 NPS position in four markets, plus substantial customer growth in the region.

The main initiatives by **country** were:

Brazil

The strong dynamics of our commercial proposition resulted in an all-time high customer acquisition in 2021. By segment:

- Excellent performance in mortgages, with a 24% new lending market share in home equity.
- In cards, we reached record-high customer acquisition and credit turnover (+28%).
- Santander vehicles remained a market leader with a 19% share, while Santander Auto reached 20% penetration in new insurance contracts.
- In SMEs, customer acquisition continued to grow. In wholesale banking we remained the only Global Bank, Infrastructure, Agribusiness and Equity Bank.
- In ESG, we channelled BRL 2.4 billion in solar energy loans, committed to be net zero by 2050 and continued to make progress with Plano Amazônia.

As a result, we were named Best Bank in Brazil in 2021 by *The Banker* and one of the 10 best companies to work for in Brazil by *GPTW* 2021, in the DESTAQUE 50+, Women, LGBTQI+ and Ethnic-Racial categories. We were also recognized as the most sustainable company by *Época Negócios 360°*, and as one of the companies that are effecting the most change in the world by *Fortune* magazine.

Chile

We kept our place as the country's leading bank, in terms of assets and customers. Our strategy remained customer-centric, based on digital expansion and better customer service. As a result, we increased our market share in current accounts to 29% (+4 pp in the year), driven by Santander Life and Superdigital.

- Getnet, our acquiring business, continued to gain momentum, installing more than 68,000 PoS.
- Autocompara, driven by increased vehicle sales, achieved 17% growth in new lending.
- In ESG, Santander Chile became the first local bank to be certified by Chile's Ministry of Women and Gender Equality. We also launched the Green SME initiative, to help SMEs obtain ESG certification, and made progress with solar energy lending.
- As a result, we were named Best Bank in Chile by *Euromoney* and *The Banker* magazines and as the Best Latin American Bank for SMEs.

Argentina

We remained focused on offering the best customers service, through innovation, improved customer care and process digitalization, carrying out the following initiatives:

- In digitalization, we rolled out Superdigital, which offers a fully-digital account. 78% of total sales were digital and our app was rated the best among banks on iOS and Android.
- In Santander Consumer, we launched Todo en Cuotas, a fully-digital platform to increase access to lending.
- We enhanced Getnet's value proposition (launched in Q4'20) and ranked second in payments processing.
- We continued to expand MODO, which promotes digital payments and financial inclusion in the country.
- In vehicles, we began to implement the CRM Cockpit system at dealerships.
- In ESG, we partnered with an energy supplier to support companies in their transition to cleaner, more sustainable energy.

Loyal customers	South America	Brazil	Chile	Argentina	Others South America
Thousands	10,625	8,037	832	1,614	141
YoY	+23%	+26%	+9%	+19%	+27%

Digital customers	South America	Brazil	Chile	Argentina	Others South America
Thousands	23,771	18,351	2,017	2,730	502
YoY	+17%	+18%	+30%	+3%	+12%

Uruguay

We strengthened our leadership among privately-owned banks in Uruguay and expanded our insurance and card product proposition. We saw strong growth in vehicles through partnerships with dealers which enabled us to increase our market share by 10 pp, propelling us to top of the pile.

We made further progress with our digital and technological transformation strategy through Soy Santander, a fully-digital loyalty proposition for individuals.

In ESG, we launched the first vehicle loan, with carbon credits to offset the emissions of every car the bank finances. In addition, *GPTW* named us the Best Bank in the country.

Peru

We continued to focus on global companies and the corporate segment, growing through more sophisticated products. In auto finance business continued to increase, reaching a 25% market share in new vehicles. We also acquired a market place for new and used vehicle financing.

We continued to digitalize our services and internal processes to enhance customer experience. We processed 88% of transactions digitally on our office banking platform and Nexus.

Colombia

We continued to expand in Colombia. In CIB, we remained a market leader and participated in key transactions for nationwide development. In corporates, we further increased our portfolio (+36% year-on-year) aided by a joint CIB and corporate proposition.

In consumer finance, we grew our vehicle portfolio by 51% in the year. In ESG, we continued to expand Microcredit (launched in June 2021) which is already present in 167 towns and cities.

Business performance

Loans and advances to customers climbed 9% year-on-year. Excluding reverse repos and the exchange rate impact, gross loans were 12% higher, with increases in all entities.

Customer deposits rose 8% in euros compared to 2020. Excluding repurchase agreements and the exchange rate impact, they rose 11% (increasing across all our markets) driven by demand and time deposits. As mutual funds were up 4% (excluding the FX impact), customer funds were 9% higher in constant euros.

Results

Underlying attributable profit in the year was EUR 3,328 million (31% of the Group's total operating areas), 14% higher compared to 2020 (24% excluding the exchange rate impact). By line:

- Total income increased 12% underpinned by strong customer revenue, driven by larger volumes and customer acquisition.

  Net interest income was 14% higher and net fee income increased by 13%, while gains on financial transactions remained stable.

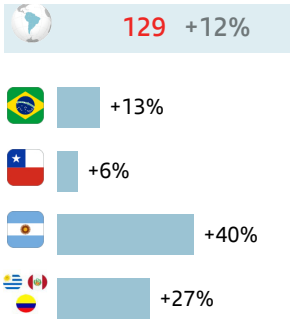
- Administrative expenses and amortizations increased 8% at a slower pace than inflation. In real terms, costs were 5% lower, owing to management and greater productivity.

- Net loan-loss provisions dropped by 10% driven by covid-19-related provisions recorded in 2020. The cost of credit improved 72 bps to 2.60%.

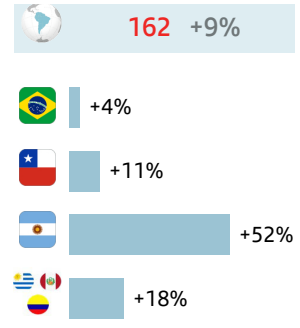
- Losses in other income and provisions increased in the year, owing mainly to Argentina and Brazil.

South America. Business performance

December 2021. EUR billion and YoY % change in constant euros



Gross loans and advances to customers excl. reverse repos



Customer deposits excl. repos + mutual funds

South America. Underlying income statement

EUR million and % change

	2021	2020	/ 2020 %	/ 2020 % excl. FX
Revenue	15,353	14,868	+3	+12
Expenses	-5,380	-5,357	0	+8
Net operating income	**9,974**	**9,511**	**+5**	**+13**
LLPs	-3,251	-3,924	-17	-10
PBT	6,249	5,267	+19	+28
Underlying attrib. profit	**3,328**	**2,907**	**+14**	**+24**

Detailed financial information in section 4.6 'Appendix

Brazil

Underlying attributable profit
EUR 2,325 Mn

Business performance

Our efforts to preserve business dynamism and improve service quality helped us rank first in NPS and hit an all-time high in customer acquisition in the year (5.1 million).

Loans and advances to customers increased 14% year-on-year. In gross terms, excluding reverse repos and the exchange rate impact, they rose 13%, underscored by individuals (+22%), consumer finance (+12%) and SMEs (+15%).

We continued to build the most complete auto platform in the market, reached record highs in customer acquisition figures in cards and hit a record in mortgage origination for individuals. In corporates, we expanded the range of available services in the app. GENT&, our artificial intelligence channel, registered more than 19 million interactions per month.

Customer deposits increased 6% in euros with respect to 2020. Excluding repos and the exchange rate impact, growth was 4% driven by the increase in demand deposits (+5%). As mutual funds were 3% higher excluding the exchange rate impact, customer funds rose 4% at constant exchange rates.

Results

Underlying attributable profit was EUR 2,325 million in 2021 (22% of the Group's total operating areas), 10% higher compared to 2020. Excluding the exchange rate impact, it was 21% higher. By line:

- Total income rose 10% boosted by 13% higher net interest income plus net fee income, benefitting from higher volumes and a larger customer base.
- Administrative expenses and amortizations had no material change through efficient cost management and higher productivity despite average inflation of 8%. The annual efficiency ratio improved to an all-time record of 29.7%, while net operating income was 14% higher.
- Net loan-loss provisions fell 1%, enabling cost of credit to improve 62 bps year-on-year to 3.73%. The NPL ratio was 4.88% and coverage stood at 111%.
- The negative impact of other gains (losses) and provisions rose due to higher tax provisions in 2021 and releases in 2020.

Brazil. Underlying income statement

EUR million and % change

	2021	2020	/ 2020 %	/ 2020 % excl. FX
Revenue	10,884	10,866	0	+10
Expenses	-3,236	-3,541	-9	0
Net operating income	**7,649**	**7,325**	**+4**	**+14**
LLPs	-2,715	-3,018	-10	-1
PBT	4,618	4,045	+14	+25
Underlying attrib. profit	**2,325**	**2,113**	**+10**	**+21**

Detailed financial information in section 4.6 'Appendix

Chile

Underlying attributable profit
EUR 637 Mn

Business performance

Our strategy remained focused on boosting customer satisfaction through an enhanced digital banking proposition and the transformation of our commercial network, with new Work Café branches. Santander Life and Superdigital continued to grow steadily. Life customers rose nearly 100% in just one year, reaching close to 900,000, Superdigital has 257,000 customers and we maintained the best NPS in the country.

Loans and advances to customers decreased 4% year-on-year in euros. Excluding reverse repurchase agreements and the exchange rate impact, gross loans and advances to customers rose 6%. By segment, individuals grew 8% (boosted by mortgages), CIB by 17%, and corporates and institutions by 4%, which more than offset the fall in SMEs (-6%, affected by state-backed loans granted in 2020).

Customer deposits rose 4% year-on-year, up 15% excluding repurchase agreements and the exchange rate impact (on the back of demand deposits, +23%). Mutual funds fell 3% and customer funds rose 11% in constant euros.

Results

Underlying attributable profit was EUR 637 million in 2021 (6% of the Group's total operating areas), up 47% compared to 2020.

Excluding the exchange rate impact it was also 47% higher. By line:

- Total income rose 8%, spurred on by 10% higher net interest income, driven by inflation and margin management, and by the 17% increase in net fee income, mainly due to payment methods.
- Administrative expenses and amortizations rose 4% (below inflation) which resulted in 10% higher net operating income and an efficiency ratio of 38.4%.
- Net loan-loss provisions dropped 43% due to covid-19-related charges in 2020, placing the cost of credit at 0.85%. The NPL ratio improved to 4.43% and coverage was 63%.
- Other gains (losses) and provisions totalled -EUR 16 million (+EUR 16 million in 2020) due to contingencies in 2021.

Chile. Underlying income statement

EUR million and % change

	2021	2020	/ 2020 %	/ 2020 % excl. FX
Revenue	2,457	2,263	+9	+8
Expenses	-942	-900	+5	+4
Net operating income	**1,514**	**1,363**	**+11**	**+10**
LLPs	-341	-594	-43	-43
PBT	1,158	785	+48	+47
Underlying attrib. profit	**637**	**432**	**+47**	**+47**

Detailed financial information in section 4.6 'Appendix

Argentina

Underlying attributable profit
EUR 274 Mn

Business performance

We continued to make headway with our digitalization strategy and enhanced service quality, ranking second in NPS.

In 2021, we further expanded our product offering through different initiatives, such as the launch of Superdigital and the opening of the first agribusiness branch. We boosted Getnet's value proposition, reaching 60,000 active customers and rolled out Cockpit and Todo en Cuotas.

Our efforts to remain one of Argentina's top banks and a leader in deposit volumes were recognized by the market, as *The Banker* once again named us Best Bank in Argentina.

Loans and advances to customers rose 25%. Excluding reverse repurchase agreements and the exchange rate impact, gross loans and advances to customers were 40% higher driven by lending to individuals, SMEs and corporates.

Customer deposits increased 28% compared to 2020 in euros. Excluding repurchase agreements and the exchange rate impact, deposits grew 44% and mutual funds +90%.

Results

Underlying attributable profit was EUR 274 million in the year (3% of the Group's total operating areas).

Compared to 2020, underlying attributable profit was 53% higher. Excluding the exchange rate impact, it rose 73%. In particular:

- Total income grew 39% underpinned by net interest income (+32%) and 74% higher net fee income, driven by transactional fees. Gains on financial transactions were 168% higher.
- Administrative expenses and amortizations increased 44%, affected by inflation and the salary agreement. The efficiency ratio stood at 57.8% and net operating income rose 34%.
- Net loan-loss provisions fell 30% due to covid-19-related provisioning in 2020. The NPL ratio improved to 3.01%.
- Other gains (losses) and provisions increased their loss due to charges relating to downsizing.

Argentina. Underlying income statement

EUR million and % change

	2021	2020	/ 2020 %	/ 2020 % excl. FX
Revenue	1,393	1,128	+23	+39
Expenses	-805	-632	+27	+44
Net operating income	**587**	**496**	**+18**	**+34**
LLPs	-140	-226	-38	-30
PBT	311	200	+56	+76
Underlying attrib. profit	**274**	**179**	**+53**	**+73**

Detailed financial information in section 4.6 'Appendix

Uruguay

Underlying attributable profit
EUR 110 Mn

Business performance

In 2021, we strengthened our business model with new products, such as Soy Santander, the launch of Getnet and partnerships and growth in auto finance.

We also made progress with our technological transformation. We upgraded our channels and processes: we completed the roll out of Santander Lockers and our mobile branch saw great success.

These initiatives were reflected in volumes. Loans and advances to customers increased 17% year-on-year in euros. Excluding reverse repurchase agreements and the exchange rate impact, gross loans and advances to customers rose 14%, due to lending to individuals, (mainly due to auto segment growth well above market rates).

Customer deposits were 18% higher in euros compared to 2020. Excluding the exchange rate impact and repurchase agreements, they increased 15% backed by demand deposits (+20%). Mutual funds were up 22% excluding the exchange rate impact.

Results

In 2021, underlying attributable profit was EUR 110 million (1% of the Group's total operating areas).

Compared to 2020, it fell 18% in euros. Excluding the exchange rate impact, it declined 12%. By line:

- Total income declined 3% mainly due to the 6% lower net interest income, due heavily to lower interest rates, but partly offset by 9% growth in net fee income.
- Administrative expenses and amortizations rose 11%, affected by the salary agreement under the collective labour agreement signed in 2021, and by higher costs from business growth. The efficiency ratio stood at 47.4%.
- Net loan-loss provisions decreased 43%, due to covid-19-related provisioning in 2020. The cost of credit improved 111 bps to 1.19%, the NPL ratio stood at 2.65% and coverage at 107%.

Uruguay. Underlying income statement

EUR million and % change

	2021	2020	/ 2020 %	/ 2020 % excl. FX
Revenue	342	380	-10	-3
Expenses	-162	-157	+3	+11
Net operating income	**180**	**223**	**-19**	**-13**
LLPs	-32	-61	-47	-43
PBT	145	161	-10	-3
Underlying attrib. profit	**110**	**134**	**-18**	**-12**

Detailed financial information in section 4.6 'Appendix

Peru

Underlying attributable profit
EUR 63 Mn

Business performance

Loans and advances to customers rose 23% year-on-year (+26% on a gross basis, excluding reverse repurchase agreements and the exchange rate impact). Customer deposits surged 18% (+20% excluding the exchange rate impact and repurchase agreements), with growth in both demand and time deposits.

Results

Underlying attributable profit of EUR 63 million in 2021 was 18% higher year-on-year. Excluding the exchange rate impact, it soared 36%:

- Total income grew 32% mainly led by customer revenue and gains on financial transactions stemming from higher customer activity.
- Administrative expenses and amortizations were 35% higher, mainly driven by the launch of new businesses. Net operating income increased 31%.
- Net loan-loss provisions increased slightly, although the cost of credit remained low at 0.58%.

Colombia

Underlying attributable profit
EUR 25 Mn

Business performance

Loans and advances to customers rose 38% year-on-year in euros. In gross terms, excluding reverse repurchase agreements and the exchange rate impact growth was 51%.

Customer deposits rose 28% in euros and 40% excluding the exchange rate impact and repurchase agreements, driven by 71% growth in demand deposits.

Results

Underlying attributable profit of EUR 25 million in the year was 27% higher than in 2020. Excluding the exchange rate impact, underlying attributable profit rose 34%. By line:

- Total income grew 25% spurred by higher customer revenue.
- Administrative expenses and amortizations rose 30% and net operating income was 21% higher.
- Net loan-loss provisions fell 8% and the cost of credit declined year-on-year to 0.40%.

Other South America. Underlying income statement

EUR million and % change

	Net operating income				Underlying attrib. profit			
			/ 2020				/ 2020	
	2021	2020	%	% excl. FX	2021	2020	%	% excl. FX
Peru	106	93	+14	+31	63	53	+18	+36
Colombia	43	37	+15	+21	25	19	+27	+34



Sebastian J. Gunningham

Chairman of Santander Consumer Finance and VP of Openbank

Digital Consumer Bank

Underlying attributable profit

EUR 1,332 Mn

"We aim to become the leading and largest digital consumer bank leveraging SCF's footprint in auto and consumer finance and profiting from Openbank's technology stack"

Strategy

We prioritized the execution of our strategic operations to broaden our **business capabilities**, strengthen **leadership in global digital consumer finance** and generate significant growth for the Group

Business performance[1]

We continued to manage the unstable environment. **New lending** was well above 2020 (+10% year-on-year), with strong new and used car volumes despite lockdowns and the semiconductor shortage. Demand gathered momentum as restrictions were lifted

Results[1]

Underlying attributable profit stood at EUR 1,332 million (**+16%** year-on-year), driven by **revenue** growth (+3% year-on-year) and better cost of credit

1. Excluding the exchange rate impact.

Strategy

Digital Consumer Bank (DCB) is the leading consumer finance bank in Europe. It combines Santander Consumer Finance's (SCF) scale and leadership in consumer finance and Openbank's digital capabilities.

SCF is Europe's consumer finance leader. It operates in 18 countries (16 in Europe, most recently in Greece, and presence in China and Canada) through more than 130,000 affiliated points of sale (mainly auto dealers and retail merchants). In addition, it is developing direct financing capabilities.

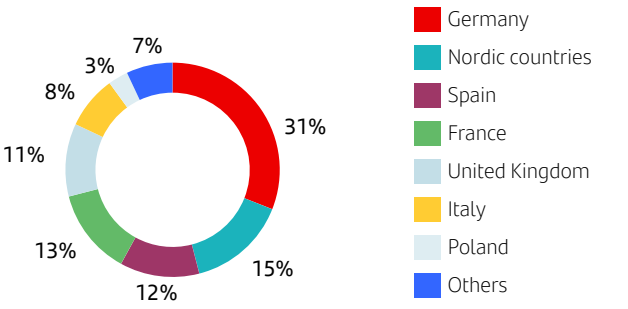
Openbank is the largest fully-digital bank in Europe. It offers current accounts, cards, loans, mortgages, a state-of-the-art robo-advisor service and open platform brokerage services. Operating in Spain, the Netherlands, Germany and Portugal, it is working on expansion across Europe and the Americas.

The aim of the Digital Consumer Bank concept is to generate synergies for both businesses:

- SCF will leverage Openbank's IT capabilities to further improve its digital operating system and service to its customers and partners (i.e. OEMs, car dealers, retailers and individuals) at a lower cost.
- Openbank will be able to offer retail banking products to SCF's large customer base to expand retail capabilities across Europe at lower customer acquisition costs.

Loans and advances to customers by geographic area

December 2021



Jose Luis de Mora

CEO SCF

Santander Consumer Finance

"We are dedicated to supporting our partners and developing advanced technologies to give them a competitive edge, enabling us to become the top mobility financer and provider in Europe"

In 2021 management focused on:

- **Auto**: strengthening our auto financing leadership position by: renewing existing agreements and entering into new ones with car manufacturers, importers and dealers; reinforcing our leasing business; and developing new services (e.g. subscriptions) across our footprint. SCF also focused on providing advanced online financing capabilities to its partners to help boost their sales growth.

  The Auto business closed 2 million new contracts in 2021. By the end of the year, it was managing a loan book of EUR 91 billion.

- **Consumer (Non-Auto)**: gaining market share in consumer financing solutions by leveraging our position to grow in e-commerce, checkout lending and buy now, pay later (BNPL).

  The Consumer (Non-Auto) business closed 6 million new contracts in 2021. As at 31 December 2021, it managed a loan book of EUR 20 billion.

  In **retail,** we focused on improving digital capabilities to inspire loyalty among our 3.7 million retail (Openbank and SC Germany Retail) customers and to boost digital banking activity.

- **Cost reduction and simplification**: accelerating digitalization to transform the business and improve efficiency. The main drivers were:

  – organizational simplification by transitioning from banking licences to branches in the Western hub. SCF is already working through branches in Portugal, Belgium, the Netherlands and Greece;

  – streamlining IT by leveraging technology and data capabilities with digital banking apps (APIs) and a Banking as a Service (BaaS) model.

During 2021, DCB signed new agreements with retail distributors and manufacturers, supporting them in their commercial transformation and increasing the value proposition for end customers. We executed strategic deals to strengthen our presence in Europe in order to maintain our auto finance leadership and boost digital channels including:

- the acquisition of Sixt Leasing in Germany (renamed Allane);

- the kick off of the joint consumer finance venture with Telecom Italia Mobile in Italy, deploying a new consumer finance solution (for smartphones, modems, eWatches, etc.) which was used by more than 5,500 active retail points of sale and financed more than 600,000 TIM customers in 2021;

- SCF's acquisition in the second half of 2021 of a 14.7% stake in Vinturas Holding, a company with a blockchain-based technology solution which allows manufacturers to digitally track vehicles throughout the entire logistics process, supporting our focus on digitalization; and

- a non-binding agreement with Stellantis (the world's fourth largest car manufacturer) signed in December to renegotiate the terms of cooperation (binding contracts expected to be signed in Q1 2022). This new agreement will enable us to broaden our scope and be the captive financing partner for all Stellantis brands (Abarth, Alfa Romeo, Chrysler, Citroën, Dodge, DS, Fiat, Fiat Professional, Jeep, Lancia, Maserati, Opel, Peugeot, RAM and Vauxhall) in France, Italy, Spain, Belgium, the Netherlands, Poland and Portugal.

In 2021, the leasing business doubled and digital credit and leasing sales tripled. We also launched a subscription business in Spain, Germany and Norway (to be launched in our remaining countries in 2022-2023).

Moreover, we ran several cost reduction and income initiatives (pricing and funding costs) to compensate revenue lost during lockdowns.

To sustainably grow our business and contribute to the enhancement of the environment, we are developing new business solutions and partnerships to finance electric vehicles (we financed >113,000 fully-electric vehicles in 2021), electric chargers, solar panels, green heating systems, etc. while promoting carbon offset services (available in all countries). Additionally, we are an active issuer in the green bond market, with 5 issuances in 2021.

In comparison with our pan-European competitors, our higher volumes and better efficiency (in absolute terms and trends) enabled us to maintain our leadership position and high profitability, thereby increasing our competitive advantage.

Thanks to all these initiatives, DCB secured its great potential to continue enhancing the business and growing the 19 million active customer base.

SCF was once again named Top Employer in Austria, Belgium, Germany, the Netherlands and Poland recognizing its HR best practices. Additionally, *Great Place to Work* named SCF among the best 25 companies to work for in Italy, France and the UK.

Ezequiel Szafir
CEO SCF and Openbank
Openbank Grupo Santander

"In applying Openbank's IT and business philosophy, we will continue to exceed our customer loyalty and engagement targets, while ensuring an unbeatable time to market"

Business performance

Though pandemic restrictions affected commercial activity in early 2021 (mainly in Central Europe), new business recovered to pre-covid-19 levels in Q2 (driven by Germany and the Nordics). The second half of the year was affected by the semiconductor shortage which impacted new car production and by the reintroduction of some travel and social restrictions near year end.

Despite those headwinds, new lending increased 10% year-on-year. We saw growth in all countries (except the Netherlands) and our business model, highly diversified by country with a critical mass in key products, supported further market share gains in Europe (approximately +50 bps).

The stock of loans and advances to customers increased 1% year-on-year. In gross terms, excluding reverse repos and the exchange rate impact, it fell 1% to EUR 117 billion.

Customer deposits increased 8% in euros and 7% excluding repos and the exchange rate impact. Mutual funds grew significantly. Our recourse to wholesale funding markets remained strong and diversified, with funding costs, rates and spreads remaining near all-time lows.

Results

Underlying attributable profit in 2021 was EUR 1,332 million (12% of the Group's total operating areas).

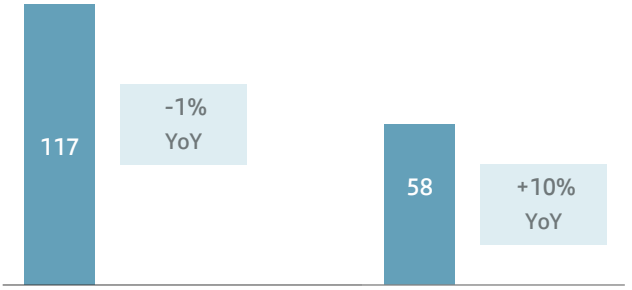
Compared to 2020, underlying profit increased 18% in euros. In constant euros the increase was 16% as follows:

- Total income was up 3% driven by growth in net fee income (+6% due to increased new business volumes) and leasing. Net interest income fell slightly (-0.4%).
- Administrative expenses and amortizations increased 3% due to perimeter effects (Allane and TIMFIN joint ventures) and digital transformation investments. Net operating income increased 3% and the efficiency ratio stood at 45.0%.

  Without perimeter effects, costs were flat year-on-year and 4% lower than in 2019.
- Net loan-loss provisions dropped 45% driven by covid-19 provisioning in 2020. Positive credit quality performance, with a 38 bp reduction in the cost of credit of credit to 0.46% and an NPL ratio of 2.13% (-4 bps year-on-year). Coverage remained high (108%).
- Negative impact from Other gains (losses) and provisions due to charges related to Swiss franc mortgages.
- The largest contribution to underlying attributable profit came from Germany (EUR 405 million), the UK (EUR 277 million), the Nordic countries (EUR 247 million), France (EUR 145 million) and Spain (EUR 133 million).

Digital Consumer Bank. Activity

December 2021. EUR billion and % change in constant euros



Gross loans and advances to customers excl. reverse repos

Customer deposits excl. repos + mutual funds

Digital Consumer Bank. Underlying income statement

EUR million and % change

	2021	2020	/ 2020 %	/ 2020 % excl. FX
Revenue	5,339	5,166	+3	+3
Expenses	-2,405	-2,329	+3	+3
Net operating income	**2,934**	**2,837**	**+3**	**+3**
LLPs	-527	-957	-45	-45
PBT	2,213	1,929	+15	+14
Underlying attrib. profit	**1,332**	**1,133**	**+18**	**+16**

Detailed financial information in section 4.6 'Appendix

4.4 CORPORATE CENTRE

Corporate Centre

Underlying attributable profit
- EUR 2,037 mn

2021 HIGHLIGHTS

→ The Corporate Centre aims to aid the operating units by adding value and through oversight and control. It also performs financial and capital management functions.

→ Underlying attributable loss was 10% higher than in 2020, mainly due to lower gains on financial transactions resulting from exchange rate differences that affected our core units' foreign currency hedges, as other results and provisions decreased year-on-year.

Strategy and functions

The Corporate Centre adds value to the Group by:

- strengthening the Group's governance with global control frameworks and supervision.
- fostering the exchange of best practices in cost management and generating economies of scale, that enable us to be one of the most efficient banks.
- helping launch global business projects that leverage our global footprint to develop solutions for all business units, generating economies of scale.

It also coordinates our relation with regulators and supervisors in the EU and performs the following financial and capital management functions:

- **Financial management:**
  - Structural management of liquidity risks from funding the Group's recurring activity and financial stakes.
  - Diversification of funding sources (issuances and other), to maintain appropriate volumes, maturities and costs. The price of these transactions with other Group entities is the market rate plus a premium, which in liquidity terms, we support by immobilizing funds during the term of the transaction.
  - Active management of interest rate risk with derivatives with high credit quality, high liquidity and low capital consumption in order to reduce the impact of interest rate shifts on net interest income.
  - Strategic management of exposure to exchange rates in equity and dynamic on the countervalue of the country units' annual results in euros. At year end, net investment hedges with spots, forwards and other equity instruments amounted to EUR 18,730 million (mainly in Brazil, the UK, Mexico, Chile, the US, Poland and Norway).
- **Management of total capital and reserves**: efficient allocation of capital to each of the Group's entities in order to maximize shareholder return.



Global Headquarters. Boadilla del Monte.



Global Headquarters. Boadilla del Monte.

Results

In 2021, underlying attributable loss of EUR 2,037 million was 10% higher than in 2020 (-EUR 1,844 million) because:

- gains on financial transactions were lower (EUR 427 million less than in 2020) dampened by negative foreign currency hedging results in 2021 and positive results in 2020. Net interest income fell 1%;
- administrative expenses and amortizations, however, increased by 5% compared to 2020, due to general inflation upturn in 2021. Excluding this impact, they would have remained stable;
- net loan-loss provisions grew from EUR 31 million in 2020 to EUR 155 million in 2021; and
- the net impact of other gains (losses) and provisions (which include provisions, intangible assets impairment, cost of the state guarantee on deferred tax assets, pensions, litigation, one-off provisions for stakes whose value was affected by the crisis, etc.) went from -EUR 412 million in 2020 to -EUR 190 million in 2021.



Global Headquarters in Boadilla del Monte.

Corporate Centre

EUR million

Underlying income statement	2021	2020	%
Net interest income	(1,390)	(1,374)	1.2
Net fee income	(28)	(29)	(5.4)
Gains (losses) on financial transactions [A]	(140)	287	—
Other operating income	(28)	(25)	12.2
Total income	**(1,586)**	**(1,141)**	**38.9**
Administrative expenses and amortizations	(346)	(329)	5.2
Net operating income	**(1,931)**	**(1,470)**	**31.4**
Net loan-loss provisions	(155)	(31)	399.1
Other gains (losses) and provisions	(190)	(412)	(53.8)
Profit before tax	**(2,277)**	**(1,912)**	**19.0**
Tax on profit	241	69	250.7
Profit from continuing operations	**(2,036)**	**(1,844)**	**10.4**
Net profit from discontinued operations	—	—	—
Consolidated profit	**(2,036)**	**(1,844)**	**10.4**
Non-controlling interests	(1)	0	479.0
Underlying profit attributable to the parent	**(2,037)**	**(1,844)**	**10.5**
Balance sheet			
Loans and advances to customers	6,787	5,044	34.6
Cash, central banks and credit institutions	88,918	61,173	45.4
Debt instruments	1,555	1,918	(18.9)
Other financial assets	2,203	1,645	33.9
Other asset accounts	116,007	112,807	2.8
Total assets	**215,470**	**182,587**	**18.0**
Customer deposits	1,042	825	26.3
Central banks and credit institutions	53,563	38,554	38.9
Marketable debt securities	74,302	57,240	29.8
Other financial liabilities	431	493	(12.5)
Other liabilities accounts	7,113	9,443	(24.7)
Total liabilities	**136,451**	**106,556**	**28.1**
Total equity	**79,019**	**76,031**	**3.9**
Memorandum items:			
Gross loans and advances to customers [B]	6,813	5,224	30.4
Customer funds	1,042	837	24.5
Customer deposits [C]	1,042	825	26.3
Mutual funds	0	12	(100.0)
Operating means			
Number of employees	1,724	1,692	1.9

A. Includes exchange differences.

B. Excluding reverse repos.

C. Excluding repos.

4.5 Secondary segments



Smart Red branch, Spain

Retail Banking

Underlying attributable profit

EUR 7,869 mn

"We remained committed to our digital transformation and multi-channel strategy with a clear focus on customers and their satisfaction"

Strategy

Santander continued to strengthen its **commitment** to **customers and society**, **boosting digitalization and offering new products and services** that meet their needs

Business performance[1]

Year-on-year growth in **loans and advances to customers** and customer **deposits**, driven by individuals, benefitting from economic recovery

Results[1]

Underlying attributable profit up 78% in euros to EUR 7,869 million **(+83% in constant euros)** due to strong performance in core P&L lines

1. Excluding the exchange rate impact.

Strategy

The economic and social impacts of the global health crisis moved us to strengthen our commitment to our customers and society, and play a key part in economic and business recovery in the countries where we operate.

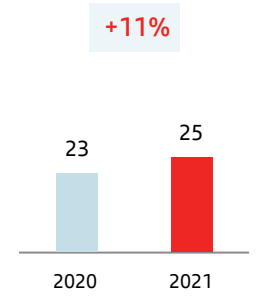
The crisis brought forward the implementation and development of our digital transformation strategy. It focuses on our multi-channel approach and the digitalization of businesses and processes. We are adapting channels to new business trends under a hybrid model that prioritizes digital customer service, and complements the service of our branches, which are well equipped to handle operations that are more complex and those that require tailored assistance from our professionals.

The personalized support we offer to our customers, also forms part of our aim to continuously enhance customer care and service. This enabled us to rank in the top 3 in customer satisfaction (measured by NPS) in eight of our markets in 2021.

Thanks to our efforts to improve customer care and services, our leadership position in the banking industry in digitalization and focus on meeting our customers' needs, we registered double-digit growth in loyal and digital customers.

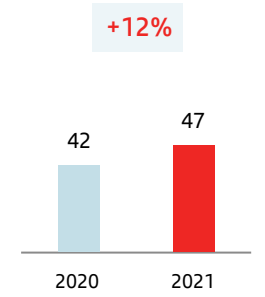
Loyal customers

Millions



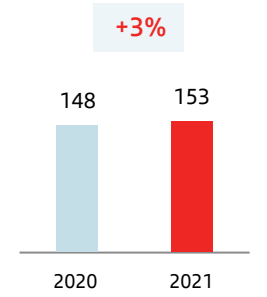
Digital customers

Millions



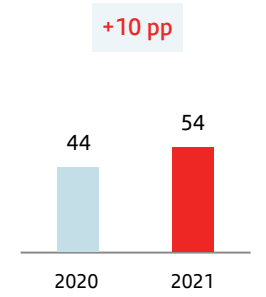
Total customers

Millions



Digital sales

% of total sales



The number of loyal customers increased 11% year-on-year to more than 25 million, digital customers rose 12% year-on-year to more than 47 million and 54% of our of total sales were digital.

These increases were spurred by our commercial initiatives and specialized products and services for each segment:

- Individuals: strong mortgage growth in almost all markets, through initiatives. We were the first bank in Mexico to offer a tailored interest rate based on customer profiles. In the UK, the shift towards digitalization enabled us to process most new mortgages, current accounts and cards through digital channels.
- Auto finance: Digital Consumer Bank continued to strengthen our leadership position in Europe. We renewed agreements and entered into new ones with manufacturers, importers and distributors. In the US, we signed new agreements with the country's largest auto dealer groups. In Mexico, we doubled our auto market share, partly due to a new alliance with Honda. While Santander Brasil exported its management platform for financing new and used vehicles to other countries, we are also rolling out Cockpit in Chile, Argentina and Peru.
- Corporates: we continued to roll out new services. In Spain, we launched the integrated management platform for Next Generation EU programmes. In Portugal, new corporate lending grew at a fast pace, especially in SMEs. In Poland, we focused on building a common platform to offer comprehensive services to our customers.

Regarding our branch network transformation, we remain committed to boosting our multi-channel proposition. In addition to digital channels, we have 9,879 branches. Our aim is to improve customer experience and offer advice on everything they need through the channel that best suits their preferences and requirements.

Business performance

Loans and advances to customers increased 4% year-on-year. Excluding reverse repurchase agreements and the exchange rate impact, gross loans rose 2%, boosted by South America.

Customer deposits were 8% higher compared to 2020. Excluding repurchase agreements and the exchange rate impact, they were up 6%, driven by growth in demand deposits (+8%).

Results

Underlying attributable profit was EUR 7,869 million (74% of the Group's operating areas).

Compared to 2020, underlying attributable profit was up 78%. Excluding the exchange rate impact, it was 83% higher, as follows:

- Total income increased 7% on the back of net interest income (+7%) and net fee income (+4%). Gains on financial transactions dropped 18% affected by the high levels recorded in the second and the third quarter of 2020.
- Administrative expenses and amortizations increased slightly (+1%, well below inflation), benefiting from positive cost management and productivity improvement.
- Loan-loss provisions plummeted 37% mainly due to covid-19-related provisioning in 2020.
- Other gains (losses) and provisions increased its loss versus 2020, mainly due to charges for Swiss franc mortgages.

Retail Banking. Underlying income statement

EUR million and % change

			/ 2020	
	2021	2020	%	% excl. FX
Revenue	39,636	38,022	+4	+7
Expenses	-17,193	-17,286	-1	+1
Net operating income	**22,443**	**20,736**	**+8**	**+12**
LLPs	-7,114	-11,632	-39	-37
PBT	13,265	7,866	+69	+74
Underlying attrib. profit	**7,869**	**4,420**	**+78**	**+83**

Detailed financial information in section 4.6 'Appendix



José M. Linares

Senior Executive Vice-President and Global Head of Santander CIB

Santander Corporate & Investment Banking

Underlying attributable profit

EUR 2,167 mn

"The transformation we started a few years ago is paying off. In an environment shaped by sustainable development and digitalization, more and more clients are relying on SCIB's leadership and expertise to guide their strategic decision-making and business transformation"

Strategy

Expanding our **content and product proposition** to become our **clients' strategic advisors,** while **digitalizing our business faster**

Business performance

Business in 2021 was marked by **recovery in SCIB's major markets** despite the pandemic upsurge and uncertainty caused by rising inflation and geopolitical tension

Results

Underlying attributable profit reached EUR 2,167 million, driven by higher revenue and strong LLP reductions. Efficiency was best-in-class and **RoRWA** was **2.23%**

Strategy

SCIB continued to make headway with its strategy to strengthen its position as our clients' strategic advisor of choice, by boosting specialized high value-added products and services that enable us to optimize the return on capital.

In line with this strategy, SCIB focuses on high growth potential sectors which require considerable expertise.

Our ESG team was involved in transactions in many sectors and markets, such as Plug Power's M&A deals to lead the hydrogen sector alongside Groupe Renault and Acciona; the issuance of the 2053 Green Gilt, to support the UK's environmental targets; and Vineyard Wind 1, the largest offshore wind farm ever built in the US.

Created in Q1'21, our Digital Solutions Group (DSG) team supports the development and digital transformation of our current and potential customer base. The several transactions it took part in include the Robinhood's IPO in the US and the issuance of the European Investment Bank's first Digital Bond, which earned *Euromoney*'s 2021 Global Awards for Excellence in the with the Financial Innovation Deal of the Year category.

Lastly, as part of our plans to continue to geographically diversify and accelerate growth in the United States, Santander announced the acquisition of broker-dealer Amherst Pierpont, a market-leading franchise in fixed income and structured products.

Though the deal is still subject to regulatory approvals, it will strengthen our product offering, value proposition and distribution capabilities in the US, with 230 seasoned professionals who serve more than 1,300 institutional clients across the country and will boost our global business.

SCIB held leading positions in several rankings in 2021:

- In Project Finance and Export & Agency Finance we ranked top 3 in Latin America and Europe in volumes of transactions that promote renewable energies (Top 3 in Green Global) the cornerstone of our ESG strategy.
- In Debt Capital Markets (DCM) we are the market leaders in Spain and ranked among the top 5 underwriters by volume of corporate debt in Latin America.
- In Equity Capital Markets (ECM) we ranked in the top 3 in Latin America and number one in Spain and Mexico.

In the year, SCIB also received numerous awards in several categories, including *Global Finance* and *Euromoney*.

Ranking 2021

Award/ranking	Source	Area
Global Financial Adviser of the Year	*PFI (Project Finance International)*	GDF
Global ESG Deal of the Year: Vineyard Wind (US)	*PFI (Project Finance International)*	GDF
Europe Deal of the Year: Enfinium (UK)	*PFI (Project Finance International)*	GDF
Americas ESG Deal: Intersect Power (US)	*PFI (Project Finance International)*	GDF
Americas Transport Deal of the Year Americas: Rio Magdalena 2 (Colombia)	*PFI (Project Finance International)*	GDF & GTB
Best Bank for Cash Management in Latin America	*Global Finance*	GTB
Best Bank for Payments and Collections in Latin America	*Global Finance*	GTB
2021 Bank of the year in Argentina, Chile and Southern Cone	*Latin Finance*	GDF & B&CF
Investment Bank of the Year in Mexico	*Latin Finance*	GDF & B&CF
Infrastructure Bank of the Year-Andes	*Latin Finance*	GDF
Best Bank for Latam	*FX-W*	Markets
Best Bank for USD/BRL	*FX-W*	Markets
Deals of the Year 2021 (Europe)	*The Banker*	GDF
Deals of the Year 2021 (Americas)	*The Banker*	GTB & B&CF
Deals of the Year 2021 (Middle East)	*The Banker*	GDF
Best Transactional Bank Latin America	*The Banker*	GTB
Sustainability Bond of the Year	*Environmental Finance*	GDF
Lead Manager of the Year	*Environmental Finance*	GDF
Best Bank for Financial Inclusion	*Euromoney*	Global
Financial Innovation of the Year	*Euromoney*	GDF

Business performance

Business in 2021 was marked by recovery in SCIB's core markets despite the pandemic upsurge and uncertainty caused by rising inflation and geopolitical tension. Against this backdrop, SCIB continued to offer clients tailored financing solutions, strategic advice and assistance with capital markets to meet their needs, and advice on their digital transformation and sustainability goals.

Each business's revenue performance (in constant euros) was as follows:

- **Global markets**: revenue was 12% higher year-on-year. The markets business recorded strong revenue growth in 2021 underscored by sound management of the trading books and sales to clients whom we have continued to support with structured hedging products, especially in Spain and Portugal, Asia, Argentina, Brazil and Chile. Solid performance of interest rate and FX hedging products, fixed income, lending and equity derivatives.

  In 2021, SCIB developed the first sustainable market products, such as the ESG Linked Derivatives, whose price is based on KPIs of Santander's corporate ESG programmes and our customers; and the first ESG Impact Derivatives, which help Santander run environmental projects with a portion of their proceeds. SCIB also issued structured notes and ESG deposits.

- **GDF (Global Debt Financing):** Santander continued to support clients in accessing liquidity sources. As a result, funding volumes spiked in the year and total income was 14% higher year-on-year. We shifted our strategy towards sustainable financing in the loan and bond markets.

  In particular, we issued our first social project bond with Sacyr in Colombia plus the sustainable bonds of the Kingdom of Spain, Republic of Chile, the European Investment Bank and others.

  We continued to be a global leader in structured finance. SCIB ranked number one in Latin America and Europe thanks to the large renewable projects we led.

  We also began to engage in our clients' leveraged buy-outs on companies in Europe such as Burger King, Masmovil, Urbaser and the privatization of Aggreko.

- **Global Transactional Banking (GTB)**: Total income was 1% higher than in 2020. Cash Management improved during the year as transactional banking continued to recover, with greater commercial activity in most of the division's core countries, offsetting the negative impact of low interest rates in some, though rises are expected in 2022.

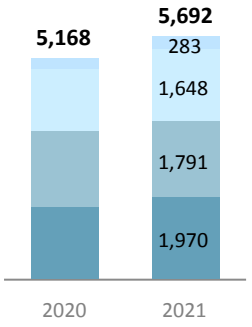
  Export & Agency Finance continues to provide financial and risk mitigation solutions for cross-border capex transactions in all markets. It benefits from the support of Export Credit Agencies (ECAs) and Multilateral Lending Agencies (MLAs) to serve our entire client base.

  We were particularly active in green finance for environmental projects and in covid-19 impact mitigation programmes. We also maintained our market leadership with solid growth (especially in Europe).

In 2021, the Trade & Working Capital Solutions team enhanced its industry leadership. It closed large transactions with the development of new products and strategic asset allocation initiatives. Of note was the launch of the Inventory Finance product (which rounds off our working capital solutions proposition). To maintain our double-digit growth rate sustainably, we expanded our client base and developed tools that optimize the use of our balance sheet. In particular, we rolled out an alternative investment fund with Santander Asset Management for trade assets, and entered into an EUR 2 billion agreement with the EIB to expand our confirming programmes.

Total income breakdown

Constant EUR million



TOTAL	+10%
Other	+44%
Global Debt Financing	+14%
Global Transactional Banking	+1%
Markets	+12%

- **Corporate Finance (CF):** we saw significant revenue growth (+44% vs 2020) driven by an increase in mergers and acquisitions (M&A) and equity capital market (ECM) transactions.

  In M&A, we focused on transactions for assets related to the energy transition and renewable electricity. In two green hydrogen-related transactions, we advised Plug Power in the creation of a joint venture with Renault and another with Acciona Energía. In renewable energies, we advised Canada's Northland Power and Italy's ENI on acquisitions in Spain.

  In the technology, media and telecom (TMT) sector, we advised on digital infrastructure transactions. SCIB advised Telefónica in three sales of fibre-to-the-home (FTTH) companies worth more than USD 2.5 billion, which will help expand digital inclusion in Chile, Brazil and Colombia.

  The infrastructure M&A market also had a good year. We carried out more than 15 global transactions. In particular, Platinum Equity acquired the Spanish environmental services group Urbaser and Goldman Sachs Infra sold the last package of the RCO highway in Mexico. As a result, SCIB was at the top of advisor rankings for Spain and Portugal and for Latin America.

  ECM revenue spiked, strengthening our market leadership in Spain and Portugal, Brazil, Mexico and Poland. We led major transactions of the year, such as Acciona Energía's EUR 1.5 billion IPO in Spain (the largest in Europe's renewable energy industry), Universal Music Group's EUR 20 billion IPO (the largest spin-off ever) and EXI's IPO (the largest equity offering in Mexico since 2017).

  We performed exceptionally well in Brazil. Our 28 transactions (16 IPOs and 12 primary share offerings), included Armac's BRL 1.5 billion IPO and Brisanet's BRL 1.4 billion IPO and Lojas Renner's BRL 4 billion follow-on public offering.

Results

Underlying attributable profit in 2021 increased 21% to EUR 2,167 million (20% of the Group's total operating areas). Excluding the exchange rate impact, growth was 26%, strongly backed by GDF and Markets. RoRWA was 2.23% (1,86% in 2020). By line:

- Total income was 10% higher driven by net fee income (+16%) and gains on financial transactions (+9%).
- Administrative expenses and amortizations rose 15%, compared to 2020 due to investments in products and franchises under development. However, efficiency improved year-on-year and remained a benchmark in the sector (40%).
- Sharp improvement in loan-loss provisions compared to 2020, due to significant increases last year stemming from the widespread macroeconomic downturn caused by the covid-19 pandemic. Better-than-expected economic conditions at the beginning of 2021 led us to release provisions and improved the credit outlook for the customer portfolio, which had an impact on the level of provisions recorded during the year.

SCIB. Underlying income statement

EUR million and % change

			/ 2020	
	2021	2020	%	% excl. FX
Revenue	5,692	5,332	+7	+10
Expenses	-2,301	-2,038	+13	+15
Net operating income	**3,392**	**3,294**	**+3**	**+7**
LLPs	-130	-470	-72	-72
PBT	3,251	2,689	+21	+26
Underlying attrib. profit	**2,167**	**1,798**	**+21**	**+26**

Detailed financial information in section 4.6 'Appendix



Víctor Matarranz

Senior Executive Vice President and Head of Wealth Management & Insurance

Wealth Management & Insurance

Underlying attributable profit

EUR 907 Mn

"In 2021, we returned to double-digit growth rates and consolidated the transformation of our businesses, laying the groundwork for a new phase of growth in the coming years"

Strategy

We continue to **innovate and improve** our product offering (especially **ESG** products), while increasing sales through digital channels

Business performance[1]

Total **assets under management** were **8% higher than in 2020**, and **funds and investments increased 9%** a sign of the gradual recovery of activity

Results[1]

Total contribution to profit in 2021 was **EUR 2,313 million, 12% higher** than in 2020, due to greater assets under management and higher net fee income

1. Excluding the exchange rate impact.

Strategy

We maintain our objective to be the best responsible wealth and protection manager in Europe and Latin America, as one of the Group's growth drivers with a 12% greater total contribution to profit.

- In **Private Baking**, we continued to revamp our product proposition, focusing on sustainable (ESG), alternative (e.g. private markets, real estate and venture capital) and thematic products. We also continued to expand our discretionary advisory service to tailor value-added solutions to our clients' specific investment needs and risk profiles. Those platforms recorded 20% growth in 2021.

  Regarding our ESG investment product range, SAM and third-party ESG products raised more than EUR 18 billion in assets under management classified according to Article 8 and 9 of the Sustainable Finance Disclosure Regulation (SFDR) or similar criteria in Latin America, which integrate a wide range of sustainability strategies.

  Santander Future Wealth is our line of thematic funds and structured products to help private banking clients invest in innovation and disruptive technologies. This joint initiative with SAM has reached EUR 3.9 billion in investment funds alone since launching. Furthermore, our alternative product proposition exceeded EUR 1.8 billion in SAM and third-party alternative funds (Hamilton Lane, Bain, Brookfield, Blackstone, Harbour Vest, Owl Rock and Everwood, among others).

  Also of note was our Private Banking platform, with a large number of clients operating across countries and a shared business volume of EUR 9.9 billion (+34% versus 2020, mainly due to operations in Mexico, Brazil, the US and the UK).

  In 2021, we launched new digital private banking front-ends in Portugal and Spain and new manager front-ends in Poland.

- **Santander Asset Management** continued to improve. We rounded off our local and global product proposition. We launched Santander ON ('oriented to your needs'), a range of solutions to cover our clients' diverse investment needs. It follows a systematic and quantitative management methodology, including various investment themes and our ESG integration model.

  The Santander GO product range grew strongly, reaching EUR 3.8 billion. Also, the hub in Luxembourg, which serves all of Europe, amounted to more than EUR 11.5 billion.

  We made further headway with our ESG strategy; we offer 29 ESG products globally, and our assets under management stood close to EUR 11.3 billion. We are also focused on strengthening our proposition of products classed under Article 8 (SFDR).

  Our range of alternative products aimed primarily at our institutional clients is becoming more robust. Five funds (Alternative Leasing, Private Debt fund of funds, Trade Finance EUR, Santander European Hospitality opportunities and Sancus Green Investments II SCR) already launched.

  As part of our operational and technological transformation, we fully rolled out the Aladdin platform in all our countries in 2021. We are also about to launch our European Robo-advisor proposition in Spain and Chile in 2022.

- In **Insurance**, we continued to see growth in premiums (+4% year-on-year). Protection remained our main growth driver (+12%). Net fee income grew overall by a remarkable 13%.

Regarding our digital strategy, the number of insurance policies sold via our digital channels doubled and now account for 17% of total sales.

We closed an important agreement with Allianz in Poland, which we expect will strengthen our position in the country.

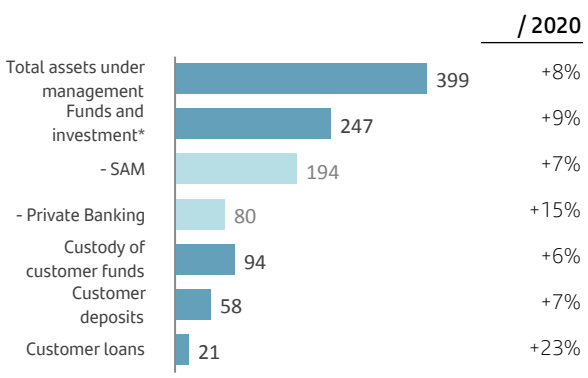
Motor vehicle insurance business performed well, with a portfolio of almost 2 million policies (most on the Autocompara platform) and a strong increase in revenue (+27%) compared to 2020.

Business performance

Total assets under management amounted to EUR 399 billion, 8% higher year-on-year, driven by the gradual business recovery following the hardest months of the health crisis.

Business performance: SAM and Private Banking

December 2021. EUR billion and % change in constant euros



Note: Total assets marketed and/or managed in 2021 and 2020.
(*) Total adjusted customer funds of private banking managed by SAM.

- In Private Banking, the volume of client assets and liabilities reached EUR 253 billion. Net new money amounted to EUR 11.7 billion in 2021 (4.6% of total volume). Funds reached EUR 4.4 billion. Net profit in 2021 was 9% higher compared to 2020 at EUR 433 million, due primarily to 13% higher net fee income. Threshold Private Banking clients rose 8% to 117,000 clients.
- SAM's total assets under management increased 7% compared to 2020 to EUR 194 billion. Record-high cumulative net sales mainly in Spain, Mexico, Luxembourg, Argentina and Poland amounted to EUR 8 billion (4.1% of total AuMs). SAM's contribution to the Group's profit (including ceded fee income) was EUR 562 million, 16% higher year-on-year.
- In Insurance, the gross written premiums in 2021 amounted to EUR 8.6 billion (+4% year-on-year). In particular, non-credit-related protection business grew 12% and total fee income increased 13%. Total contribution to profit (including ceded fee income) increased 12% year-on-year to EUR 1,318 million.

Results

Underlying attributable profit was EUR 907 million in 2021, up 10% year-on-year. Excluding the exchange rate effect, it was 13% higher:

- Total income increased 9% mainly driven by the higher volume of assets under management, net fee income growth and greater insurance protection. Total fee income generated, including fees ceded to the branch network rose 12% to EUR 3,397 million and represented 32% of the Group's total fee income.
- Administrative expenses and amortizations increased 5%, due to investments and costs stemming from greater commercial activity.
- As a result, net operating income increased 11%.

The total contribution to the Group (including net profit and total fees generated net of tax) was EUR 2,313 million in 2021, 12% higher than in 2020 in constant euros.

Total contribution to profit

EUR million and % change in constant euros



WM&I. Underlying income statement

EUR million and % change

	2021	2020	/ 2020 %	/ 2020 % excl. FX
Revenue	2,166	2,030	+7	+9
Expenses	-902	-872	+4	+5
Net operating income	**1,264**	**1,159**	**+9**	**+11**
LLPs	-27	-28	-5	-5
PBT	1,247	1,132	+10	+13
Underlying attrib. profit	**907**	**823**	**+10**	**+13**

Detailed financial information in section 4.6 'Appendix



Javier San Félix

CEO of PagoNxt

PagoNxt

Underlying attributable profit

-EUR 253 Mn

"After just over 12 months of existence, I'm thrilled to see the progress we've made to become a one-stop-shop that meets all payment needs for merchants, SMEs, corporates and consumers. We're investing in world-class technology and hiring top payments talent to continue to innovate and launch new products and services that will improve user experience"

Strategy

Accelerating commerce for merchants and for their connected ecosystem of customers and business partners, on the back of our **cloud-native global payments platform**, Santander's large-scale distribution capabilities and open market access

Business performance

PagoNxt achieved **significant growth across markets in 2021**. In the last 12 months, Getnet's base of active merchants grew 6% and Total Payments Volume was 50% higher

Results

PagoNxt's revenue is growing fast. It amounted to **EUR 495 mn in 2021,** 47% higher in H2 than in H1

Strategy

PagoNxt aims to accelerate commerce for merchants and for their connected ecosystem of customers and business partners. Its strength lies in its digital commerce proposition for merchants and in its exposure to fast-growing markets, complemented by distinctive assets that are progressively connecting corporates and consumers. We are fulfilling our purpose with:

- Our strong track record serving merchants through a digital commerce proposition. We serve merchants of different sizes according to their payment needs with a full suite of merchant service products, which include PoS payments, e-commerce and omnichannel, boasting local and cross-border coverage. We also offer value-added solutions that leverage our in-house product development and third-party providers.

Getnet

- Reinforced adjacencies that deliver value to businesses and consumers. We are developing solutions to expand our breadth of payment services to cover the entire commerce network. In combining the cutting-edge platforms, One Trade and Ebury, PagoNxt is offering a complete portfolio to meet SMEs' and institutions' international trade needs and help them thrive across borders with a simple, secure solution to transfer money globally.

  This is complemented by our Payments Hub's instant payment capabilities. In consumer, our Superdigital platform connects merchants with the underbanked and with low-income individuals across Latin America, providing them with a low cost-to-serve model and innovative offering.

One Trade Payments Hub

- Our progressively integrated value proposition that leverages our shared cloud-native, data-driven global payments platform. PagoNxt's real-time, flexible and highly scalable technology platform is fully cloud- and API- based, and enterprise-ready. It ensures access to PagoNxt's latest features with simpler integration. We process and generate insights to help our customers and their businesses harness the full power of data and make data-driven decisions.

- Santander's distribution network and open market capabilities. Our connection to Santander gives us privileged access to 153 million customers, plus proven distribution capabilities, that enable us to scale up faster and save acquisition costs.

To expand our global reach, we are leveraging synergies with Santander's existing presence but also developing open market distribution capabilities outside its footprint.

Our full autonomy and clear governance ensure delivery speed, as we operate independently, with our own people, culture, technology and operations.



Business performance

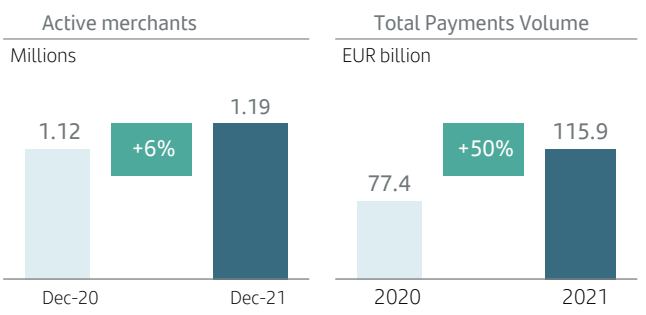
In late 2020, PagoNxt launched as a global payments platform to bring Santander's most innovative payment assets under one roof, build on the established Getnet franchise and achieve global leadership in the payments market.

Since inception, we have had several important achievements:

- PagoNxt is now a standalone operation. Its talent, processes and corporate governance provide the necessary base for faster growth. It has autonomous decision-making processes and a diverse talent pool with a strong technological background, 60% of whom are technologists and payments experts. We are investing to expand our payments proposition, increase our scale and enter high growth markets.
- Getnet, our payment solution for merchants, increased its footprint and achieved significant growth in 2021. Its Total Payments Volume (TPV) grew 50% to EUR 116 billion and its active merchants totalled 1.2 million a 6% increase year-on-year.

  In Latin America, Getnet continued to expand. It achieved TPV market share exceeding 15% TPV market share in Brazil and Mexico, and it also launched commercial operations in Chile and Uruguay. Getnet Brazil is now fully integrated within PagoNxt after the completion of its spin-off from Santander Brasil and subsequent listing on the B3, in São Paulo and on the Nasdaq. Likewise, Getnet Europe began operations in H2 as a pan-European acquirer after the integration of former Wirecard's technology, and consolidated its position in Spain with a 14% TPV market share.
- PagoNxt's global technology platform continued to enhance its capabilities and scale:
  - On the merchant side, our global platform added multiple new services including digital onboarding and PoS, alternative payment methods (APMs) and other payment schemes. We rolled it out in the EU, Argentina and Uruguay, and accelerated migration in other countries (e.g., 80% of transactions in Mexico have already been transferred).
  - On the trade side, our One Trade value proposition expanded its international payments, FX and trade finance solutions for SMEs and institutions. It is already connected to eight countries, providing, for example, instant payments in BRL in Brazil.
  - Our Payments Hub platform complements that proposition with its instant payments access to schemes in GBP and EUR.
  - On the consumer side, our Superdigital global platform developed digital wallets and payments for the underbanked. It was rolled out in Argentina, ahead of an initial launch of friends & family in Colombia and Peru.

Merchant



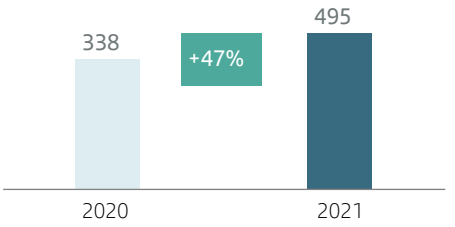
Results

In 2021, underlying attributable loss increased year-on-year to -EUR 253 million (-EUR 116 million in 2020), driven by high investments in new, developing projects and platforms (mainly in Trade), and by the integration of Wirecard's assets into Merchant in January 2021.

However, total income increased 39% in 2021, with a strong jump in net fee income (+47% at constant exchange rates).

PagoNxt. Revenue performance

Constant EUR million



Our performance was backed by the activity recovery in recent quarters. Volumes exceeded pre-pandemic levels, mainly in Merchant (strong increase in the number of transactions, merchants and total payments volumes in most of the countries).

PagoNxt. Underlying income statement

EUR million and % change

	2021	2020	/ 2020 %	/ 2020 % excl. FX
Revenue	495	356	+39	+47
Expenses	-673	-443	+52	+57
Net operating income	**-178**	**-86**	**+106**	**+96**
LLPs	-10	-12	-17	-10
PBT	-227	-101	+124	+116
Underlying attrib. profit	**-253**	**-116**	**+118**	**+114**

Detailed financial information in section 4.6 'Appendix

4.6 Appendix

Primary segments

EUR million

	Europe				Spain		
Underlying income statement	**2021**	**2020**	**%**	**% excl. FX**	**2021**	**2020**	**%**
Net interest income	10,952	9,911	10.5	9.5	3,994	3,957	0.9
Net fee income	4,344	4,000	8.6	8.6	2,482	2,314	7.3
Gains (losses) on financial transactions [A]	755	869	(13.1)	(12.7)	552	781	(29.3)
Other operating income	261	(107)	—	—	(21)	(269)	(92.0)
Total income	**16,312**	**14,673**	**11.2**	**10.5**	**7,006**	**6,782**	**3.3**
Administrative expenses and amortizations	(8,318)	(8,275)	0.5	(0.2)	(3,340)	(3,607)	(7.4)
Net operating income	**7,994**	**6,398**	**24.9**	**24.5**	**3,666**	**3,175**	**15.5**
Net loan-loss provisions	(2,294)	(3,344)	(31.4)	(31.7)	(1,833)	(2,001)	(8.4)
Other gains (losses) and provisions	(1,289)	(970)	32.9	32.5	(526)	(459)	14.6
Profit before tax	**4,411**	**2,084**	**111.6**	**111.0**	**1,307**	**715**	**82.7**
Tax on profit	(1,362)	(594)	129.4	129.1	(350)	(199)	75.9
Profit from continuing operations	**3,049**	**1,491**	**104.6**	**103.8**	**957**	**516**	**85.3**
Net profit from discontinued operations	—	—	—	—	—	—	—
Consolidated profit	**3,049**	**1,491**	**104.6**	**103.8**	**957**	**516**	**85.3**
Non-controlling interests	(71)	(78)	(9.0)	(6.1)	0	0	86.8
Underlying profit attributable to the parent	**2,978**	**1,413**	**110.8**	**109.7**	**957**	**517**	**85.3**
Balance sheet							
Loans and advances to customers	590,610	563,582	4.8	1.6	195,041	194,239	0.4
Cash, central banks and credit institutions	256,433	213,561	20.1	17.8	142,040	113,518	25.1
Debt instruments	67,068	81,271	(17.5)	(18.2)	13,915	21,654	(35.7)
Other financial assets	37,250	48,313	(22.9)	(23.0)	2,550	2,671	(4.5)
Other asset accounts	29,793	35,893	(17.0)	(18.5)	17,712	22,438	(21.1)
Total assets	**981,153**	**942,620**	**4.1**	**1.6**	**371,258**	**354,521**	**4.7**
Customer deposits	619,486	582,353	6.4	3.5	265,004	251,375	5.4
Central banks and credit institutions	193,307	167,014	15.7	14.1	52,855	48,305	9.4
Marketable debt securities	73,629	84,201	(12.6)	(16.1)	25,428	26,068	(2.5)
Other financial liabilities	38,706	54,634	(29.2)	(29.4)	7,937	9,344	(15.1)
Other liabilities accounts	10,929	11,788	(7.3)	(9.6)	4,147	4,112	0.9
Total liabilities	**936,056**	**899,990**	**4.0**	**1.5**	**355,371**	**339,203**	**4.8**
Total equity	**45,097**	**42,630**	**5.8**	**3.3**	**15,887**	**15,318**	**3.7**
Memorandum items:							
Gross loans and advances to customers [B]	575,983	543,336	6.0	2.9	201,549	200,735	0.4
Customer funds	711,799	655,954	8.5	6.1	345,298	320,879	7.6
Customer deposits [C]	603,739	562,977	7.2	4.5	265,004	251,375	5.4
Mutual funds	108,060	92,977	16.2	15.6	80,295	69,503	15.5
Ratios (%), operating means and customers							
Underlying RoTE	7.36	3.61	3.75		6.33	3.30	3.04
Efficiency ratio	51.0	56.4	(5.4)		47.7	53.2	(5.5)
NPL ratio	3.12	3.34	(0.22)		5.77	6.23	(0.46)
Total coverage ratio	49.4	50.3	(0.9)		52.2	47.1	5.1
Number of employees	60,941	69,032	(11.7)		23,035	26,961	(14.6)
Number of branches	3,242	4,494	(27.9)		1,947	2,939	(33.8)
Number of loyal customers (thousands)	10,286	10,021	2.6		2,772	2,643	4.9
Number of digital customers (thousands)	16,216	15,302	6.0		5,412	5,234	3.4

A. Includes exchange differences.
B. Excluding reverse repos.
C. Excluding repos.

Primary segments

EUR million

	United Kingdom				Portugal		
Underlying income statement	2021	2020	%	% excl. FX	2021	2020	%
Net interest income	4,431	3,504	26.5	22.3	751	787	(4.6)
Net fee income	434	494	(12.3)	(15.2)	441	388	13.7
Gains (losses) on financial transactions [A]	(8)	(20)	(59.4)	(60.8)	142	111	27.4
Other operating income	6	1	419.7	402.4	8	10	(21.8)
Total income	**4,863**	**3,980**	**22.2**	**18.1**	**1,341**	**1,296**	**3.5**
Administrative expenses and amortizations	(2,592)	(2,539)	2.1	(1.3)	(563)	(590)	(4.7)
Net operating income	**2,271**	**1,441**	**57.6**	**52.4**	**778**	**706**	**10.3**
Net loan-loss provisions	245	(677)	—	—	(38)	(193)	(80.5)
Other gains (losses) and provisions	(319)	(256)	24.6	20.5	(26)	(29)	(9.2)
Profit before tax	**2,197**	**508**	**332.2**	**317.9**	**714**	**483**	**47.8**
Tax on profit	(627)	(117)	435.9	418.1	(231)	(145)	59.8
Profit from continuing operations	**1,570**	**391**	**301.2**	**287.9**	**483**	**339**	**42.6**
Net profit from discontinued operations	—	—	—	—	—	—	—
Consolidated profit	**1,570**	**391**	**301.2**	**287.9**	**483**	**339**	**42.6**
Non-controlling interests	—	—	—	—	(1)	0	171.9
Underlying profit attributable to the parent	**1,570**	**391**	**301.2**	**287.9**	**482**	**338**	**42.4**
Balance sheet							
Loans and advances to customers	261,414	249,777	4.7	(2.1)	39,280	38,058	3.2
Cash, central banks and credit institutions	72,499	54,444	33.2	24.6	9,692	5,819	66.6
Debt instruments	7,832	11,527	(32.0)	(36.4)	8,489	11,569	(26.6)
Other financial assets	389	712	(45.4)	(49.0)	1,586	1,487	6.7
Other asset accounts	5,667	8,177	(30.7)	(35.2)	1,209	1,475	(18.0)
Total assets	**347,801**	**324,637**	**7.1**	**0.2**	**60,257**	**58,408**	**3.2**
Customer deposits	242,739	231,921	4.7	(2.1)	42,371	39,881	6.2
Central banks and credit institutions	44,086	20,587	114.1	100.3	9,410	9,974	(5.7)
Marketable debt securities	40,796	51,151	(20.2)	(25.4)	2,633	2,520	4.5
Other financial liabilities	2,558	2,316	10.5	3.3	236	249	(5.5)
Other liabilities accounts	2,442	4,508	(45.8)	(49.3)	1,344	1,643	(18.2)
Total liabilities	**332,620**	**310,483**	**7.1**	**0.2**	**55,994**	**54,267**	**3.2**
Total equity	**15,181**	**14,154**	**7.3**	**0.3**	**4,264**	**4,141**	**3.0**
Memorandum items:							
Gross loans and advances to customers [B]	247,775	230,674	7.4	0.5	40,262	39,054	3.1
Customer funds	237,780	222,268	7.0	0.1	46,711	43,133	8.3
Customer deposits [C]	228,790	214,329	6.7	(0.1)	42,371	39,881	6.2
Mutual funds	8,991	7,938	13.3	5.9	4,340	3,252	33.4
Ratios (%), operating means and customers							
Underlying RoTE	11.71	3.02	8.69		11.85	8.73	3.12
Efficiency ratio	53.3	63.8	(10.5)		42.0	45.5	(3.6)
NPL ratio	1.43	1.24	0.19		3.44	3.89	(0.45)
Total coverage ratio	25.8	44.7	(18.9)		71.7	66.5	5.2
Number of employees	18,684	22,028	(15.2)		5,069	6,336	(20.0)
Number of branches	450	564	(20.2)		393	477	(17.6)
Number of loyal customers (thousands)	4,389	4,450	(1.4)		860	812	6.0
Number of digital customers (thousands)	6,635	6,267	5.9		1,000	930	7.5

A. Includes exchange differences.
B. Excluding reverse repos.
C. Excluding repos.

Primary segments

EUR million

	Poland				Other Europe			
Underlying income statement	2021	2020	%	% excl. FX	2021	2020	%	% excl. FX
Net interest income	1,049	1,037	1.2	4.0	726	627	15.9	16.7
Net fee income	518	452	14.5	17.7	470	351	33.9	35.2
Gains (losses) on financial transactions [A]	77	90	(14.2)	(11.8)	(8)	(93)	(91.0)	(91.2)
Other operating income	2	(55)	—	—	267	206	29.9	29.9
Total income	**1,646**	**1,524**	**8.0**	**11.0**	**1,455**	**1,090**	**33.5**	**34.6**
Administrative expenses and amortizations	(663)	(629)	5.3	8.2	(1,161)	(909)	27.7	28.7
Net operating income	**984**	**895**	**10.0**	**13.0**	**294**	**181**	**62.5**	**64.1**
Net loan-loss provisions	(200)	(330)	(39.4)	(37.7)	(468)	(144)	226.2	225.9
Other gains (losses) and provisions	(404)	(195)	106.8	112.5	(13)	(30)	(56.4)	(56.2)
Profit before tax	**380**	**370**	**2.8**	**5.6**	**(187)**	**8**	**—**	**—**
Tax on profit	(150)	(130)	15.5	18.7	(4)	(3)	10.4	9.5
Profit from continuing operations	**230**	**240**	**(4.1)**	**(1.4)**	**(191)**	**4**	**—**	**—**
Net profit from discontinued operations	—	—	—	—	—	—	—	—
Consolidated profit	**230**	**240**	**(4.1)**	**(1.4)**	**(191)**	**4**	**—**	**—**
Non-controlling interests	(69)	(78)	(11.1)	(8.6)	(1)	—	—	—
Underlying profit attributable to the parent	**161**	**162**	**(0.7)**	**2.0**	**(191)**	**5**	**—**	**—**
Balance sheet								
Loans and advances to customers	29,817	28,025	6.4	7.3	65,058	53,483	21.6	19.9
Cash, central banks and credit institutions	2,968	2,539	16.9	17.8	29,234	37,241	(21.5)	(22.3)
Debt instruments	15,082	14,006	7.7	8.6	21,748	22,516	(3.4)	(3.4)
Other financial assets	503	980	(48.7)	(48.3)	32,222	42,463	(24.1)	(24.2)
Other asset accounts	1,419	1,341	5.8	6.7	3,785	2,462	53.8	47.6
Total assets	**49,788**	**46,890**	**6.2**	**7.1**	**152,049**	**158,165**	**(3.9)**	**(4.7)**
Customer deposits	37,919	34,868	8.8	9.7	31,452	24,307	29.4	28.4
Central banks and credit institutions	3,312	2,613	26.7	27.8	83,644	85,535	(2.2)	(3.3)
Marketable debt securities	1,618	2,110	(23.3)	(22.7)	3,154	2,353	34.1	34.1
Other financial liabilities	692	993	(30.3)	(29.7)	27,283	41,732	(34.6)	(34.7)
Other liabilities accounts	1,529	1,232	24.1	25.1	1,468	294	399.3	395.8
Total liabilities	**45,071**	**41,816**	**7.8**	**8.7**	**147,000**	**154,221**	**(4.7)**	**(5.4)**
Total equity	**4,717**	**5,074**	**(7.0)**	**(6.3)**	**5,048**	**3,944**	**28.0**	**25.1**
Memorandum items:								
Gross loans and advances to customers [B]	30,657	29,055	5.5	6.4	55,740	43,818	27.2	25.0
Customer funds	42,325	38,889	8.8	9.7	39,684	30,786	28.9	28.2
Customer deposits [C]	37,919	34,865	8.8	9.7	29,655	22,526	31.7	30.6
Mutual funds	4,406	4,023	9.5	10.4	10,029	8,260	21.4	21.4

Ratios (%), operating means and customers			
Underlying RoTE	5.00	5.05	(0.05)
Efficiency ratio	40.2	41.3	(1.0)
NPL ratio	3.61	4.74	(1.13)
Total coverage ratio	73.9	70.7	3.2
Number of employees	9,718	10,582	(8.2)
Number of branches	440	502	(12.4)
Number of loyal customers (thousands)	2,266	2,115	7.1
Number of digital customers (thousands)	2,998	2,756	8.8

A. Includes exchange differences.
B. Excluding reverse repos.
C. Excluding repos.

Primary segments

EUR million

	North America				United States			
Underlying income statement	2021	2020	%	% excl. FX	2021	2020	%	% excl. FX
Net interest income	8,204	8,470	(3.1)	(1.4)	5,405	5,645	(4.2)	(0.8)
Net fee income	1,644	1,684	(2.4)	(1.3)	782	889	(12.0)	(8.8)
Gains (losses) on financial transactions [A]	224	251	(10.6)	(9.9)	152	118	29.1	33.9
Other operating income	914	629	45.3	51.6	1,044	709	47.3	52.7
Total income	**10,986**	**11,034**	**(0.4)**	**1.4**	**7,383**	**7,360**	**0.3**	**4.0**
Administrative expenses and amortizations	(4,967)	(4,677)	6.2	8.1	(3,197)	(3,079)	3.8	7.6
Net operating income	**6,019**	**6,357**	**(5.3)**	**(3.5)**	**4,187**	**4,281**	**(2.2)**	**1.4**
Net loan-loss provisions	(1,210)	(3,917)	(69.1)	(68.4)	(419)	(2,937)	(85.7)	(85.2)
Other gains (losses) and provisions	(145)	(133)	9.6	11.8	(116)	(93)	24.0	28.6
Profit before tax	**4,664**	**2,307**	**102.2**	**104.5**	**3,652**	**1,250**	**192.1**	**202.7**
Tax on profit	(1,056)	(573)	84.1	86.4	(832)	(318)	161.2	170.7
Profit from continuing operations	**3,609**	**1,734**	**108.1**	**110.5**	**2,821**	**932**	**202.6**	**213.7**
Net profit from discontinued operations	—	—	—	—	—	—	—	—
Consolidated profit	**3,609**	**1,734**	**108.1**	**110.5**	**2,821**	**932**	**202.6**	**213.7**
Non-controlling interests	(556)	(262)	112.3	117.4	(494)	(201)	145.4	154.3
Underlying profit attributable to the parent	**3,053**	**1,472**	**107.4**	**109.3**	**2,326**	**731**	**218.4**	**230.0**
Balance sheet								
Loans and advances to customers	137,428	120,571	14.0	5.9	103,548	90,992	13.8	5.0
Cash, central banks and credit institutions	34,857	28,666	21.6	13.5	24,033	16,614	44.7	33.5
Debt instruments	38,500	38,402	0.3	(5.9)	16,341	14,084	16.0	7.1
Other financial assets	12,555	15,439	(18.7)	(23.5)	4,258	4,381	(2.8)	(10.3)
Other asset accounts	21,394	20,718	3.3	(4.2)	17,638	17,003	3.7	(4.3)
Total assets	**244,734**	**223,797**	**9.4**	**1.9**	**165,819**	**143,074**	**15.9**	**7.0**
Customer deposits	121,989	102,924	18.5	10.4	83,159	67,450	23.3	13.8
Central banks and credit institutions	35,059	38,017	(7.8)	(13.9)	21,851	20,989	4.1	(3.9)
Marketable debt securities	38,061	36,583	4.0	(3.5)	31,482	29,737	5.9	(2.3)
Other financial liabilities	14,652	16,182	(9.5)	(14.8)	4,038	4,329	(6.7)	(13.9)
Other liabilities accounts	6,194	6,029	2.7	(4.0)	4,140	3,369	22.9	13.4
Total liabilities	**215,955**	**199,735**	**8.1**	**0.8**	**144,670**	**125,874**	**14.9**	**6.1**
Total equity	**28,779**	**24,062**	**19.6**	**11.3**	**21,149**	**17,200**	**23.0**	**13.5**
Memorandum items:								
Gross loans and advances to customers [B]	134,090	120,665	11.1	3.2	99,731	90,459	10.2	1.8
Customer funds	137,206	117,548	16.7	8.7	91,865	76,972	19.3	10.2
Customer deposits [C]	111,004	96,315	15.3	7.2	77,775	66,385	17.2	8.1
Mutual funds	26,202	21,233	23.4	15.4	14,090	10,586	33.1	22.8
Ratios (%), operating means and customers								
Underlying RoTE	13.10	6.95	6.15		13.62	4.66	8.96	
Efficiency ratio	45.2	42.4	2.8		43.3	41.8	1.5	
NPL ratio	2.42	2.23	0.19		2.33	2.04	0.28	
Total coverage ratio	134.9	182.6	(47.6)		150.3	210.4	(60.1)	
Number of employees	43,595	38,706	12.6		15,674	16,125	(2.8)	
Number of branches	1,859	1,958	(5.1)		488	585	(16.6)	
Number of loyal customers (thousands)	4,226	3,942	7.2		373	347	7.6	
Number of digital customers (thousands)	6,706	6,127	9.5		1,036	1,011	2.5	

A. Includes exchange differences.
B. Excluding reverse repos.
C. Excluding repos.

Primary segments

EUR million

	Mexico				Other North America			
Underlying income statement	2021	2020	%	% excl. FX	2021	2020	%	% excl. FX
Net interest income	2,799	2,825	(0.9)	(2.5)	—	1	(26.9)	(26.9)
Net fee income	828	772	7.3	5.6	34	24	41.7	41.7
Gains (losses) on financial transactions [A]	72	134	(45.9)	(46.7)	—	(1)	(84.3)	(84.3)
Other operating income	(120)	(79)	51.0	48.6	(11)	(1)	—	—
Total income	**3,579**	**3,651**	**(2.0)**	**(3.5)**	**23**	**23**	**0.4**	**0.4**
Administrative expenses and amortizations	(1,643)	(1,552)	5.8	4.2	(127)	(46)	176.6	176.6
Net operating income	**1,936**	**2,098**	**(7.7)**	**(9.2)**	**(104)**	**(23)**	**354.2**	**354.2**
Net loan-loss provisions	(791)	(979)	(19.2)	(20.5)	—	—	(80.9)	(80.9)
Other gains (losses) and provisions	(19)	(37)	(48.6)	(49.4)	(10)	(2)	472.8	472.8
Profit before tax	**1,126**	**1,082**	**4.1**	**2.5**	**(114)**	**(25)**	**354.3**	**354.3**
Tax on profit	(231)	(259)	(11.1)	(12.5)	7	5	45.3	45.3
Profit from continuing operations	**896**	**823**	**8.9**	**7.2**	**(108)**	**(21)**	**422.2**	**422.2**
Net profit from discontinued operations	—	—	—	—	—	—	—	—
Consolidated profit	**896**	**823**	**8.9**	**7.2**	**(108)**	**(21)**	**422.2**	**422.2**
Non-controlling interests	(61)	(61)	0.7	(0.9)	—	—	—	—
Underlying profit attributable to the parent	**835**	**762**	**9.6**	**7.8**	**(108)**	**(20)**	**434.3**	**434.3**
Balance sheet								
Loans and advances to customers	33,860	29,565	14.5	8.5	20	15	34.4	34.4
Cash, central banks and credit institutions	10,593	11,854	(10.6)	(15.3)	231	197	17.0	17.0
Debt instruments	22,159	24,315	(8.9)	(13.7)	—	4	(100.0)	(100.0)
Other financial assets	8,297	10,982	(24.5)	(28.4)	0	76	(99.5)	(99.5)
Other asset accounts	3,474	3,523	(1.4)	(6.6)	282	193	46.2	46.2
Total assets	**78,383**	**80,239**	**(2.3)**	**(7.5)**	**533**	**485**	**9.9**	**9.9**
Customer deposits	38,820	35,457	9.5	3.7	11	17	(38.3)	(38.3)
Central banks and credit institutions	13,183	16,977	(22.3)	(26.4)	25	51	(49.7)	(49.7)
Marketable debt securities	6,579	6,847	(3.9)	(9.0)	—	—	—	—
Other financial liabilities	10,559	11,830	(10.7)	(15.4)	54	23	140.4	140.4
Other liabilities accounts	2,022	2,628	(23.1)	(27.1)	32	31	3.2	3.2
Total liabilities	**71,162**	**73,739**	**(3.5)**	**(8.6)**	**123**	**122**	**0.8**	**0.8**
Total equity	**7,221**	**6,500**	**11.1**	**5.2**	**410**	**363**	**13.0**	**13.0**
Memorandum items:								
Gross loans and advances to customers [B]	34,339	30,191	13.7	7.8	20	15	31.8	31.8
Customer funds	45,330	40,558	11.8	5.9	11	17	(38.3)	(38.3)
Customer deposits [C]	33,218	29,912	11.1	5.2	11	17	(38.3)	(38.3)
Mutual funds	12,112	10,646	13.8	7.8	—	—	—	—

Ratios (%), operating means and customers			
Underlying RoTE	13.91	14.38	(0.47)
Efficiency ratio	45.9	42.5	3.4
NPL ratio	2.73	2.81	(0.08)
Total coverage ratio	95.0	120.8	(25.8)
Number of employees	27,266	22,246	22.6
Number of branches	1,371	1,373	(0.1)
Number of loyal customers (thousands)	3,853	3,595	7.2
Number of digital customers (thousands)	5,499	5,000	10.0

A. Includes exchange differences.
B. Excluding reverse repos.
C. Excluding repos.

Primary segments

EUR million

	South America				Brazil			
Underlying income statement	**2021**	**2020**	**%**	**% excl. FX**	**2021**	**2020**	**%**	**% excl. FX**
Net interest income	11,323	10,723	5.6	14.0	7,875	7,625	3.3	13.2
Net fee income	3,721	3,589	3.7	12.7	2,728	2,824	(3.4)	5.9
Gains (losses) on financial transactions [A]	716	765	(6.5)	0.4	376	467	(19.6)	(11.9)
Other operating income	(407)	(210)	94.0	112.7	(95)	(51)	87.1	105.0
Total income	**15,353**	**14,868**	**3.3**	**11.6**	**10,884**	**10,866**	**0.2**	**9.8**
Administrative expenses and amortizations	(5,380)	(5,357)	0.4	8.4	(3,236)	(3,541)	(8.6)	0.1
Net operating income	**9,974**	**9,511**	**4.9**	**13.4**	**7,649**	**7,325**	**4.4**	**14.4**
Net loan-loss provisions	(3,251)	(3,924)	(17.2)	(10.5)	(2,715)	(3,018)	(10.0)	(1.4)
Other gains (losses) and provisions	(474)	(321)	48.0	63.9	(316)	(263)	20.4	31.9
Profit before tax	**6,249**	**5,267**	**18.6**	**28.3**	**4,618**	**4,045**	**14.2**	**25.1**
Tax on profit	(2,364)	(1,923)	23.0	33.7	(2,029)	(1,693)	19.8	31.3
Profit from continuing operations	**3,884**	**3,344**	**16.2**	**25.2**	**2,589**	**2,352**	**10.1**	**20.6**
Net profit from discontinued operations	—	—	—	—	—	—	—	—
Consolidated profit	**3,884**	**3,344**	**16.2**	**25.2**	**2,589**	**2,352**	**10.1**	**20.6**
Non-controlling interests	(556)	(436)	27.5	33.6	(263)	(238)	10.5	21.1
Underlying profit attributable to the parent	**3,328**	**2,907**	**14.5**	**23.9**	**2,325**	**2,113**	**10.0**	**20.6**
Balance sheet								
Loans and advances to customers	123,920	113,745	8.9	12.7	73,085	63,974	14.2	13.3
Cash, central banks and credit institutions	43,134	43,154	0.0	1.4	28,400	31,466	(9.7)	(10.5)
Debt instruments	51,451	49,303	4.4	5.9	37,078	37,655	(1.5)	(2.4)
Other financial assets	23,809	17,342	37.3	45.1	10,129	6,877	47.3	46.0
Other asset accounts	15,491	15,201	1.9	4.0	10,755	10,600	1.5	0.6
Total assets	**257,805**	**238,746**	**8.0**	**11.0**	**159,446**	**150,573**	**5.9**	**5.0**
Customer deposits	120,500	111,808	7.8	10.7	74,475	70,083	6.3	5.4
Central banks and credit institutions	44,303	42,040	5.4	8.3	27,664	26,350	5.0	4.1
Marketable debt securities	23,461	21,280	10.2	14.5	13,737	11,901	15.4	14.5
Other financial liabilities	40,490	35,456	14.2	17.3	25,503	23,536	8.4	7.4
Other liabilities accounts	8,610	8,334	3.3	5.0	5,283	6,157	(14.2)	(14.9)
Total liabilities	**237,364**	**218,918**	**8.4**	**11.4**	**146,662**	**138,026**	**6.3**	**5.4**
Total equity	**20,441**	**19,828**	**3.1**	**5.7**	**12,785**	**12,547**	**1.9**	**1.0**
Memorandum items:								
Gross loans and advances to customers [B]	128,916	118,784	8.5	12.3	76,569	67,424	13.6	12.6
Customer funds	162,212	153,241	5.9	8.5	105,095	100,351	4.7	3.8
Customer deposits [C]	110,875	103,319	7.3	10.5	64,890	61,627	5.3	4.4
Mutual funds	51,337	49,922	2.8	4.4	40,205	38,725	3.8	2.9
Ratios (%), operating means and customers								
Underlying RoTE	20.28	17.72	2.56		21.49	19.16	2.33	
Efficiency ratio	35.0	36.0	(1.0)		29.7	32.6	(2.9)	
NPL ratio	4.50	4.39	0.11		4.88	4.59	0.29	
Total coverage ratio	98.3	97.4	0.9		111.2	113.2	(2.0)	
Number of employees	74,970	65,587	14.3		52,871	43,258	22.2	
Number of branches	4,469	4,431	0.9		3,614	3,571	1.2	
Number of loyal customers (thousands)	10,625	8,614	23.3		8,037	6,382	25.9	
Number of digital customers (thousands)	23,771	20,315	17.0		18,351	15,556	18.0	

A. Includes exchange differences.
B. Excluding reverse repos.
C. Excluding repos.

Primary segments

EUR million

	Chile				Argentina			
Underlying income statement	2021	2020	%	% excl. FX	2021	2020	%	% excl. FX
Net interest income	1,984	1,787	11.0	10.4	1,070	912	17.3	32.2
Net fee income	394	335	17.8	17.2	420	273	53.9	73.5
Gains (losses) on financial transactions [A]	131	174	(24.7)	(25.1)	147	62	137.4	167.7
Other operating income	(52)	(32)	62.5	61.6	(245)	(119)	105.3	131.4
Total income	**2,457**	**2,263**	**8.5**	**7.9**	**1,393**	**1,128**	**23.4**	**39.2**
Administrative expenses and amortizations	(942)	(900)	4.7	4.1	(805)	(632)	27.4	43.6
Net operating income	**1,514**	**1,363**	**11.1**	**10.5**	**587**	**496**	**18.5**	**33.5**
Net loan-loss provisions	(341)	(594)	(42.6)	(43.0)	(140)	(226)	(37.9)	(30.0)
Other gains (losses) and provisions	(16)	16	—	—	(136)	(70)	93.6	118.3
Profit before tax	**1,158**	**785**	**47.5**	**46.7**	**311**	**200**	**55.8**	**75.7**
Tax on profit	(230)	(155)	48.0	47.2	(35)	(19)	83.8	107.2
Profit from continuing operations	**928**	**629**	**47.4**	**46.6**	**275**	**180**	**52.8**	**72.3**
Net profit from discontinued operations	—	—	—	—	—	—	—	—
Consolidated profit	**928**	**629**	**47.4**	**46.6**	**275**	**180**	**52.8**	**72.3**
Non-controlling interests	(291)	(197)	47.7	46.9	(2)	(1)	25.9	41.9
Underlying profit attributable to the parent	**637**	**432**	**47.3**	**46.5**	**274**	**179**	**53.0**	**72.5**
Balance sheet								
Loans and advances to customers	37,849	39,381	(3.9)	6.3	5,173	4,151	24.6	40.5
Cash, central banks and credit institutions	6,773	5,836	16.0	28.4	5,243	3,048	72.0	93.9
Debt instruments	10,955	8,365	31.0	44.9	1,358	1,897	(28.4)	(19.3)
Other financial assets	13,469	10,221	31.8	45.8	92	59	55.1	74.9
Other asset accounts	2,942	3,076	(4.4)	5.8	966	832	16.1	30.9
Total assets	**71,987**	**66,880**	**7.6**	**19.1**	**12,832**	**9,988**	**28.5**	**44.8**
Customer deposits	29,525	28,362	4.1	15.2	9,170	7,179	27.7	44.0
Central banks and credit institutions	12,109	11,611	4.3	15.4	645	840	(23.2)	(13.4)
Marketable debt securities	9,264	9,247	0.2	10.8	204	20	911.8	—
Other financial liabilities	13,841	11,162	24.0	37.2	1,013	657	54.0	73.7
Other liabilities accounts	2,543	1,519	67.4	85.2	443	359	23.3	39.0
Total liabilities	**67,282**	**61,902**	**8.7**	**20.2**	**11,475**	**9,056**	**26.7**	**42.9**
Total equity	**4,705**	**4,978**	**(5.5)**	**4.6**	**1,357**	**931**	**45.6**	**64.2**
Memorandum items:								
Gross loans and advances to customers [B]	38,930	40,593	(4.1)	6.1	5,454	4,395	24.1	39.9
Customer funds	37,847	37,873	(0.1)	10.6	11,891	8,795	35.2	52.4
Customer deposits [C]	29,484	28,330	4.1	15.1	9,170	7,179	27.7	44.0
Mutual funds	8,363	9,543	(12.4)	(3.0)	2,721	1,616	68.4	89.9
Ratios (%), operating means and customers								
Underlying RoTE	19.28	13.19	6.09		27.44	26.24	1.20	
Efficiency ratio	38.4	39.8	(1.4)		57.8	56.0	1.8	
NPL ratio	4.43	4.79	(0.36)		3.61	2.11	1.50	
Total coverage ratio	63.3	61.4	1.9		153.8	275.1	(121.3)	
Number of employees	10,574	10,835	(2.4)		8,620	9,159	(5.9)	
Number of branches	326	346	(5.8)		411	408	0.7	
Number of loyal customers (thousands)	832	764	8.9		1,614	1,356	19.0	
Number of digital customers (thousands)	2,017	1,547	30.4		2,730	2,650	3.0	

A. Includes exchange differences.
B. Excluding reverse repos.
C. Excluding repos.

Primary segments

EUR million

	Other South America				Digital Consumer Bank			
Underlying income statement	2021	2020	%	% excl. FX	2021	2020	%	% excl. FX
Net interest income	395	399	(1.0)	8.0	4,281	4,263	0.4	(0.4)
Net fee income	179	158	13.3	21.5	821	771	6.4	6.4
Gains (losses) on financial transactions [A]	62	62	(0.1)	9.7	8	16	(46.3)	(43.5)
Other operating income	(15)	(8)	96.2	117.1	228	116	96.4	92.1
Total income	**620**	**611**	**1.5**	**10.3**	**5,339**	**5,166**	**3.3**	**2.6**
Administrative expenses and amortizations	(397)	(284)	39.8	49.4	(2,405)	(2,329)	3.3	2.6
Net operating income	**223**	**327**	**(31.7)**	**(24.6)**	**2,934**	**2,837**	**3.4**	**2.5**
Net loan-loss provisions	(55)	(86)	(36.3)	(30.6)	(527)	(957)	(44.9)	(45.5)
Other gains (losses) and provisions	(7)	(3)	89.5	97.9	(194)	49	0.0	0.0
Profit before tax	**162**	**238**	**(31.8)**	**(24.4)**	**2,213**	**1,929**	**14.8**	**13.8**
Tax on profit	(70)	(55)	27.2	41.4	(536)	(495)	8.2	7.5
Profit from continuing operations	**92**	**183**	**(49.4)**	**(44.0)**	**1,678**	**1,433**	**17.0**	**15.9**
Net profit from discontinued operations	—	—	—	—	—	—	—	—
Consolidated profit	**92**	**183**	**(49.4)**	**(44.0)**	**1,678**	**1,433**	**17.0**	**15.9**
Non-controlling interests	—	—	—	—	(346)	(301)	15	15
Underlying profit attributable to the parent	**92**	**183**	**(49.7)**	**(44.3)**	**1,332**	**1,133**	**17.6**	**16.2**
Balance sheet								
Loans and advances to customers	7,813	6,239	25.2	27.6	113,936	113,257	0.6	(0.6)
Cash, central banks and credit institutions	2,718	2,803	(3.0)	(3.1)	33,482	21,754	53.9	53.1
Debt instruments	2,061	1,386	48.7	48.8	5,280	5,660	(6.7)	(7.1)
Other financial assets	119	185	(35.8)	(35.0)	47	30	57.3	56.4
Other asset accounts	828	692	19.6	20.3	6,937	6,149	12.8	11.0
Total assets	**13,539**	**11,306**	**19.8**	**21.1**	**159,683**	**146,851**	**8.7**	**7.5**
Customer deposits	7,331	6,184	18.5	18.1	55,327	51,399	7.6	6.7
Central banks and credit institutions	3,885	3,239	20.0	25.0	49,109	41,567	18.1	16.1
Marketable debt securities	255	112	127.2	131.6	36,710	35,965	2.1	1.3
Other financial liabilities	134	101	33.2	34.6	1,397	1,370	2.0	0.9
Other liabilities accounts	340	298	14.0	13.9	4,565	3,940	15.8	15.2
Total liabilities	**11,945**	**9,934**	**20.2**	**21.6**	**147,108**	**134,241**	**9.6**	**8.4**
Total equity	**1,595**	**1,372**	**16.2**	**16.8**	**12,575**	**12,610**	**(0.3)**	**(1.7)**
Memorandum items:								
Gross loans and advances to customers [B]	7,963	6,373	25.0	27.3	116,580	116,083	0.4	(0.8)
Customer funds	7,378	6,222	18.6	18.2	57,824	52,058	11.1	10.2
Customer deposits [C]	7,331	6,184	18.5	18.1	55,327	51,399	7.6	6.7
Mutual funds	48	38	25.3	22.4	2,497	658	279.4	279.4
Ratios (%), operating means and customers								
Underlying RoTE					14.05	11.77	2.27	
Efficiency ratio					45.0	45.0	(0.04)	
NPL ratio					2.13	2.17	(0.04)	
Total coverage ratio					107.8	113.3	(5.54)	
Number of employees					15,840	16,172	(2.1)	
Number of branches					309	353	(12.46)	
Number of total customers (thousands)					19,437	19,611	(0.89)	

A. Includes exchange differences.
B. Excluding reverse repos.
C. Excluding repos.

Secondary segments

EUR million

Underlying income statement	Retail Banking 2021	Retail Banking 2020	Retail Banking %	Retail Banking % excl. FX	Corporate & Investment Banking 2021	Corporate & Investment Banking 2020	Corporate & Investment Banking %	Corporate & Investment Banking % excl. FX
Net interest income	31,389	30,056	4.4	7.0	2,995	2,918	2.6	5.8
Net fee income	7,010	6,987	0.3	3.7	1,750	1,542	13.5	16.4
Gains (losses) on financial transactions [A]	920	1,132	(18.8)	(17.6)	684	670	2.1	8.7
Other operating income	318	(153)	—	—	263	202	30.1	29.3
Total income	**39,636**	**38,022**	**4.2**	**7.0**	**5,692**	**5,332**	**6.8**	**10.1**
Administrative expenses and amortizations	(17,193)	(17,286)	(0.5)	1.4	(2,301)	(2,038)	12.9	15.0
Net operating income	**22,443**	**20,736**	**8.2**	**11.6**	**3,392**	**3,294**	**3.0**	**7.1**
Net loan-loss provisions	(7,114)	(11,632)	(38.8)	(36.9)	(130)	(470)	(72.3)	(72.1)
Other gains (losses) and provisions	(2,064)	(1,238)	66.8	70.6	(11)	(135)	(92.2)	(91.9)
Profit before tax	**13,265**	**7,866**	**68.6**	**74.2**	**3,251**	**2,689**	**20.9**	**26.5**
Tax on profit	(4,052)	(2,524)	60.5	68.2	(937)	(773)	21.2	27.3
Profit from continuing operations	**9,213**	**5,342**	**72.5**	**77.0**	**2,314**	**1,916**	**20.8**	**26.2**
Net profit from discontinued operations	—	—	—	—	—	—	—	—
Consolidated profit	**9,213**	**5,342**	**72.5**	**77.0**	**2,314**	**1,916**	**20.8**	**26.2**
Non-controlling interests	(1,344)	(922)	45.8	49.1	(147)	(119)	24.1	31.2
Underlying profit attributable to the parent	**7,869**	**4,420**	**78.0**	**82.9**	**2,167**	**1,798**	**20.6**	**25.8**

A. Includes exchange differences.

Secondary segments

EUR million

Underlying income statement	Wealth Management & Insurance 2021	Wealth Management & Insurance 2020	Wealth Management & Insurance %	Wealth Management & Insurance % excl. FX	PagoNxt 2021	PagoNxt 2020	PagoNxt %	PagoNxt % excl. FX
Net interest income	375	394	(4.9)	(2.5)	1	(1)	—	—
Net fee income	1,276	1,153	10.7	12.5	493	362	36.3	43.9
Gains (losses) on financial transactions [A]	101	100	0.3	2.9	(1)	(2)	(44.4)	(43.6)
Other operating income	414	383	8.3	10.2	2	(3)	—	—
Total income	**2,166**	**2,030**	**6.7**	**8.7**	**495**	**356**	**38.9**	**46.6**
Administrative expenses and amortizations	(902)	(872)	3.5	5.2	(673)	(443)	52.0	57.0
Net operating income	**1,264**	**1,159**	**9.1**	**11.3**	**(178)**	**(86)**	**106.3**	**95.5**
Net loan-loss provisions	(27)	(28)	(4.6)	(4.5)	(10)	(12)	(16.5)	(9.5)
Other gains (losses) and provisions	10	1	—	—	(38)	(3)	—	—
Profit before tax	**1,247**	**1,132**	**10.2**	**12.6**	**(227)**	**(101)**	**124.3**	**115.6**
Tax on profit	(304)	(271)	12.1	14.0	(24)	(16)	51.0	71.2
Profit from continuing operations	**943**	**860**	**9.6**	**12.1**	**(251)**	**(117)**	**114.3**	**110.3**
Net profit from discontinued operations	—	—	—	—	—	—	—	—
Consolidated profit	**943**	**860**	**9.6**	**12.1**	**(251)**	**(117)**	**114.3**	**110.3**
Non-controlling interests	(36)	(38)	(4.1)	0.1	(2)	1	—	—
Underlying profit attributable to the parent	**907**	**823**	**10.3**	**12.7**	**(253)**	**(116)**	**117.9**	**113.9**

A. Includes exchange differences.

5. Research, development and innovation (R&D&I)

Research, development and innovation activities

Innovation and technological development are fundamental to Santander's strategy. We aim to focus on operational excellence and customer experience in response to fresh challenges that emanate from digital transformation.

Moreover, the information from our new technological platforms helps us better understand the customer journey and enable us to design a more accurate digital profile to generate more confidence and increase customer loyalty.

As well as competition from other banks, financial entities must watch out for new entrants to the financial system, whose use of new technology is both a differentiating factor and a competitive advantage.

Developing a sound strategic technology plan must provide:

- greater capacity to adapt to customers' needs (customized products and services, full availability, and excellent, secure service across all channels);
- enhanced processes for Santander's professionals to ensure greater reliability and productivity; and
- proper risk management, supplying teams with the necessary infrastructures to help identify and assess all business-related, operational, reputational, regulatory and compliance risks.

As a global systemically important bank, Santander and its subsidiaries face increasing regulatory demands that impact system models and their underlying technology. Therefore they must make considerable additional investments to guarantee compliance and legal security.

As in previous years, the European Commission's 2021 EU Industrial R&D Investment Scoreboard (based on 2020 data) ranked our technological effort first among Spanish companies and our R&D investment second among global banks.

The equivalent investment in R&D&I to that considered in the ranking was EUR 1,325 million. See note 18 to the consolidated financial statements.

Technological strategy

To meet business and customer needs, we must integrate new digital capabilities such as agile methodologies, public and private cloud-based products and core systems development. We must also broaden our data and technological capabilities (APIs - Application Programming Interface, artificial intelligence, robotics, blockchain, etc.).

Our technological strategy aligns with the three pillars of the Group's strategy: One Santander, PagoNxt and Digital Consumer Bank. Our technological pillars (cloud, agile, data, core evolution and deep tech skills), a flexible and common architecture and a global operating model, and better risk and associated cost management, help us achieve this.

To ensure the technology strategy is consistent in all the Group's entities, the Santander Architecture Review Board (SARB) holds monthly meetings that bring together the chief technology officers (CTOs) of the different units and businesses to actively participate in key architecture decision-making. The SARB oversees everything; the analysis of potential assets, the migration to the cloud, the review of data lake reference architectures and other measures. The use of a single technology stack and reference architectures are key to achieving Santander Common Architecture. Based on simplification, component recycling and the principle of composable architecture, the SARB also guarantees the use of technologies that matches the business of the future.

To implement our technological strategy we rely on internal regulation, the Group's commitment and experience in relations with our entities, and a governance model that articulates projects and initiatives that help crystallize it in all our markets.

The development of our technology and operations (T&O) model will help us cultivate new business, especially in terms of global products and digital services. Some 5,000 Santander Global Technology & Operations professionals in Spain, the UK, Portugal, Poland, the US, Mexico, Brazil and Chile are gradually incorporating the global product portfolio agreed on by the Group's entities, our global businesses and the T&O division, guaranteeing the not only quality of digital services and products, but also their security.

Technological infrastructure

Santander has a network of high-quality data centres (CPDs) interconnected by a redundant communications system. The CPDs are spread across strategic markets to support and develop our activity. They combine traditional information technology (IT) systems with the capabilities supplied by an on-premise private cloud, which, thanks to its swift adoption, enables integrated management of the business areas' technology, accelerates digital transformation and allows us to save costs significantly.

Santander has migrated more than 75% of its technology infrastructure to the cloud and expects to complete the roll-out by 2023. Our cloud strategy enables us to improve processes, innovate swiftly and improve service quality. Our Local Cloud Centres of Excellence (local CCoEs), which the Global CCoE coordinates, guarantee consistent and rigorous cloud adoption across our entities. This minimizes risks in accordance with our Public Cloud policy. The process will also help fulfil Santander's responsible banking goals as

we expect it to save 70% of the energy our technology infrastructure consumes.

Cybersecurity

Cybersecurity is one of Santander's main priorities and a crucial element in supporting our purpose of helping people and businesses prosper, as well as offering excellent digital services to our customers.

The new cyber services and capabilities created during the 3-year Cybersecurity Transformation Plan completed in 2020 have moved to business as usual (BAU) operations in line with the Group's Cybersecurity Framework. It enabled us to set the organizational foundations and governance for cyber security globally; establish global cybersecurity services in the Group; strengthen defences according to existing best practices and latest technology tools; and drive a security-aware culture among employees and clients. During the transformation, Santander opened a Global Cybersecurity Centre in Madrid which proactively identifies, monitors and responds to cyber threats 24/7 to protect all Group entities, systems and customers.

At the same time, as cyber threats and attack techniques become more sophisticated, we must continuously evolve our cyber defences. In 2021, we established these key strategic cyber security pillars and initiatives to help us develop our cyber defences against emerging threats and technologies:

- Level the playing field: The current threat landscape is increasingly challenging and new weaknesses, techniques and procedures are reported on a daily basis. Deterrence, deception and automation techniques are crucial to make attacks more difficult;
- Defend the (hyper-connected) "Bank of the Future": Banks'platforms, cloud and supply chains are increasingly hyper-connected and interdependent. Cybersecurity teams have been working on implementing new defence paradigms such as "Zero Trust" and other innovative solutions; and
- Generate value and trust: Helping customers stay safe online is key to continue building trust and helping everyone prosper in the digital world. Santander promoted public-private partnerships and collaborations to tackle cybercrime to protect customers and society as a whole. For Santander this has translated into several initiatives in 2021, detailed in section 'Acting responsibly towards customers' of the Responsible banking chapter.

Internal and external audits of information systems occur periodically. The Group identifies IT assets, systems and information (including those in third parties), and regularly reviews the relevant risks and levels of protection to proactively discover and remedy any weakness through frequent security testing such as vulnerability scanning, penetration testing and red team exercises that simulate real cyber-attack scenarios.

Santander also actively participates in various coordinated cyber-exercises in collaboration with public and private organizations. In 2021, Santander placed first and third against 29 teams in the "Capture the Flag" exercise the SANS Institute in Spain had organized. We also placed seventh out of 200 teams from 48 countries in the World Economic Forum's Cyberpolygon exercise.

In addition to regular testing and reviews, independent certification authorities such as the International Organization for Standardization (ISO) 27001 and the Statement on Standards for Attestation Engagements (SSAE) 18 certify our critical cyber security services.

For more details on the different on how we measure, monitor and control cybersecurity risks and their respective mitigation plans, see section 6.2 'Operational risk management' of the Risk management and compliance chapter.

Digitalization and fintech ecosystem

To make headway in our digital transformation, in addition to the technological strategy, infrastructure development and cybersecurity initiatives, we created PagoNxt in 2020. This new brand enables us to accelerate business for merchants and enhance their ecosystem connecting customers and business partners, through our cloud-native, data-driven global payments platform, coupled with Santander's large-scale distribution and proven capabilities to provide access to the open market. Further details are given in section 4 'Financial information by segment' in this chapter.

Moreover, Santander combined Santander Consumer Finance's scale and leading position in Europe with Openbank's platform. Openbank's technology (digital banking API, with a Banking as a Service model) and data management capabilities drive growth by offering new services and operational improvements.

For more details about our digital and innovative products and services for individuals and corporates, as well as references to cybersecurity policies, see section 2 'Inclusive and sustainable growth' in the Responsible banking chapter.

6. Significant events since year end

No significant events occurred from 1 January 2022 to the date on which these consolidated financial statements were authorized for issue, other than those described in these consolidated annual accounts.

7. Trend information 2022

This director's report contains certain prospective information on the directors' plans, forecasts and estimates, based on what they consider to be reasonable assumptions.

Readers of this report should take into account that such prospective information must not be considered a guarantee of our future performance. As the plans, forecasts and estimates are subject to numerous risks and uncertainties, our future performance may not match initial expectations. These risks and uncertainties are described in the Risk management chapter of this report and in note 53 of the consolidated financial statements.

The economic outlook for 2022 is subject to considerable uncertainty owing to the spread of new covid-19 variants in Europe and the US in the final stretch of 2021, the risk they will spread to other regions and doubts about the transience of the 2021 inflation upturn.

The impact of the omicron variant and any future variants or outbreaks on activity is difficult to gauge and will largely depend on the resulting pressure on hospital capacity, which is not easy to foresee given the varying contagiousness and virulence of each covid-19 variant. Higher inflation will have an adverse effect on consumption and on financial conditions.

Our baseline scenario assumes that the measures to contain the virus will have a moderate effect on business activity, inflation gradually subsides but remains above the target for the year, and, with some exceptions, the withdrawal of monetary stimulus will be very gradual. Among the bank's most relevant economies, growth in Europe and the US is expected to stay strong growth, but it may be more imbalanced in Latin America.

The macroeconomic forecast for 2022 by country/region is as follows:

Eurozone

Although growth recorded in 2021 may be slightly more hesitant at the start of 2022, it is expected to continue into the year, underpinned by continued expansionary financial conditions, loose fiscal policy, a greater weight of Next Generation EU funds, a downturn in the pandemic and a gradual decline in inflation.

In several countries, upcoming elections and the reforms and credibility of countries' fiscal consolidation plans will be important in a year in which the restoration of the Stability and Growth Pact may be announced and monetary and prudential measures against the pandemic will be gradually withdrawn.

Spain

In Europe, the deployment of EU funds (particularly crucial for Spain), the potential improvement in international tourism, the expected further recovery in household consumption and the anticipated reactivation of home construction indicate remarkable growth that could push GDP close to pre-pandemic levels.

The success of ongoing structural reforms (partly related to EU funds) will be fundamental in the short- and medium-term.

United Kingdom

A favourable outlook points to another year of strong recovery. The main unknown is the UK's ability to adapt to Brexit and the implications it will have for supply (mainly in the labour market which has shown some tension due to labour shortages in some segments).

Overall, financial conditions are expected to remain expansionary and inflation is projected to fall, which will boost confidence and activity as long as the spread of covid-19 reduces.

Portugal

The economy is forecast to grow above pre-pandemic levels as early as 2022, thanks to consumption growth (backed by accumulated savings), Next Generation EU funds and the hope of an upturn in tourism. The labour market is already at pre-pandemic employment levels, but is suffering from worker shortages, as the job vacancy rate suggests that unemployment will fall even further, to around 6%. The commitment to putting public accounts in order will remain a priority.

Poland

GDP growth was surprisingly positive in 2021 and it seems as though the economy is starting 2022 strongly. That could keep annual GDP growth close to 5%. Positive outlooks for the highly competitive and diversified manufacturing and export sector (which will benefit from ongoing positive growth abroad). While high inflation has not affected corporate profit margins, it did lead to a 165 bp rise in interest rates in Q4'21 to 1.75%, a trend that is expected to continue.

United States

The US economy is forecasted to grow around 4% in 2022 supported by pick ups in activity, wealth-backed private consumption and inventory rebuilding. However, the withdrawal of fiscal and monetary stimulus and effects of potential further covid-19 waves will have a negative impact. Inflation will start the year suffering from supply-side strains; however it is expected to moderate but at high rates. The Federal Reserve (Fed) is expected to end tapering in March and begin to raise interest rates.

Mexico

Mexico's outlook is positive in light of the dynamism in the US, the credibility of monetary and fiscal policies and expected easing of the recent bottlenecks. The Fed's interest rate hike is not expected to have a major influence on the central bank's plans to continue raising rates given that it has already raised them significantly.

Brazil

Inflation, the sharp tightening of financial conditions and the uncertainty generated by the presidential elections are expected to have a strong impact on business in 2022. Once political uncertainty subsides, economic recovery may be stronger.

Chile

Following the strong economic expansion in 2021, growth is expected to be subdued in 2022, due to the withdrawal of fiscal stimulus and the tighter monetary policy, amid lower inflation than in the previous year but still higher than the central bank's target.

Argentina

Argentina's economy is expected to grow moderately in 2022, in light of its economic stabilization programme with the International Monetary Fund (agreed in the first quarter of 2022), to refinance its debt maturities with the organization.

→ Financial markets

Inflationary pressures, less fiscal and, especially, monetary support, and geopolitical risk, mean more vulnerable financial markets in 2022.

Our expectation of inflation moderating gradually throughout the year and slower but above potential economic growth after a strong post-covid-19 recovery will help equities adjust to the transition to monetary policy normalization. However, in light of the gap between real interest rates and inflation expectations at maximum levels and given the current high stock prices, moments of instability could befall the stock markets during this adjustment.

We expect the Fed to end its net purchase programme in March 2022, potentially opening the door to rate hikes. The more laggard ECB will exhaust its pandemic programme before considering raising the deposit rate. The landscape suggests bond yields may rebound (albeit moderately in any case), although the ECB's gradual withdrawal could put pressure on peripheral spreads. The US dollar will likely remain strong against the euro in the short term, but a gradual appreciation of the euro is possible in the medium term as the US-Europe growth differential narrows and the US is encumbered by fiscal and trade deficits.

The risks that emerged in Latin America in the second half of 2021 fuel uncertainty regarding 2022. At the domestic level, there are two main obstacles: increased concerns that public finances in the Latin American countries that increased debt the most to cope with the pandemic will become unsustainable amid rising interest rates; and on the political front, Brazil's presidential elections may spur market volatility.

The banking environment will be conditioned by inflation and central banks' response, both in mature and emerging countries. In general, a gradual normalization of monetary policy would not negative for business; but central banks must get the pace and communication of their measures right.

The tightening of monetary policy may be followed by the withdrawal of liquidity support measures, but gradually, allowing banks to adjust to the new conditions. Lastly, the private sector remains vulnerable to an economic downturn, especially in those sectors most affected by social distancing and mobility measures. Even so, at the moment most institutions have a solvency position sound enough to cope, as demonstrated by several stress tests conducted on the main banking systems.

In addition to the economic environment, banks must deal with faster business digitalization while understanding and managing climate change risks.

→Financial regulation

In 2022, we expect sustainability and digitalization will remain at the top of the regulatory agenda, alongside prudential and financial matters.

Prudential. Talks about implementing the Basel III reforms in Europe will take centre stage. The most important matters include the treatment of operational risk, the output floor (a measure that sets a lower limit on risk-weighted assets that banks calculate when using their internal models) and EU-specific scenarios relating to SME and infrastructure support. The new rules will take effect on 1 January 2025, regardless of their approval date.

The authorities will continue to assess the impact of the crisis and the interaction of regulatory framework in matters such as current capital buffers (which banks have not used despite supervisors' recommendations). The European Commission is expected to review the macroprudential framework before the year is out. The Basel Committee will continue to issue proposals on the prudential treatment of financial entities' cryptoasset exposures.

Finance: In 2022, the EU will commence a third revision of the Bank Recovery and Resolution Directive (BRRD) aiming to improve the application of the framework, eliminate incentives to bail out failing banks with public money and ensure the framework is suitable for small and medium-sized banks.

A first revision of the Deposit Guarantee Schemes Directive (DGSD) is planned. Negotiations on the creation of a common European deposit guarantee fund (European Deposit Insurance Scheme – EDIS) will also continue.

Sustainability: To enhance the green taxonomy, the European Commission will work on drafting the four remaining environmental objectives and determining one taxonomy for activities that harm the environment and another for activities with social aims. Further work will be done on setting European and international sustainable reporting standards and on finalizing details of the ESG information to be included in the Pillar 3 report from 2023.

The legislative proposal on sustainable corporate governance to help companies introduce ESG objectives into their strategies will be published. Progress will be made in with sustainability labels and standards linked to the Taxonomy, such as the European Green Bond Standard (EGBS). The Basel Committee will continue the work it started in 2021 on recommendations for the management and supervision of sustainability-related risks.

Digitalization: The Digital Markets Act (DMA) could possibly be passed in Q1. It would prove a turning point in the EU's digital strategy by setting criteria for considering a large online platform a "gatekeeper" as well as obligations that ensure a fairer environment where all businesses could market their services.

The authorities acknowledge that data will be at the centre of the digital transformation. Further talks are expected on a regulatory framework for data sharing (Data Act). Debates will intensify on so-called "open finance", which considers the possibility that banks (and also insurers and asset managers) may have to share more data than the Payment Services Directive (PSD2) requires.

While talks on reforming PSD2 will begin, the European Commission could issue a proposal on instant cross-border payments.

Technological innovation: In 2022, talks about the Commission's 2019 regulatory proposals to strengthen the Digital Operational Resilience Act (DORA) and regulate markets in cryptoassets (MiCA) will continue. Those could be passed during the year. Legislative procedures will continue to pass those submitted in 2021 to regulate the use of artificial intelligence and create a European digital identity (eIDAs2) which could be used to access financial services, for example.

The ECB will continue its analysis of the digital euro. In 2021, it began a two-year study into the feasibility of issuing a digital euro. Almost all of the world's central banks are examining digital currencies.

Retail banking: Several initiatives underway are seeking to boost consumer protection and adapt laws to the digital landscape. Legislators are expected to approve proposed reforms of the Consumer Credit Directive and the Mortgage Credit Directive.

The key obligations that will apply from 2022 fall under the Taxonomy Regulation on environmentally sustainable activities), including banks' disclosure of the proportion of eligible assets held on their balance sheets.

These are the main management priorities for 2022 in our core regions and segments:



Europe

Our priority in Europe is to integrate all businesses within a common operating model to boost cost efficiency and improve service quality. Our main action lines in 2022 are:

- → Continuing to grow our digital capabilities in the region, accelerating customer-to-digital conversion for better service and higher customer satisfaction, while reducing the cost base.
- → Delivering on our EUR 1 billion cost savings commitment.
- → Leveraging our global businesses, SCIB and WM&I, and the connection with PagoNxt to allocate capital to the most profitable segments faster and more efficiently and thereby improve the overall profitability.
- → Excelling in risk management and maintaining and reinforcing our balance sheet strength.



The cornerstone of our strategy in Spain is customer service. We aim to:

- grow the customer base through excellent service quality and seamless interaction with both customers and non-customers through digital channels;
- increase customer loyalty with better customer experience when acquiring products through simple, digital processes;
- achieve operational excellence and improve NPS;
- develop low capital-intensive revenue streams (i.e. funds and insurance); and
- continue to revise the cost structure in light of the new, more efficient model.



Santander UK's priorities remain largely unchanged. In 2022, specific focus will be on managing revenue and simplifying the business as well as:

- increasing customer loyalty by improving customer experience when interacting with the bank;
- reducing the cost of deposits and maximizing the margin of the mortgage portfolio;
- furthering the digital transformation, optimizing the branch network and simplifying processes;
- engaging, motivating and developing a talented and diverse team; and
- being a responsible and sustainable business.



Due to our market leadership in Portugal, we can focus on:

- consolidating the commercial and digital interaction model;
- strengthening our lending leadership and focusing on organic growth from transactions with the highest return on capital;
- increasing customer loyalty with a diversified Daily Banking proposition and by attracting off-balance sheet funds;
- maintaining our position as market leaders in efficiency, with a better cost base; and
- maintaining an appropriate risk policy, with high credit quality and a strong capital position.



Our strategy is based on the following pillars:

- customers: continuing to improve customer satisfaction, to remain top 3 or better;
- digitalization: increasing sales, loyalty and our customer base atop the foundations we've laid for digital interaction with customers;
- simplification: leveraging One Europe to evolve our business into a more agile, dynamic and profitable bank; and
- responsible banking: continuing to support our customers' transition to a sustainable economy.



North America

In North America, we will strive to generate synergies by leveraging the Group's global presence and strength, capitalizing on our advantages over competitors and running cross-cutting One Santander initiatives. We aim to:

- → Generate new business opportunities on the back of cross-border, US-Mexico collaboration, as well as operational efficiencies, including technology.
- → Continue to execute our regional collaboration strategy, sharing best practices and know-how between countries, increasing our common value proposition and profitability, leveraging our global strength as part of the Group.
- → Take advantage of new and improved value propositions and improved interactions to drive customer loyalty, NPS and CX.
- → Simplify the regional business model to reduce duplications (platforms and architecture) and optimize expenses.
- → Continue consolidating regional IT under a single leadership, in pursuit of faster time to market and greater efficiencies.
- → Continue developing value-added products that meet customers' needs.
- → Capitalize on recent acquisitions to expand market capabilities while also driving organic growth.



Our goal is to maintain above cost of capital returns across our core businesses. To do so, we will:

- continue to refocus our business on our consumer finance franchise;
- develop a global hub in CIB for capital markets and investment banking; while capitalizing on the APS acquisition to broaden our product offering and fee income;
- remain among the top 10 CRE and multifamily lenders in commercial banking; and
- complete the integration of the acquisition in Wealth Management and leverage the Group's connectivity to gain market share, backed by our leading brand in Latin America.



Our strategic agenda aimed at becoming the best bank for our customers is based on:

- leveraging digital solutions and process enhancement to improve customer experience;
- developing appropriate, innovative and profitable solutions for the country's mass market, such as the Like-U credit card and the Samsung Members debit account to significantly expand our customer base;
- remaining a market leader with value-added products for corporates and leverage existing relationships to attract individuals;
- executing our multi-year plan to improve our operating model and IT security and further drive our technological and digital transformation; and
- focusing on profitability, by proactively allocating capital in businesses with higher potential and profitability.



South America

The Group's priorities in South America are to:

- → Accelerate profitable growth, with a strategy that seeks to boost connectivity across South America through regional projects, seizing on business opportunities and anticipating trends.
- → Maintain high profitability and best-in-class efficiency, while expanding our customer base and increasing customer loyalty to remain a leader in the region and our markets.
- → Improve our customers' banking experience by making further progress with our digital transformation through the development of digital platforms and a more efficient model.
- → Administer strict risk controls, with credit growth mainly in secured products.



Santander Brasil's management priorities for 2022 are to:

- build a more integrated, market-leading distribution platform and strengthen connections between businesses in order to allow us to seize on opportunities faster;
- grow our customer base and make it more profitable while increasing customer loyalty;
- maintain controlled credit quality levels, by continuously enhancing our risk models, with a focus on anticipating trends;
- strengthen our high productivity culture, optimize our channels and review our processes to improve operational efficiency; and
- innovate in order to adapt to different scenarios and maintain profitability.



Santander Chile's strategy will focus on:

- continuing to improve our service quality to maintain our leadership position in NPS;
- expanding Getnet to become a platform for our customers (particularly corporates);
- continuing to strengthen our position in the mass segment, through Life and Superdigital; and
- increasing green finance, our use of renewable energy and financially empowering our customers to fulfil our ESG strategy.



In Argentina, our strategy will focus on:

- expanding our customer base, increasing loyalty and ensuring the best customer service though our multi-channel strategy;
- developing new businesses and commercial alliances further;
- continuing our efficiency and simplification process through digital transformation;
- boosting profitable growth, optimizing capital consumption and maintaining the quality of our portfolio; and
- accelerating cultural transformation through a more collaborative and agile environment.



In Uruguay, our priorities for 2022 are to:

- further consolidate the business, leverage Getnet's roll-out and strengthen our SME offering;
- enhance and expedite our technological and digital development model; and
- make progress with new ways of working and distribution models, by integrating talent and brand management among the Group's companies.

Our strategy in the Andean region will focus on:



In Peru, we aim to continue driving greater synergies and expanding our microfinance business to expand our global, corporate and retail customer base.



In Colombia, we will focus on increasing profitability in each of the business areas and generating synergies between them: capitalizing on the new financial entity in Consumer, developing Prospera and broadening our *Multilatinas* proposition in Corporates, while enhancing digitalization by adopting automation tools.

Digital Consumer Bank

Santander Consumer Finance & Openbank

Our priorities for 2022 are to:

- Secure leadership in global digital consumer lending (on the shoulders of Santander Consumer Finance's existing footprint and the business and technology stack of Openbank's digital platform) by focusing on growth and transformation to:
  - leverage the successful global insurance model while optimizing capital consumption and expanding into new markets to strengthen Auto positioning;
  - gain market share in consumer lending and develop buy now, pay later (BNPL) 2.0 to strengthen our current top 3 position in Europe; and
  - simplify for efficiency, increase competitiveness and gain scale benefits with the finalization of the new legal and operational structure with three hubs.
- Launch a large global transformation project, re-platforming the auto, consumer and retail banking businesses completely to seize on the fast-growing transition to online to support digital customer base expansion and maintain high profitability and one of the best efficiency ratios in the sector.
- Increase profits on the back of the strategic operations initiated in 2021 (e.g. Stellantis Agreement in Auto, and BNPL business in Non-Auto).

SECONDARY SEGMENTS

In 2022, we will focus on:

- partnering with our clients as strategic advisors and strengthening our value-added services, with an increased focus on ESG and digital solutions to transform our business;
- leveraging the pan-European platform to strengthen our advisory capabilities, better serve the needs of our global customers and improving our position in Europe;
- bolstering our leadership and going from being multinational to pan-regional to become the leading CIB player in most countries and products in South America; and
- raising the level of our CIB franchise to compete on a level playing field in the US and integrating Amherst Pierpont Securities (once the acquisition is completed), a step towards meeting our growth expectations.

PagoNxt strategy for 2022 is to:

- enhance our Getnet franchise and continue to develop and grow Santander's acquiring business, leverage our agreements with One Santander in Europe, North and South America and SCIB, bring innovations from one region to another and expand our products and value-added services as a multi-regional provider with a growing global presence, and tailor our solutions to local merchants' needs. The commercial expansion will leverage both the distribution through Santander channels and through third parties and alliances in the open market;
- expand our global platforms; continue delivering on Getnet's plan to migrate payment volumes from local operations, as we further expand our gateways convergence and technical interoperability; roll out One Trade platform services to Santander banks under a SaaS model, according to our plans to migrate payment volumes from the Group to the global platform and to integrate financing solutions, as well as our plan to implement Payments Hub's instant functionality in Spain, the UK and SCIB; and gradually migrate Superdigital's volumes from our local operations to the global platform.
- accelerate our commercial activity in the open market through direct marketing and partnerships; continue to expand Getnet's channels in the open market, focusing on Brazil, Mexico and the EU; deliver One Trade's and Payments Hub's direct digital marketing of e-money services in the Eurozone and the UK; use our APIs to access GBP and EUR payment schemes (subject to regulatory approvals); and accelerate Superdigital's plan to launch of its global payment services platform in Latin American markets to reach seven countries by year end and gradually introduce new services such as credit.
- continue fulfilling our strong commitment to ESG, focused on driving financial inclusion by empowering micro-entrepreneurs and underbanked communities to overcome barriers and access our services, supporting the development of vulnerable customers.

In 2022, the key management aims will be:

In Private Banking:

- continuing to leverage our scale so clients benefit globally and fostering cooperation across countries (+43% in 2021) and segments;
- continuing to expand our product range in line with market trends, with a focus on discretionary management, secured lending, alternative products, investment banking and ESG; and
- continuing to focus on strengthening our technological capabilities, with an ambitious strategy to maximize operational efficiency and provide the best digital experience to our customers.

In Santander Asset Management:

- following a systematic and quantitative management approach to support our unchanged ambition to improve performance and market share via our distribution networks, and to continue to create a global value proposition of such highly successful products as Santander Future Wealth, Santander GO and the Santander ON range of solutions geared towards our clients' needs;
- continuing to develop the alternative business with the aim of expanding our institutional client base and addressing our Private Banking clients' specific needs;
- strengthening our ESG fund offering, making responsible and profitable investment solutions available to our clients in line with our strong commitment to sustainability; and
- implementing digital robo-advisor investment platforms in certain markets where we operate.

In Insurance:

- continuing to develop our value proposition consistent with the new needs of individual and corporate customers;
- ensuring the best customer experience in taking-out, renewing and using insurance;
- focusing on use of data to customize and simplify our insurance value proposition; and
- providing an end-to-end digital insurance proposition for all interested customers, with support from the other channels.

8. Alternative performance measures (APMs)

In addition to the financial information prepared under IFRS, this consolidated directors' report contains financial measures that constitute alternative performance measures (APMs) to comply with the guidelines on alternative performance measures issued by the European Securities and Markets Authority on 5 October 2015 and non-IFRS measures.

The financial measures contained in this consolidated directors' report that qualify as APMs and non-IFRS measures have been calculated using our financial information but are not defined or detailed in the applicable financial information framework or under IFRS and have neither been audited nor reviewed by our auditors.

We use these APMs and non-IFRS measures when planning, monitoring and evaluating our performance. We consider these APMs and non-IFRS financial measures to be useful metrics for management and investors to facilitate operating performance comparisons from period to period. While we believe that these APMs and non-IFRS financial measures are useful in evaluating our business, this information should be considered as supplemental in nature and is not meant as a substitute of IFRS measures. In addition, the way in which Santander defines and calculates these APMs and non-IFRS measures may differ from the calculations used by other companies with similar measures and, therefore, may not be comparable.

The APMs and non-IFRS measures we use in this document can be categorized as follows:

Underlying results

In addition to IFRS results measures, we present some results measures which are non-IFRS measures and which we refer to as underlying measures. These underlying measures allow, in our view, a better year-on-year comparability as they exclude items outside the ordinary course performance of business which are grouped in the non-IFRS line net capital gains and provisions and are further detailed at the end of section 3.2 'Results' of this chapter.

In addition, the results by business areas in section 4 'Financial information by segment' are presented only on an underlying basis in accordance with IFRS 8. The use of this information by the Group's Governance bodies and reconciled on an aggregate basis to our IFRS consolidated results can be found in note 51.c to our consolidated financial statements.

Profitability and efficiency ratios

The purpose of the profitability and efficiency ratios is to measure the ratio of profit to capital, to tangible capital, to assets and to risk weighted assets, while the efficiency ratio measures how much general administrative expenses (personnel and other) and amortization costs are needed to generate revenue.

The goodwill adjustments have been removed from the RoTE numerator as, since they are not considered in the denominator, we believe this calculation is more correct.

Ratio	Formula	Relevance of the metric
RoE (Return on Equity)	Profit attributable to the parent / Average stockholders' equity [A] (excl. minority interests)	This ratio measures the return that shareholders obtain on the funds invested in the bank and as such measures the bank's ability to pay shareholders.
Underlying RoE	Underlying profit attributable to the parent / Average stockholders' equity [A] (excl. minority interests)	This ratio measures the return that shareholders obtain on the funds invested in the bank excluding results from operations outside the ordinary course of business.
RoTE (Return on Tangible Equity)	Profit attributable to the parent [B] / Average stockholders' equity [A] (excl. minority interests)	This is a very common indicator, used to evaluate the profitability of the company as a percentage of a its tangible equity. It's measured as the return that shareholders receive as a percentage of the funds invested in the bank less intangible assets.
Underlying RoTE	Underlying profit attributable to the parent / Average stockholders' equity [A] (excl. minority interests) - intangible assets	This indicator measures the profitability of the tangible equity of a company arising from ordinary activities, i.e. excluding results from operations outside the ordinary course of business.
RoA (Return on Assets)	Consolidated profit / Average total assets	This metric measures the profitability of a company as a percentage of its total assets. It is an indicator that reflects the efficiency of the bank's total assets in generating profit over a given period.
Underlying RoA	Underlying consolidated profit / Average total assets	This metric measures the profitability of a company as a percentage of its total assets excluding results from operations outside the ordinary course of business. It is an indicator that reflects the efficiency of the bank's total assets in generating profit over a given period.
RoRWA (Return on Risk-Weighted Assets)	Consolidated profit / Average risk-weighted assets	The return adjusted for risk is a derivative of the RoA metric. The difference is that RoRWA measures profit in relation to the Group's risk-weighted assets.
Underlying RoRWA	Underlying consolidated profit / Average risk weighted assets	This relates the underlying consolidated profit (excluding results from operations outside the ordinary course of business) to the Group's risk weighted assets.
RoRAC (Return on Risk-Adjusted Capital)	Underlying consolidated profit / Average economic capital	This is the return on economic capital required internally (necessary to support all risks inherent in our activity).
Economic Value Added	Underlying consolidated profit – (average economic capital x cost of capital)	Economic value added is the profit generated in excess of the cost of economic capital employed. This measures risk adjusted returns in absolute terms, complementing the RoRAC approach.
Efficiency (Cost-to-income)	Operating expenses [C] / Total income	One of the most commonly used indicators when comparing productivity of different financial entities. It measures the amount of resources used to generate the bank's operating income.

A. Stockholders' equity = Capital and Reserves + Accumulated other comprehensive income + Profit attributable to the parent + Dividends.
B. Excluding the adjustment to the valuation of goodwill.
C. Operating expenses = Administrative expenses + amortizations.

Profitability and efficiency [A B] (EUR million and %)	2021	2020	2019
RoE	**9.66%**	**-9.80%**	**6.62%**
Profit attributable to the parent	8,124	-8,771	6,515
Average stockholders' equity (excluding minority interests)	84,133	89,459	98,457
Underlying RoE	**10.29%**	**5.68%**	**8.38%**
Profit attributable profit to the parent	8,124	-8,771	6,515
(-) Net capital gains and provisions	-530	-13,852	-1,737
Underlying profit attributable to the parent	8,654	5,081	8,252
Average stockholders' equity (excluding minority interests)	84,133	89,459	98,457
RoTE	**11.96%**	**1.95%**	**11.44%**
Profit attributable to the parent	8,124	-8,771	6,515
(-) Goodwill impairment	-6	-10,100	-1,491
Profit attributable to the parent (excluding goodwill impairment)	8,130	1,329	8,006
Average stockholders' equity (excluding minority interests)	84,133	89,459	98,457
(-) Average intangible assets	16,169	21,153	28,484
Average stockholders' equity (excl. minority interests) - intangible assets	67,964	68,306	69,973
Underlying RoTE	**12.73%**	**7.44%**	**11.79%**
Profit attributable to the parent	8,124	-8,771	6,515
(-) Net capital gains and provisions	-530	-13,852	-1,737
Underlying profit attributable to the parent	8,654	5,081	8,252
Average stockholders' equity (excl. minority interests) - intangible assets	67,964	68,306	69,973
RoA	**0.62%**	**-0.50%**	**0.54%**
Consolidated profit	9,653	-7,708	8,116
Average total assets	1,563,899	1,537,552	1,508,167
Underlying RoA	**0.65%**	**0.40%**	**0.65%**
Consolidated profit	9,653	-7,708	8,116
(-) Net capital gains and provisions	-530	-13,866	-1,710
Underlying consolidated profit	10,183	6,158	9,826
Average total assets	1,563,899	1,537,552	1,508,167
RoRWA	**1.69%**	**-1.33%**	**1.33%**
Consolidated profit	9,653	-7,708	8,116
Average risk-weighted assets	572,136	578,517	609,170
Underlying RoRWA	**1.78%**	**1.06%**	**1.61%**
Consolidated profit	9,653	-7,708	8,116
(-) Net capital gains and provisions	-530	-13,866	-1,710
Underlying consolidated profit	10,183	6,158	9,826
Average risk-weighted assets	572,136	578,517	609,170
RoRAC	**14.97%**	**8.51%**	**12.91%**
Consolidated profit	9,653	-7,708	8,116
(-) Net capital gains and provisions	-530	-13,866	-1,710
Underlying consolidated profit	10,183	6,158	9,826
Average economic capital	68,042	72,389	76,105
Economic value added	**3,327**	**-2,529**	**3,509**
Underlying consolidated profit	10,183	6,158	9,826
(-) Average economic capital x cost of capital	-6,856	-8,687	-6,317
Average economic capital	68,042	72,389	76,105
Cost of capital	10.08 %	12.00 %	8.30 %
Efficiency ratio	**46.15%**	**47.01%**	**47.04%**
Underlying operating expenses	21,415	20,967	23,280
Operating expenses	21,415	21,130	23,280
Net capital gains and provisions impact in operating expenses [C]	—	-163	—
Underlying total income	46,404	44,600	49,494
Total income	46,404	44,279	49,229
Net capital gains and provisions impact in total income [C]	—	321	265

A. Averages included in the RoE, RoTE, RoA and RoRWA denominators are calculated using 13 months (from December to December).
B. The risk-weighted assets included in the denominator of the RoRWA metric are calculated in line with the criteria laid out in the CRR (Capital Requirements Regulation).
C. Following the adjustments in note 51.c to the consolidated financial statements.

Efficiency ratio by business areas (EUR million and %)

	2021			2020		
	%	Total income	Operating expenses	%	Total income	Operating expenses
Europe	**51.0**	**16,312**	**8,318**	**56.4**	**14,673**	**8,275**
Spain	47.7	7,006	3,340	53.2	6,782	3,607
United Kingdom	53.3	4,863	2,592	63.8	3,980	2,539
Portugal	42.0	1,341	563	45.5	1,296	590
Poland	40.2	1,646	663	41.3	1,524	629
North America	**45.2**	**10,986**	**4,967**	**42.4**	**11,034**	**4,677**
US	43.3	7,383	3,197	41.8	7,360	3,079
Mexico	45.9	3,579	1,643	42.5	3,651	1,552
South America	**35.0**	**15,353**	**5,380**	**36.0**	**14,868**	**5,357**
Brazil	29.7	10,884	3,236	32.6	10,866	3,541
Chile	38.4	2,457	942	39.8	2,263	900
Argentina	57.8	1,393	805	56.0	1,128	632
Digital Consumer Bank	**45.0**	**5,339**	**2,405**	**45.1**	**5,166**	**2,329**

Underlying RoTE by business area (EUR million and %)

	2021			2020		
	%	Underlying profit attributable to the parent	Average stockholders' equity (excl. minority interests) - intangible assets	%	Underlying profit attributable to the parent	Average stockholders' equity (excl. minority interests) - intangible assets
Europe	**7.36**	**2,978**	**40,478**	**3.61**	**1,413**	**39,178**
Spain	6.33	957	15,108	3.30	517	15,674
United Kingdom	11.71	1,570	13,411	3.02	391	12,966
Portugal	11.85	482	4,065	8.73	338	3,875
Poland	5.00	161	3,211	5.05	162	3,204
North America	**13.10**	**3,053**	**23,300**	**6.95**	**1,472**	**21,182**
US	13.62	2,326	17,086	4.66	731	15,690
Mexico	13.91	835	6,001	14.38	762	5,298
South America	**20.28**	**3,328**	**16,411**	**17.72**	**2,907**	**16,409**
Brazil	21.49	2,325	10,821	19.16	2,113	11,028
Chile	19.28	637	3,304	13.19	432	3,278
Argentina	27.44	274	997	26.24	179	681
Digital Consumer Bank	**14.05**	**1,332**	**9,479**	**11.77**	**1,133**	**9,620**

Credit risk indicators

The credit risk indicators measure the quality of the credit portfolio and the percentage of non-performing loans covered by provisions.

Ratio	Formula	Relevance of the metric
NPL ratio (Non-performing loans ratio)	Credit impaired loans and advances to customers, customer guarantees and customer commitments granted / Total Risk [A]	The NPL ratio is an important variable regarding financial institutions' activity since it gives an indication of the level of risk the entities are exposed to. It calculates risks that are, in accounting terms, declared to be credit impaired as a percentage of the total outstanding amount of customer credit and contingent liabilities.
Total coverage ratio	Total allowances to cover impairment losses on loans and advances to customers, customer guarantees and customer commitments granted / Credit impaired loans and advances to customers, customer guarantees and customer commitments granted	The total coverage ratio is a fundamental metric in the financial sector. It reflects the level of provisions as a percentage of the credit impaired assets. Therefore it is a good indicator of the entity's solvency against client defaults both present and future.
Cost of Credit	Allowances for loan-loss provisions over the last 12 months / Average loans and advances to customers over the last 12 months	This ratio quantifies loan-loss provisions arising from credit risk over a defined period of time for a given loan portfolio. As such, it acts as an indicator of credit quality.

A. Total risk = Total loans and advances and guarantees to customers (including credit impaired assets) + contingent liabilities that are credit impaired.

Credit risk (I) (EUR million and %)	2021	2020	2019
NPL ratio	**3.16%**	**3.21%**	**3.32%**
Credit impaired loans and advances to customers, customer guarantees and customer commitments granted	33,234	31,767	33,799
Gross loans and advances to customers registered under the headings "financial assets measured at amortized cost" and "financial assets designated at fair value through profit or loss" classified in stage 3 (OCI), excluding POCI (Purchased or Originated Credit Impaired) that is currently impaired	31,288	30,318	31,826
POCI exposure (Purchased or Originated Credit Impaired) that is currently impaired	358	497	706
Customer guarantees and customer commitments granted classified in stage 3	1,578	941	1,250
Doubtful exposure of loans and advances to customers at fair value through profit or loss	10	11	17
Total risk	1,051,115	989,456	1,016,507
Impaired and non-impaired gross loans and advances to customers	995,646	939,795	964,450
Impaired and non-impaired customer guarantees and customer commitments granted	55,469	49,662	52,057

Credit risk (II) (EUR million and %)	2021	2020	2019
Total coverage ratio	**71%**	**76%**	**68%**
Total allowances to cover impairment losses on loans and advances to customers, customer guarantees and customer commitments granted	23,698	24,272	22,965
Total allowances to cover impairment losses on loans and advances to customers measured at amortised cost and designated at fair value through OCI	22,964	23,577	22,229
Total allowances to cover impairment losses on customer guarantees and customer commitments granted	734	695	736
Credit impaired loans and advances to customers, customer guarantees and customer commitments granted	33,234	31,767	33,799
Gross loans and advances to customers registered under the headings "financial assets measured at amortized cost" and "financial assets designated at fair value through profit or loss" classified in stage 3 (OCI), excluding POCI (Purchased or Originated Credit Impaired) that is currently impaired	31,288	30,318	31,826
POCI exposure (Purchased or Originated Credit Impaired) that is currently impaired	358	497	706
Customer guarantees and customer commitments granted classified in stage 3	1,578	941	1,250
Doubtful exposure of loans and advances to customers at fair value through profit or loss	10	11	17
Cost of credit	**0.77%**	**1.28%**	**1.00%**
Underlying allowances for loan-loss provisions over the last 12 months	7,436	12,173	9,321
Allowances for loan-loss provisions over the last 12 months	7,436	12,431	9,321
Net capital gains and provisions impact in allowances for loan-loss provisions	—	-258	—
Average loans and advances to customers over the last 12 months	968,931	952,358	935,488

NPL ratio by business areas (EUR million and %)

	2021			2020		
	%	Credit impaired loans and advances to customers, customer guarantees and customer commitments granted	Total risk	%	Credit impaired loans and advances to customers, customer guarantees and customer commitments granted	Total risk
Europe	**3.12**	**19,822**	**636,123**	**3.34**	**20,272**	**606,997**
Spain	5.77	12,758	221,100	6.23	13,796	221,341
United Kingdom	1.43	3,766	262,869	1.24	3,138	252,255
Portugal	3.44	1,442	41,941	3.89	1,584	40,693
Poland	3.61	1,210	33,497	4.74	1,496	31,578
North America	**2.42**	**3,632**	**149,792**	**2.23**	**2,938**	**131,626**
US	2.33	2,624	112,808	2.04	2,025	99,135
Mexico	2.73	1,009	36,984	2.81	913	32,476
South America	**4.50**	**6,387**	**141,874**	**4.39**	**5,688**	**129,590**
Brazil	4.88	4,182	85,702	4.59	3,429	74,712
Chile	4.43	1,838	41,479	4.79	2,051	42,826
Argentina	3.61	198	5,481	2.11	93	4,418
Digital Consumer Bank	**2.13**	**2,490**	**116,989**	**2.17**	**2,525**	**116,381**

Coverage ratio by business areas (EUR million and %)

	2021			2020		
	%	Total allowances to cover impairment losses on loans and advances to customers, customer guarantees and customer commitments granted	Credit impaired loans and advances to customers, customer guarantees and customer commitments granted	%	Total allowances to cover impairment losses on loans and advances to customers, customer guarantees and customer commitments granted	Credit impaired loans and advances to customers, customer guarantees and customer commitments granted
Europe	**49.4**	**9,800**	**19,822**	**50.3**	**10,199**	**20,272**
Spain	52.2	6,660	12,758	47.1	6,495	13,796
United Kingdom	25.8	971	3,766	44.7	1,403	3,138
Portugal	71.7	1,033	1,442	66.5	1,053	1,584
Poland	73.9	895	1,210	70.7	1,058	1,496
North America	**134.9**	**4,901**	**3,632**	**182.6**	**5,364**	**2,938**
US	150.3	3,943	2,624	210.4	4,261	2,025
Mexico	95.0	958	1,009	120.8	1,103	913
South America	**98.3**	**6,279**	**6,387**	**97.4**	**5,540**	**5,688**
Brazil	111.2	4,651	4,182	113.2	3,880	3,429
Chile	63.3	1,164	1,838	61.4	1,260	2,051
Argentina	153.8	305	198	275.1	257	93
Digital Consumer Bank	**107.8**	**2,684**	**2,490**	**113.3**	**2,862**	**2,525**

Cost of credit (EUR million and %)

	2021			2020		
	%	Underlying allowances for loan-loss provisions over the last 12 months	Average loans and advances to customers over the last 12 months	%	Underlying allowances for loan-loss provisions over the last 12 months	Average loans and advances to customers over the last 12 months
Europe	**0.39**	**2,294**	**591,703**	**0.58**	**3,344**	**579,501**
Spain	0.92	1,833	199,243	1.01	2,001	198,273
United Kingdom	-0.09	-245	258,636	0.27	677	255,038
Portugal	0.09	38	39,805	0.51	193	37,951
Poland	0.67	200	29,777	1.10	330	30,073
North America	**0.93**	**1,210**	**130,635**	**2.92**	**3,917**	**134,187**
US	0.43	419	97,917	2.86	2,937	102,662
Mexico	2.44	791	32,434	3.03	979	32,287
South America	**2.60**	**3,251**	**125,089**	**3.32**	**3,924**	**118,138**
Brazil	3.73	2,715	72,808	4.35	3,018	69,421
Chile	0.85	341	40,344	1.50	594	39,534
Argentina	3.01	140	4,667	5.93	226	3,813
Digital Consumer Bank	**0.46**	**527**	**115,156**	**0.83**	**957**	**114,747**

Other indicators

The market capitalization indicator provides information on the volume of tangible equity per share. The loan-to-deposit ratio (LTD) identifies the relationship between net customer loans and advances and customer deposits, assessing the proportion of loans and advances granted by the Group that are funded by customer deposits.

The Group also uses gross customer loan magnitudes excluding reverse repurchase agreements (repos) and customer deposits excluding repos. In order to analyse the evolution of the traditional commercial banking business of granting loans and capturing deposits, repos and reverse repos are excluded, as they are mainly treasury business products and highly volatile.

Ratio	Formula	Relevance of the metric
TNAV per share (Tangible net asset value per share)	Tangible book value [A] / Number of shares excluding treasury stock	This is a very commonly used ratio used to measure the company's accounting value per share having deducted the intangible assets. It is useful in evaluating the amount each shareholder would receive if the company were to enter into liquidation and had to sell all the company's tangible assets.
Price / tangible book value per share (X)	Share price / TNAV per share	Is one of the most commonly used ratios by market participants for the valuation of listed companies both in absolute terms and relative to other entities. This ratio measures the relationship between the price paid for a company and its accounting equity value.
LtD (Loan-to-deposit)	Net loans and advances to customers / Customer deposits	This is an indicator of the bank's liquidity. It measures the total (net) loans and advances to customers as a percentage of customer funds.
Loans and advances (excl. reverse repos)	Gross loans and advances to customers excluding reverse repos	In order to aid analysis of the commercial banking activity, reverse repos are excluded as they are highly volatile treasury products.
Deposits (excl. repos)	Customer deposits excluding repos	In order to aid analysis of the commercial banking activity, repos are excluded as they are highly volatile treasury products.
PAT + After tax fees paid to SAN (in Wealth Management & Insurance)	Net profit + Fees paid from Santander Asset Management and Santander Insurance to Santander, net of taxes, excluding Private Banking customers	Metric to assess Wealth Management & Insurance's total contribution to Group's profits

A. Tangible book value = Stockholders' equity - intangible assets.

Others (EUR million and %)	2021	2020	2019
TNAV (tangible book value) per share [B]	**4.12**	**3.79**	**4.18**
Tangible book value	70,346	65,568	72,384
Number of shares excl. treasury stock (million) [B]	17,063	17,312	17,332
Price / tangible book value per share (X)	**0.71**	**0.67**	**0.86**
Share price (euros) [B]	2.941	2.538	3.575
TNAV (tangible book value) per share [B]	4.12	3.79	4.18
Loan-to-deposit ratio	**106%**	**108%**	**114%**
Net loans and advances to customers	972,682	916,199	942,218
Customer deposits	918,344	849,310	824,365
PAT + After tax fees paid to SAN (in WM&I) (Constant EUR million)	**2,313**	**2,061**	
Profit after tax	943	841	
Net fee income net of tax	1,370	1,220	

B. 2019 data adjusted for the capital increase in December 2020.

Impact of exchange rate movements on profit and loss accounts

The Group presents, at both the Group level as well as the business unit level, the real changes in the income statement as well as the changes excluding the exchange rate effect, as it considers the latter facilitates analysis, since it enables businesses movements to be identified without taking into account the impact of converting each local currency into euros.

Said variations, excluding the impact of exchange rate movements, are calculated by converting P&L lines for the different business units comprising the Group into our presentation currency, the euro, applying the average exchange rate for 2021 to all periods contemplated in the analysis. The table below shows the average exchange rates of the main currencies in which the Group operates.

Impact of exchange rate movements on the balance sheet

The Group presents, at both the Group level as well as the business unit level, the real changes in the balance sheet as well as the changes excluding the exchange rate effect for loans and advances to customers excluding reverse repos and customer funds (which comprise deposits and mutual funds) excluding repos. As with the income statement, the reason is to facilitate analysis by isolating the changes in the balance sheet that are not caused by converting each local currency into euros.

These changes excluding the impact of exchange rate movements are calculated by converting loans and advances to customers excluding reverse repos and customer funds excluding repos, into our presentation currency, the euro, applying the closing exchange rate on the last working day of 2021 to all periods contemplated in the analysis. The table below shows the period-end exchange rates of the main currencies in which the Group operates.

Exchange rates: 1 euro/currency parity

	Average		Period-end	
	2021	2020	2021	2020
US dollar	1.182	1.140	1.133	1.227
Pound sterling	0.859	0.889	0.840	0.898
Brazilian real	6.372	5.814	6.319	6.373
Mexican peso	23.980	24.364	23.152	24.438
Chilean peso	897.123	902.072	964.502	871.819
Argentine peso	112.383	79.555	116.302	103.159
Polish zloty	4.564	4.441	4.597	4.559

Impact of inflation on operating expenses

Santander presents, for both the Group and the business units included in the primary segments, the changes in operating expenses, as well as the changes excluding the exchange rate effect, and the changes of the latter excluding the effect of average inflation in 2021. The reason is that the two latter facilitate analysis for management purposes.

Inflation is calculated as the arithmetic average of the last twelve months for each country and, for the regions, as the weighted average of each country comprising the region's inflation rate, weighed by each country's operating expenses in the region. The table below shows the average inflation rates calculated as indicated for each of the regions and countries.

Average inflation

%

	2021
Europe	**2.9**
Spain	3.1
United Kingdom	2.6
Portugal	1.3
Poland	5.1
North America	**5.0**
US	4.7
Mexico	5.7
South America	**13.7**
Brazil	8.3
Chile	4.5
Argentina	48.1
Digital Consumer Bank	**2.6**
Total Group	**6.0**

Risk management and compliance



1. Risk management and compliance overview 432
1.1 Executive summary and 2021 highlights 432
1.2 2021 key achievements 436
1.3 Santander's top and emerging risks 437

2. Risk management and control model 439
2.1 Risk principles and culture 439
2.2 Risk factors 439
2.3 Risk governance 440
2.4 Management processes and tools 442
2.5 Models & Data unit 444

3. Credit risk 446
3.1 Introduction 446
3.2 Credit risk management 446
3.3 Key metrics 449
3.4 Details of main geographies 455
3.5 Other credit risk details 460

4. Market, structural and liquidity risk 466
4.1 Introduction 466
4.2 Market risk management 467
4.3 Market risk key metrics 469
4.4 Structural balance sheet risk management 475
4.5 Structural balance sheet risk key metrics 475
4.6 Liquidity risk management 477
4.7 Liquidity risk key metrics 478
4.8 Pension and actuarial risk management 478

5. Capital risk 480
5.1 Introduction 480
5.2 Capital risk management 481
5.3 Key metrics 482

6. Operational risk 483
6.1 Introduction 483
6.2 Operational risk management 483
6.3 Key metrics 488

7. Compliance and conduct risk 489
7.1 Introduction 489
7.2 Compliance and conduct risk management 489

8. Model risk 496
8.1 Introduction 496
8.2 Model risk management 496

9. Strategic risk 498
9.1 Introduction 498
9.2 Strategic risk management 498

10. Climate and environmental risk 499
10.1 Introduction 499
10.2 Climate and environmental risk management 499

1. Risk management and compliance

Our risk and compliance culture is a key pillar of Grupo Santander's strategy and underpins our safe and robust business model

In 2021, we continued to support our customers and all our stakeholders to encourage a sustainable and responsible economic recovery.

The Risk and Compliance function kept its commitment to the digitalization and fulfilment of our strategic goals and initiatives such as One Santander, PagoNxt and Digital Consumer Bank.

Management of ESG-related risks (with special focus on the effects of climate-related risk and the achievement of our ambitious net zero goals) is also one of our priorities.

1.1 Executive summary and 2021 highlights

This section outlines Santander's risk management and risk profile in 2021 based on key risk indicators and their performance.

The subsequent sections in this chapter (accessible via the links provided) provide additional information on each risk factor, as well as our analysis of top and emerging risks.

Credit risk

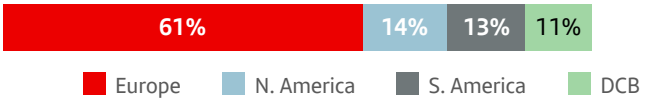
> Section 3

Our risk management and control model together with our solid risk culture contributed to the bank's strong performance in 2021 while improving the way we serve our customers.

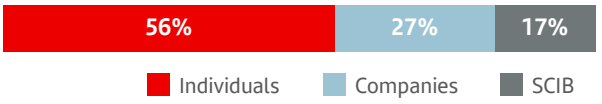


[29]

TOTAL RISK BY REGION[30]



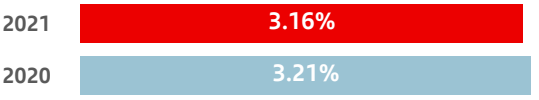
TOTAL RISK BY SEGMENT



Credit quality indicators maintained their positive trend through the year.

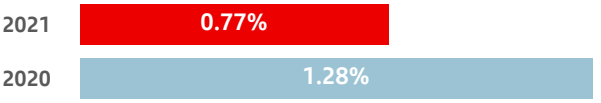
NON-PERFORMING LOANS RATIO

Loan growth coupled with positive portfolio performance drove the NPL rate down.



COST OF CREDIT[20]

Cost of credit improved owing to the good performance of the portfolio and the additional provisions made in 2020 to cover potential losses that could arise as a result of the covid pandemic.



Digital Consumer Bank (DCB) and Santander Corporate & Investment Banking (SCIB)

[29] Includes gross lending to customers, guarantees and documentary credits.

[30] 'Others' not included represent 1% (Corporate Centre).

[20] Cost of credit is the ratio of 12-month loan-loss provisions to average lending on the same period.

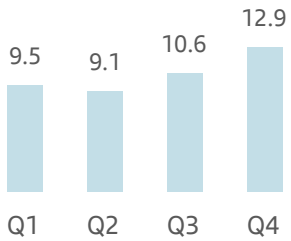
Market, structural and liquidity risk

> Section 4

Risk levels in trading activity remained low, in an environment where volatility was lower than in 2020.

2021 AVG. VALUE AT RISK (VaR)

EUR million. Dec.21



Max.
EUR 15.9mn

Min.
EUR 6.8mn

VaR remained stable averaging EUR 10.5 million. It peaked in September (EUR 15.9 million) due to supply chain disruptions and rising energy prices.

▲164%

The liquidity ratio (LCR) was stable in 2021 and always remained above the regulatory threshold.

We managed liquidity buffers effectively to maintain a sound risk profile (within regulatory limits) and a profitable balance sheet.

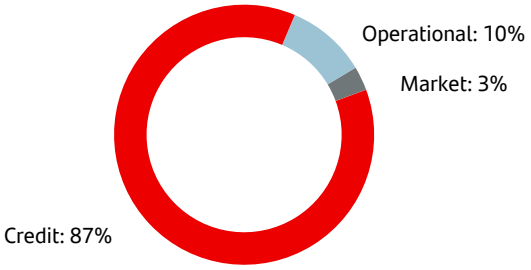
Our subsidiaries have a strong balance sheet and a stable funding structure, supported by a large customer deposit base. This strength is demonstrated in stress scenarios developed under homogeneous corporate criteria.

Capital risk

> Section 5

RWA[31] BY RISK TYPE

Credit risk, which is our core business, stands out among RWA.

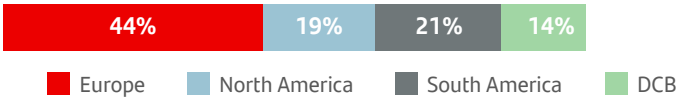


[32]

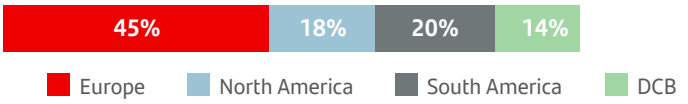
RWA BY REGION

Diversified and balanced distribution.

2021 EUR 579 bn

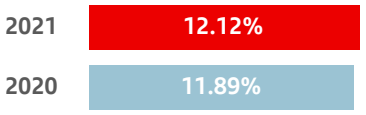


2020 EUR 563 bn



Others not included represent 2% in 2021 and 3% in 2020.

FULLY LOADED CET1



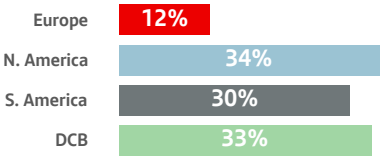
▲12.12%

▲ 23 bp in 2021 placing CET1 at the top of our 11-12% target

The CET1 ratio increased due to strong organic capital generation based on underlying profits and efficient RWA management.

The strength of our diversified retail banking business model is demonstrated by our positive performance in all eight regulatory stress tests performed since 2008.

RoRAC[33]



▲ 15.0%

▲ 6 pp in 2021

RoRAC methodology allows us to compare homogeneously the return on loans, customers, portfolios and businesses, helping to identify those that obtain a risk-adjusted return above the cost of capital.

[31] Risk weighted assets.
[32] Credit includes counterparty risk, securitizations and amounts below deduction thresholds.
[33] The Group's total RoRAC includes the operative units and the Corporate Centre, reflecting the Group's economic capital and its return.

Operational risk

> Section 6

Our operational risk profile remained stable despite the exceptional circumstances. With the goal of reinforcing existing controls, our 2021 priorities were:

Operational management model

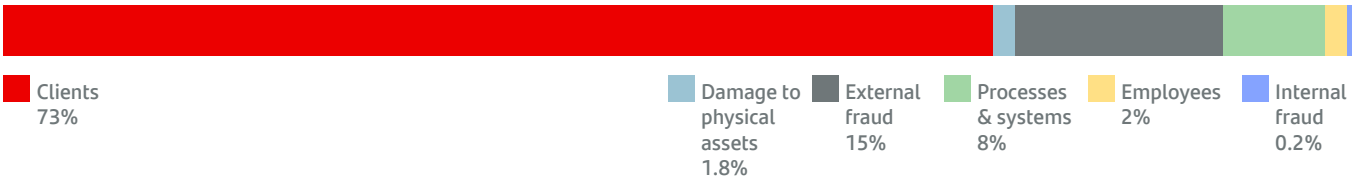
Progress implementation and improvements in instruments related to risk appetite, risk assessment and control, business continuity plans, as well as in the analysis and integration within the monitoring and control of non-financial risks (transformation risk and climate).

Relevant operational risks

Several initiatives in place to mitigate emerging risks (technological, cyber, etc.) and also adapt to regulatory framework changes, focusing on strengthening capacities to recover from disruptive events that affect our main business operations.

OPERATIONAL LOSSES BY BASEL CATEGORY

Dec.2021



Compliance and conduct risk

> Section 7

Main initiatives in 2021:

- **Transformation:** Continued development of One FCC strategic transformation plan; use of artificial intelligence techniques to improve root-cause analysis of customer complaints and for proactive conduct risk management in commercialization; exploration of RegTech tools.
- **Process redesign to improve effectiveness:** Use of homogeneous management methodologies and tools in subsidiaries: Heracles, CCM, Annual compliance program, Product and service approval. Stronger governance under a risk-based approach for the supervision of our subsidiaries.
- **Compliance & conduct risk management by the first line of defence:**
  - Designation of an executive responsible for FCC at subsidiary/business level.
  - More robust compliance and conduct risk management in terms of dealing with vulnerable customers, conduct risk control, better reputational risk management and regulatory agenda with GDPR and Anti-Trust requirements.
- **Risk culture:** Fine-tuning of team capabilities according to strategic objectives, gender and diversity initiatives, talent review in succession planning.

Model risk

> Section 8

- We continue to make progress with our Model Risk Management (MRM 2.0) strategic plan, with two achievements: better management of our regulatory models (IRB and IMA) and compliance with supervisory expectations.
- Our digitalization progress helped us improve real-time decision-making through more agile admission models.

Strategic risk

> Section 9

- 2021 strategic focus was to see how economic recovery fared against the uncertainty generated by new covid-19 variants and the progress of vaccination campaigns in various geographies; and to monitor the progress of our transformational projects.
- Challenging strategic plans, reviewing our business model, identifying and monitoring top risks, assessing and validating new products and coordinating the risk analysis for corporate development transactions.

Climate and environmental risk

> Section 10

- Climate-related and environmental risk further embedded in our core risk management processes. Major 2021 milestones include a new quantitative metric in our risk appetite statement that allows us to closely monitor our commitment to reduce thermal coal exposure.
- Progress also made with increasing granularity and scope (e.g. Santander Consumer Finance and Private Banking) of credit risk materiality assessments.
- Continued support for our public commitments on climate change and for our customers' transition to a more sustainable economy.
- In 2021, progress was made in developing the Group's capabilities to assess portfolios with scenario analysis techniques. Among other management uses, it is also enabling to meet growing regulatory requirements, including the Climate Biennial Exploratory Scenarios (CBES) in the UK and the Single Supervisory Mechanism (SSM) climate risk stress test for 2022.
- Progress in credit approval process according to EBA guidelines; and the adaptation of our policy to comply with environmental commitments.

Grupo Santander's risk profile could be affected by the macroeconomic environment, regulations and competition.

This financial information, prepared with the same Group-wide principles, aggregates figures for our various markets and business subsidiaries, based on accounting data and internal management system reporting.

The segments shown are differentiated by the geographical area where profits are earned and by type of business. The financial information of each reportable segment is prepared by aggregating the figures for the Group's various geographical areas and business units. The information relates to both the accounting data of the units integrated in each segment and that provided by internal management information systems. In all cases, the same general principles as those used in the Group are applied.

The notes to the consolidated financial statements contain additional information on Grupo Santander's provisions, legal proceedings, taxes and other risks.



For additional information on segments, please see '4.1 Description of segments' of the Economic and financial review chapter.

1.2 2021 key achievements

Our Risk and Compliance function is forward-looking, pragmatic and a reference in the market. It is also guided by a clear and reinforced strategy with lessons learnt throughout the crisis that enables us to be better prepared.

Covid-19 close monitoring

- Unprecedented level of support to customers (EUR 150 bn).
- Integrated Health reports and stats into BAU reporting for effective & timely updates.
- Closely following most affected sectors/clients supported by clear segmentation.
- Fully prepared Collections & Recoveries teams were instrumental in helping manage the crisis including Conduct approach.
- Detailed & regular assessments of provisions alongside a robust control environment.

Operational excellence

- Strong customer-centric credit management with excellent results in the ECB's stress test.
- ONE Compliance strategy in motion and accelerating One FCC transformation programme through global standards implementation and detection activities.
- Considerable cyber risk progress made with the launch of Europe's hub.
- Climate & environmental factors integration into the admission process.
- Constantly raising up the bar in credit risk digitalisation and automation to improve customer experience (time to yes/time to cash).

Creating value

- Capital accuracy: continuous optimization through model enhancements and other initiatives.
- Consolidation of Monet as the Group's tool supporting our consistent model risk management framework.
- Integration of compliance & conduct risk assessments/ indicators into one process under the same methodology through the enhancements made to our Heracles tool.
- Compliance & conduct governance, process, methodologies and tool simplification to better engage with subsidiaries and be more effective and efficient.
- Leverage new advanced analytics techniques in risk management: conduct and customer voice, reputational risk, credit risk, FCC.

New ways of working

- Simplified key processes through state of the art modelling techniques and robotics.
- New regional heads in place accelerating shared services/ common solutions.
- Introduced Flexi-working to better reconcile work-life balance and protect employees during covid.
- Broadened Risk Culture to include cyber, compliance & conduct and climate.

1.3 Santander's top and emerging risks

For forward-looking management and strict control, we regularly measure top and emerging risks under various stress scenarios. We detect, analyse and monitor major internal and external threats that could affect our strategic plan and compromise our profitability and solvency. Top and emerging risks could lead to deviations from our targets, as (by definition) their potential impact is not included in current plans. Still, management measures can mitigate impact severity.

In 2021, the covid pandemic and vaccine rollouts (especially in OECD countries, where they have prompted faster economic recovery than expected) still affected our top risks identification process. The risk of new virus variants remains under close observation, particularly in geographies where vaccination rates are low.

Grupo Santander is monitoring and adopting measures to mitigate strategic risks, such as:

A macroeconomic scenario in which recovery is restrained:

Ongoing inflation in the US and Europe over recent months and signs of some economic indicators' slowdown have cast doubts about global economic recovery. Extreme scenarios even suggest the return of stagflation.

Following lockdowns, global manufacturing and services have not been able to keep up with increasing demand and changing consumption patterns prompted by covid. Global supply chains have not yet recovered their full capacity, which was diminished by pandemic restrictions. Examples of this are the maritime shipping woes and the semi-conductor shortage that is especially affecting the auto industry.

Food and commodity prices are on the rise, and many markets (including the US and the UK) are seeing labour shortages. Amid the inflationary tension (which central banks will have to tackle), fiscal and monetary stimulus measures to reverse the economic slowdown spurred by the pandemic which are gradually being reduced. There is the risk that economic recovery will be affected by these ongoing supply shocks, leading to higher, more structural inflation. Furthermore, if job market instability pushes inflation forecasts above targets, due to the so called "second-round effects", the pressure for tighter monetary policies will be greater.

Our balanced diversification between mature and developing markets and our wide range of products leave us more resilient to macroeconomic threats. We also managed to reduce the potential severity of these risks through mitigating measures we took at the onset of the pandemic and adapted throughout 2021. They include:

- robust risk policies and processes and proactive management, which kept our risk profile within the parameters set out in our risk appetite statement;
- our recoveries and collections teams' full capacity after adapting to the new environment through a Group-wide preparedness plan initiated in 2020 and finalized in 2021;
- continuous monitoring of the social and political situation regarding countries and industries where we have considerable exposure, and adjustments of our limits and positions according to our risk appetite; and
- regular reviews of our risk profile and commercial, market and macroeconomic dynamics, and new action plans to remain on track with established plans.

Growing regulatory pressure

In light of our international footprint and status as a global systemically important bank, we are subject to substantial capital requirements that could increase owing to new regulation or to a review by the supervisor of the existing criteria. This could reduce our profitability and return on capital while raising our cost of funding. In the coming years, banks must implement capital and leveraging requirements in accordance with Basel III reforms, aimed to enhance the comparability of capital ratios at the industry level.

Key mitigation measures:

- Continued enhancement of our models and multiple initiatives on each risk factor to optimize capital.
- Participation in all forums to debate and work with banking associations, regulators and supervisors on new regulation and requirements.
- Appropriate capital planning that allows us to absorb new regulation impacts preventing them from affecting our solvency levels.

Cyber risk in a digital business model

Cybersecurity threats are increasing rapidly in terms of frequency, sophistication and impact. Ransomware and data breaches continued to dominate the external threat landscape during 2021. Additionally, new vulnerabilities that can be rapidly exploited are also on the rise.

As cyber threats continue to grow and new attack techniques are developed, continuous evolution of cyber defences is essential. Cybersecurity initiatives, described on the Cyber risk paragraph on section 6.2 'Operational risk management', are helping Grupo Santander to evolve its defences in line with emerging threats and technologies.

The increase in digital transactions and the expansion of remote working schemes seen in recent times can also have an effect on cyber risks and threats. These are the measures Grupo Santander has taken to combat them:

- We tightened controls (e.g., patching, browsing control, data protection and remote connections from the call centre), anticipating the worst scenarios in order to create a "defence in depth" to prevent, detect, react and recover.
- We standardized and continued to bolster existing defences through agile, sustainable and risk-driven management.

Risk in the execution of our transformational projects

In the new digital environment driven by covid-19, growing competition between existing companies and new players is causing banks to rethink their business models, customer experience and market demands, spurring faster digitalization. Regulation plays a fundamental role and may give rise to asymmetries between new and traditional competitors, and between markets.

To adapt, Grupo Santander is executing a transformation plan that is complex owing to the number of countries, systems and regulation it

involves. If we fail to execute these key strategic projects, it could damage our business plan and worsen efficiency as well as regulatory expectations.

Key mitigation measures:

- Continuing to make progress in digitalization to make the bank an open financial services platform. This has been vital in the new environment. Our agreements and joint ventures have been playing a fundamental role in our transformation.
- Sharing best practices and commercial solutions in order to continue to embed a culture of fast experimentation in Grupo Santander.
- Establish a strategic project management office with robust governance to monitor and report to the risk control and strategy committees on strategic projects.
- We carefully measure and monitor risks stemming from inadequate project execution. Projects must be closely overseen by specific departments.

Inclusion of climate-related risks within risk management

Climate-related risks have become a priority for broader society. Governments, international organizations, regulators and supervisors continue to develop initiatives to comprehend the magnitude of this risk, with stricter transparency and market disclosure requirements in regard to climate-related risks to banks' profitability, resilience and business strategies.

We split climate-related risk into two categories: (1) risks from the transition to a low-carbon economy and (2) risks from the physical effects of climate change. To identify and respond to them properly, proactive management is key.

In 2022, European banks will undergo their first-ever climate-related stress test to measure the Eurosystem's balance sheet exposure to climate-related risk. Furthermore, as the Supervisory Review and Evaluation Process (SREP) gradually includes environmental risks, they could eventually have an effect on regulatory capital.

Key mitigation measures:

- Direct participation of senior managers to support Grupo Santander's strategic objectives, in accordance with our established governance.

For more details on those objectives, see section 10. 'Climate and environmental risk' in this chapter.

- Climate-related project, with Responsible Banking, Corporate & Investment Banking (CIB) and Risks at the helm, to develop risk measurement approaches, climate-related metrics, strategies, new policies and frameworks; set out a robust risk appetite statement; and design green products to satisfy the growing demand. Stronger internal resources and capabilities to meet increasing requirements.
- Financing for renewable energy and smart infrastructure to aid customers' transition to reducing their own carbon emissions. Support for inclusive and sustainable growth in consideration of risks and opportunities.
- Active role in international forums and working groups to promote the energy transition programme, including the United Nations Environment Programme Finance Initiative's (UNEP FI) pilot programme to develop scenarios, models and metrics to measure climate-related risks and opportunities in the future.

As part of our risk identification process, we also defined other events, which could affect our strategy and transformation plan in the longer-term, such as significant shifts in market tendencies and the business environment; consumer behaviour; geopolitics; political fragmentation; social and demographic changes; asymmetric access to natural resources; extended use of crypto assets; and potential legal loopholes. We conducted Board Risk Strategy sessions to discuss with board members new and fast emerging key trends.

2. Risk management and control model

Our risk management and control model is underpinned by common principles, a strong risk culture, a solid governance structure and advanced risk management processes and tools

2.1 Risk principles and culture

Our risk principles below are compulsory. They comply with regulatory requirements and are inspired by best market practices:

1. **All employees are risk managers** who must understand the risks associated with their functions and not assume risks with an impact that exceeds the Group's risk appetite or is unknown.
2. **Involvement of senior managers,** with consistent risk management and control through their conduct, actions and communications, as well as oversight of our risk culture and make sure we maintain our risk profile within the defined risk appetite.
3. **Independent risk management and control functions,** according to our three lines of defence model, described in detail under section 2.3 'Risk and Compliance governance' of this chapter.
4. **A forward-looking, comprehensive approach to risk management and control** for all businesses and risk types.
5. **Complete and timely information** to identify, assess, manage and disclose risks to the appropriate level.

Grupo Santander's holistic control structure stands on these principles and includes strategic tools and processes set out in the risk appetite statement, such as annual and budget planning, scenario analysis, the risk reporting structure and risk identification and assessment.

Risk culture - *Risk Pro*

Santander has a strong risk culture called *Risk Pro* (or *I AM RISK* in the UK and the US), based on the principle that all employees are risk managers. Risk Pro is a pillar of 'The Santander Way' group culture and considers all risks to promote socially responsible management and long-term sustainability.

For more details, see the section 'Risk pro: our risk culture' in the Responsible Banking chapter.

2.2 Risk factors

Grupo Santander's risks categorization ensures effective risk management, control and reporting. Our risk framework distinguishes these risk types:

1. **Credit risk** relates to financial loss arising from the default or credit quality deterioration of a customer or counterparty, to which Santander has directly financed or assumed a contractual obligation.
2. **Market risk** results of loss and detriment to profits or capital stemming from movements in interest rates, exchange rates, stock and commodity prices and its potential impact on capital requirements.
3. **Liquidity risk** occurs if liquid financial resources are insufficient or too costly to obtain in order to meet liabilities when they fall due.
4. **Structural risk** is the risk that market movements or balance sheet behaviour will change the value or profit generation of assets or liabilities in the banking book. It covers insurance and pension risks, as well as the risk that Santander will not have sufficient capital (in terms of quantity or quality) to meet internal business targets, regulatory requirements or market expectations.
5. **Operational risk** is the possibility of losses due to shortcomings and failures relating to processes, employees and internal systems, even as a result of external events. It includes legal, regulatory compliance and conduct risks.
6. **Financial crime risk** is the risk of loss due to criminal or illegal activity involving Santander's resources, products and services. Such activity includes money laundering, terrorism financing, violation of international sanctions, corruption, bribery and tax evasion.
7. **Model risk** involves potential losses due to inaccurate forecasting or from a model being implemented or misused that can result in poor decision-making.
8. **Reputational risk** is the risk of current or potential negative economic impact due to damage to the bank's reputation among employees, customers, shareholders, investors and broader society.
9. **Strategic risk** relates to losses due to strategic decisions or their poor implementation that affect our core stakeholders' medium-to-long-term interests or to an inability to adapt to a changing environment.

Environmental and climate-related risk drivers are considered as factors that could impact the existing risks in the medium-to-long-term.

These elements include, on the one hand, those derived from the physical effects of climate change, generated by one-off events as well as by chronic changes in the environment and, on the other hand, those derived from the process of transition to a development model with lower emissions, including changes on legislation, technology or economic agents' behaviour.

2.3 Risk and Compliance governance

Grupo Santander´s robust risk and compliance governance structure allows us to conduct effective oversight in line with our risk appetite. It stands on three lines of defence, a structure of committees and strong Group-subsidiary relations, guided by our risk culture, Risk Pro.

Lines of defence

Our model of three lines of defence effectively manages and controls risks:

- **First line:** formed by businesses and functions that take or originate exposure to risk, it recognizes, measures, controls, monitors and reports on risks according to internal risk management regulation. Risk origination must be consistent with the approved risk appetite and related limits.
- **Second line:** formed by the Risk and Compliance and Conduct functions, it independently oversees and challenges the first line's risk management. Its duties include ensuring that risks are managed according to the risk appetite defined by senior management and strengthening our risk culture throughout Grupo Santander.
- **Third line:** the Internal Audit function, which is independent to ensure the board of directors and senior managers with high-quality and efficient internal controls, governance and risk management systems, helping to safeguard our value, solvency and reputation.

The Risk, Compliance & Conduct and Internal Audit functions are separate and independent. Each has direct access to the board of directors and its committees.

Risk and Compliance committees' structure

The board of directors is ultimately responsible for risk and compliance management and control. It revises and approves the bank's risk frameworks and appetite, while promoting a strong risk culture across the Group. The board relies on its risk supervision, regulation and compliance committee for risk control and on the group's executive committee for risk approval.

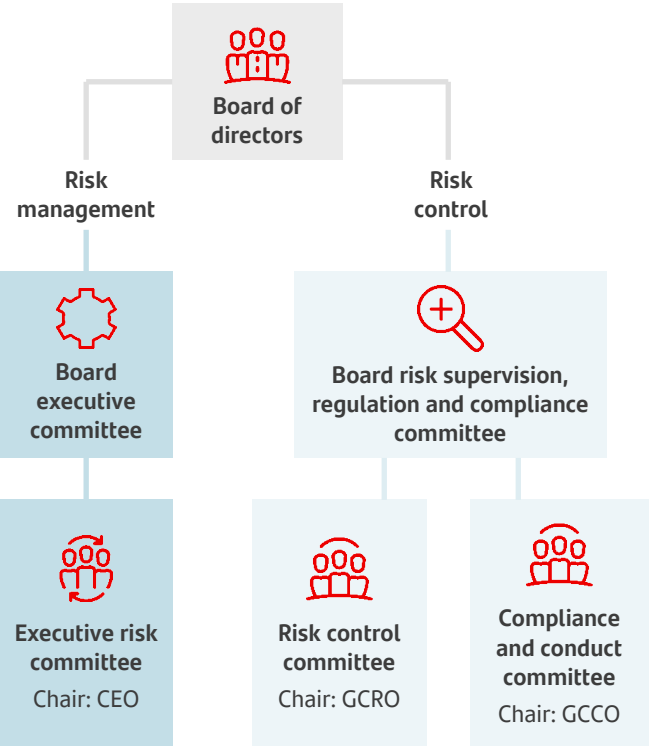
For more details, see section 4.8 'Risk supervision, regulation and compliance committee activities in 2021' of the chapter on Corporate governance.

The **Group chief risk officer (Group CRO)**, who decides risk strategy and promotes proper risk culture, is in charge of overseeing all risks and challenging and advising business lines on risk management.

The **Group chief compliance officer (Group CCO)**, who decides compliance and conduct strategy, is in charge of controlling the risks within their purview and must provide the Group CRO with a complete overview on the situation of risks being monitored.

Both the Group CRO and the Group CCO have direct access and report to the risk supervision, regulation and compliance committee and the board of directors.

Risk governance keeps risk control and risk-taking lines separate:



The executive risk, risk control and compliance and conduct committees (described below) are executive committees and have been delegated powers by the board.

	Executive risk committee (ERC)	Risk control committee (RCC)	Compliance and conduct committee
Functions:	Manages risks according to the powers it has been delegated by the board. It is authorized to approve, alter or scale significant models as well as any measures or transactions that may pose substantial risk to Grupo Santander. It makes the highest-level risk decisions according to the group's risk appetite.	Controls and provides a holistic overview of risks. It makes sure business lines are managed according to risk appetite. It also identifies, monitors and assesses the impact of existing and emerging risks on Santander's risk profile.	The committee monitors and reviews compliance and conduct risk management. It also oversees corrective measures for new risks and risks detected among management-related deficiencies.
Chair:	CEO	Group CRO	Group CCO
Composition:	Appointed executive directors and other senior managers, representing the risk, finance and compliance and conduct functions. The Group CRO reserves the right to veto the committee's decisions.	Senior managers from the risk, compliance & conduct, finance, accounting and management control functions. From time to time, each CRO from subsidiaries attend to report on their respective risk profiles.	Senior managers representing the compliance & conduct, risk, accounting and management control functions. The chair reserves the right to veto the committee's decisions.
Meetings:	Weekly	Monthly	Monthly
Forums:	• Model approval forum • Risk proposal forum	• Forum on market, structural, liquidity and capital risk control • Credit risk control forum • Provisions forum	• Corporate product governance forum • Financial crime prevention forum • Reputational risk forum

In addition, for each risk factor there are forums and regular meetings to manage and control the risks within their purview. Executive committees also delegate part of their duties to subordinate forums.

Their responsibilities include:

- reporting to the Group CRO, the Group CCO, the risk control committee and the compliance and conduct committee on risk management according to risk appetite;
- monitoring and ensuring proper management of each risk factor; and
- overseeing measures to comply with supervisors and auditors' expectations.

In order to establish an adequate control environment for the management of each risk factors, the Risk and Compliance and Conduct functions have effective internal regulation to create the right environment to manage and control all risks.

Grupo Santander can also dictate new governance measures for special situations. For the Brexit transition process, it set up separate steering committees and working groups with Santander UK. Also, to cope with the covid crisis, it created special situation forums, in which close coordination with subsidiaries, local contingency plan activation (including scenario analysis) enhanced allocated resources and governance to ensure the efficiency of the measures.

The Group's relationship with its subsidiaries

Our subsidiaries' risk and compliance management and control models is consistent with the frameworks approved by the group's board of directors, which they adhere to through their own boards and can only adapt according to local law and regulation. In its duty to carry out aggregate risk oversight, Grupo Santander validates and challenges subsidiaries' internal regulation and transactions, which results in a common risk management model across the group.

In 2021, we continued to strengthen our regional subsidiary relations model, based on regions, to find synergies for common operations and platforms building on our global and regional scale; to streamline processes; and to tighten control mechanisms so our business can grow, allocate capital more efficiently and offer the best service to our customers.

Local CRO interact regularly with their regional head of risk, the Group CRO and the Group CCO in periodic regional or country control meetings. Local and global Risk and Compliance functions also hold follow-up meetings to address special matters. The Group CRO and the Group CCO and regional heads of risk are involved in appointing, setting of objectives, reviewing and compensating their local counterparts to ensure proper risk management.

Grupo Santander enhances its relations with subsidiaries and its advanced risk management model through:

- close collaboration between countries in the same region to carry out common initiatives efficiently;
- structural change, subsidiary benchmarks and a strategic vision for the function to implement advanced risk management infrastructures and practices
- the exchange of best practices to strengthen processes and drive innovation in order to achieve a quantitative impact.
- identification of talent in risk and compliance teams, promoting international mobility through a global risk talent programme and tightening succession plans.

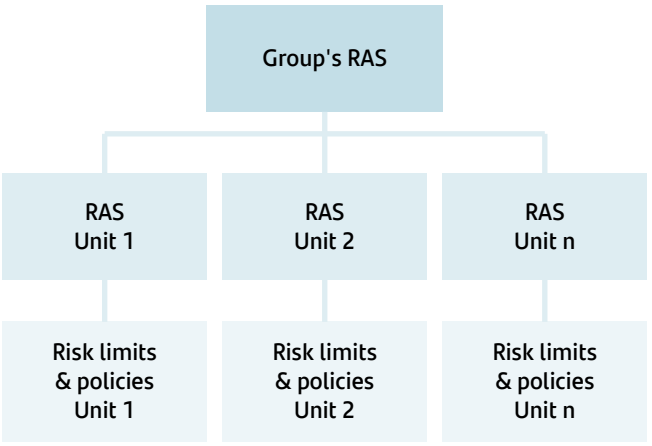
For more details on our relationship with our subsidiaries, see section 7 'Group structure and internal governance' of the chapter on Corporate Governance.

2.4 Risk management processes and tools

Grupo Santander has the following processes and tools to carry out an effective risk management:

Risk appetite and structure of limits

Risk appetite is the volume and type of risks we deem prudent for our business strategy, even in unforeseen circumstances. It considers adverse scenarios that could have a negative impact on capital, liquidity and profitability. The board sets the Group's risk appetite statement (RAS) every year. Our subsidiaries' boards also set their own risk appetites annually. Each of those risk appetites translates into risk management limits and policies based on risk type, portfolio and segment.



Business model and risk appetite fundamentals

Santander's risk appetite is consistent with our risk culture and our business model built on customer focus, scale and diversification. At the core of our risk appetite are:

- a medium-low and predictable target risk profile that is centred on retail and commercial banking, internationally diversified operations and strong market share;
- stable, recurrent earnings and shareholder remuneration, sustained by a sound base of capital, liquidity and sources of funding;
- independent subsidiaries that manage their own capital and liquidity, with risk profiles that do not compromise the Group's solvency;
- an independent risk function with involvement by senior management to embed a strong risk culture and drive a sustainable return on capital;
- a global, holistic outlook through extensive control and monitoring of risks, businesses and markets;
- a focus on products we know well;
- a conduct model that protects our customers; and
- a remuneration policy that aligns employees and executives' interests with risk appetite and long-term results.

Our risk appetite principles

The principles that inform our risk appetite are:

- **the board and senior management's responsibility** for risk appetite;
- **an enterprise-wide view of risk, backtesting and challenge of risk profile** based on quantitative metrics and qualitative indicators;
- **a forward-looking view** based on plausible assumptions and adverse/stress scenarios to reflect our desired risk profile in the short and medium term;
- **strategic and business plans embedded in daily management** by policies and limits;
- **common standards** that align each subsidiary's appetite with the Group's; and
- **regular reviews, best practice and regulatory requirements**, with mechanisms in place to keep the risk profile stable and mitigate non-compliance.

Limits structure, monitoring and control

Our risk appetite is expressed in qualitative terms and limits structured on these five core elements.

1 Earnings volatility

Maximum loss Santander can tolerate in an acute-but-plausible stress scenario.

2 Solvency

- Minimum capital position Santander can tolerate in a stress scenario.
- Maximum leverage Santander can tolerate in a stress scenario.

3 Liquidity

- Minimum structural liquidity position.
- Minimum liquidity horizon Santander can tolerate in peak stress scenarios.
- Minimum liquidity coverage position.

4 Concentration

- Concentration in single-names, industries and portfolios.
- Concentration in non-investment-grade counterparties.
- Concentration in large exposures.

5 Non-financial risks

- Maximum operational risk losses.
- Maximum risk profile.
- Non-financial risk indicators:
  - Financial crime compliance (FCC)
  - Cyber and security risk
  - Model risk
  - Reputational risk

While risk appetite limits are regularly monitored, specialized control functions report on risk profile and compliance with limits to the board and its committees every month. The link between risk appetite limits and the limits used to manage business units and portfolios is key to making risk appetite an effective tool for managing risks. Management policies and limits are based on the risk appetite statement (see sections 3.2 'Credit risk management', 4.2 'Market risk management' and 4.4 'Structural balance sheet risk management' of this chapter).

Key initiatives in 2021

Santander continued to thoroughly review the impact of covid and the adequacy of our risk appetite to cope with the new landscape. We strengthened our controls and metrics to monitor our commitment to the environment and to the Paris Agreement for the transition to a low-carbon and climate-resilient economy more closely. Having achieved our aim to be carbon neutral in 2020, our ambition is to be net-zero in carbon emissions by 2050. We set our first decarbonization objectives, which are to stop providing financial services to power generation customers with a revenue dependency on coal of over 10% and to reduce our worldwide exposure to coal mining production to zero, a key step in fighting climate change.

Risk profile assessment (RPA)

Identification and assessment are central to the management, control and reporting of Grupo Santander's risk. To assess the Group's risk profile systematically, we use a single, robust methodology that allows us to analyse the various risk types described in our risk framework (outlined under section 2.2 'Risk factors'). In addition, it classifies them by different levels and unit according to a points system with four categories ("low", "medium-low", "medium-high" and "high").

The RPA methodology is based on the main principles of the identification and risk assessment model, such as: self-assessment and exercise suitability; efficiency; and holistic, in-depth risk analysis (with common approaches and alignment for decision-making). The three lines of defence take part in the assessment, strengthening our risk culture by reviewing how risks change and pinpointing areas for improvement.

Risk profile assessment covers:

- **risk performance** (to measure exposure to each type of risk);
- **control environment** (to measure the target operating model of our advanced risk management according to regulation and best market practice); and
- **forward-looking analysis** (to measure threats that can affect business planning and strategic objectives).

In 2021, we revised and strengthened our control environment standards, adding an internal self-assessment questionnaire on the management of risks relating to environment and climate-related risks to check the implementation of measures designed to achieve net-zero emissions by 2050.

At the end of 2021, Grupo Santander's risk profile returned to "medium-low". Our core profitability and credit quality indicators improved due to efficient risk management, a sustained low liquidity risk profile and the reopening of the economy spurred by vaccination and government stimulus in our geographies.

Furthermore, the severity of the emerging risks on our risk profile declined, as health indicators improved and the global economy shows signs of recovery. Grupo Santander maintains a robust risk control environment.

Scenario analysis

Scenario analyses are a useful risk management tool to measure our resilience to stress situations under a forward-looking approach and, if necessary, prepare mitigating plans for expected loss, capital and liquidity. Our Research department plays a key role in determining analysis scenarios based on macroeconomic and other variables that can affect our risk profile in our markets. The governance and control of the entire process, including the review by our three lines of defence and senior management, is also a fundamental aspect to ensure its consistency and robustness, to which it also contributes:

- develop and execute models that estimate future metric values (e.g. credit losses);
- backtesting (in order to challenge model outcomes regularly);
- our teams' expert opinions and vast understanding of portfolios; and

- thorough monitoring of models, scenarios, assumptions, results and mitigating management measures.

Grupo Santander has repeatedly obtained excellent quantitative and qualitative scores in the European Banking Authority's (EBA) stress tests.

Scenario analysis applications

We run a systematic review of our risk exposure under a base scenario and several adverse and favourable scenarios to predict potential solvency and liquidity changes. These exercises are fundamental for:

- **Regulatory exercises** according to instructions given by EU and local supervisors.
- **Internal capital and liquidity adequacy assessment processes** (ICAAP and ILAAP), in which Grupo Santander follows its own approach to measure capital and liquidity under various scenarios.
- **Risk appetite**, which includes stressed metrics to determine the highest risk we can assume. Though risk appetite and capital and liquidity stress exercises are closely related, they have different time frames and granularity.
- **Recurrent risk management** also uses scenario analyses for:
  - **budget and strategy planning,** when implementing a new risk approval policy or reviewing the Group's risk profile, monitoring specific portfolios and business lines;
  - **systematic top risk identification and impact analysis** (where each top risk relates to a macroeconomic or idiosyncratic scenario);
  - **our annual Recovery Plan**, which specifies the tools Grupo Santander can use to survive a severe financial crisis. The plan includes financial and macroeconomic stress scenarios with varying levels of severity, plus idiosyncratic and systemic events.
  - **IFRS 9**: Since 1 January 2018, regulation for estimating provisions have required scenario analysis models and methodologies.
  - **Credit and market risk stress testing exercises,** simulating changes to expected losses or estimating required capital to absorb losses resulting from unforeseen events.

In the covid-19 pandemic context, scenario analyses continued to be instrumental in 2021 to check if the additional provisions recognized in 2020 were sufficient to cover expected losses caused by the health crisis. In the Group we have developed a new tool (Delphi) to review the calculation of provisions, using the latest best practices available in the industry, to better anticipate and manage the impacts of covid.

Across our geographies, macroeconomic conditions were differently affected by the progress of vaccination campaigns, government relief programmes and monetary and tax policies. Accordingly, our scenario analyses helped us recognize points of action, develop adequate commercial responses and adapt our risk strategy to conserve our strength and solvency.

For more details on scenario analysis, see sections 3.2 'Credit risk management', 4.2 'Market risk management' and 4.6 'Liquidity risk management' and Note 53 section 'Expected loss estimation' in this report

- Grupo Santander made significant inroads with **climate-related analysis** in 2021. We added the Network for Greening in the Financial System (NGFS) climate scenarios and created others to account for risks posed by the transition to a low-carbon economy and by potential climate events in certain geographies. Our 2021 ICAAP showed improvement against environmental and climate-related risks, and we anticipate further progress in 2022. We will also take part in pilot stress tests led by the Single Supervisory Mechanism (SSM) in 2022, which will be included in the Supervisory review and evaluation process (SREP).

For more details, see 'Monitoring' in section 10.2 'Climate and environmental risk management' in this chapter

Risk reporting structure (RRS)

To provide senior managers with a complete, up-to-date understanding of our risk profile, the Enterprise-wide risk management team regularly consolidates and reports on current and future risks so the right decisions can be made in a timely manner.

We continue to change our reporting, as we simplify and automate processes, tighten controls and adapt to new needs. In 2021, to report on the covid crisis, we monitored such critical topics as the macroeconomic situation, health indicators, relief measures for our customers and risk areas, which helped us make decisions. We also vigorously accounted for initiatives relating to our strategic objectives, such as new regional structures and new business units.

Our risk reporting covers all factors set out in our risk framework, especially environmental, social and climate-related risks, as well as all those fundamental aspects that may be necessary for our risk assessment. We issue weekly, monthly and group-wide reports for senior managers; as well as monthly subsidiary risk reports and reports on each risk factor found in our risk framework. Our robust risk reporting structure is characterized by:

- balanced data analysis and qualitative commentary (with future measures, alerts, risk appetite limits and emerging risks);
- holistic, accurate overviews of risk factors, subsidiaries and markets;
- consistent risk analysis structure and standards; and
- metric reporting according to our corporate data framework, guaranteeing information quality and consistency.

This ensures complete, agile and dynamic reporting that provides a clear overview of current and future risks and enables us to adapt to emerging risks.

2.5 Models & Data Unit

In 2021, Grupo Santander made progress towards becoming the best open financial services platform, using advanced analytics and artificial intelligence (AI) to enrich its understanding of current and potential customers' needs and to earn their trust.

The leading data scientists and analysts that make up the group's Models & Data unit (part of the Risk and Technology & Operations divisions) used state-of-the-art algorithms and models to help us achieve our targets and get the most out of data in a responsible way. During 2021, they worked on two priorities:

a. **Strengthening the business,** where AI and digitalization enable Santander to scale up and grow efficiently. The Models & Data teams in headquarters and each of our geographies help by:

- **growing the customer base:** We select quality potential customers and get to know their needs and behaviours to boost onboarding and conversion rates. AI has been useful for customer approval, especially at Santander Brasil, where new account openings climbed from 51% to 76%. When combined with better digital customer experience, it proves highly beneficial at scale.

- **increasing customer loyalty:** We meet expectations and offer smart services throughout the customer life cycle. In particular, Santander España created and applied a machine learning model to split the Spanish economy into high-growth industries (in collaboration with Tresmares[1]); identify SMEs in those industries; and design a value proposition that meets existing and potential customers' needs.

- **maximizing profitability:** Grupo Santander is increasing efficiency by using cognitive robotics to automate repetitive tasks. Santander México uses this type of robotics to review 20,000 digitalized collateral documents per month.

b. **Enhancing risk management:** Our data and models are key to regulatory compliance.

In 2021, Grupo Santander worked on internal ratings-based (IRB) 2.1 models programme to comply with the EBA Repair Programme (and other regulatory requirements), which sets out new provisions for internal models developed under the IRB approach. The programme posed significant planning and resource challenges for the industry. Our Data & Models teams created models to delve deeper into our portfolios and better manage their risks.

They also developed Reg-Tech apps to upgrade anti-money laundering practices in geographies as Santander Brasil. The apps use AI to prioritize major risk alerts for analysts and help scale anti-money laundering processes.

In the future, Santander will continue to innovate its risk management based on two pillars:

- Boosting sustainable growth and climate risk management. In accordance with EBA requirements, the Models & Data teams quantify transition and physical risks from natural and climate-related disasters based on geography and exposure.

- Promoting the use of new analysis techniques (AI) in risk models (especially for regulatory capital). Banco Santander took part in a study on machine learning models' prediction of credit default published by Banco de España[2] in early 2021, which showed that advanced models have greater predictive power than traditional ones.

  Grupo Santander commits to promoting changes to risk management in banking through the responsible use of advanced analytics (machine learning and AI).

[1] Tresmares is a financing platform specialized in SMEs with the collaboration of Santander España.
[2] Understanding the performance of Machine Learning Models to predict credit default: a novel approach for supervisory evaluation.

3. Credit risk

3.1 Introduction

Credit risk is the risk of financial loss due to the failure to pay or impaired credit of a customer or counterparty Santander has financed or maintains a contractual obligation with. It is our most significant risk in terms of exposure and capital consumption, and includes counterparty risk, country risk and sovereign risk.

3.2 Credit risk management

We take a holistic view of the credit risk cycle, which includes the transaction, the customer and the portfolio to identify, analyse, control and decide on credit risk.

Credit risk identification is key to managing and controlling our portfolios effectively. We classify external and internal risks in each business and adopt corrective and mitigating measures when needed through the following processes:

1. Planning

Our planning helps us set business targets and draw up concrete action plans within our risk appetite statement.

Strategic commercial plans (SCPs) are a risk management and control tool the business and risk areas prepare for our credit portfolios. They determine commercial strategies, risk policies, resources and infrastructure, ensuring a holistic view of portfolios.

In addition, they provide us with an updated view of portfolio credit quality to measure credit risk; run internal controls over the strategy with regular monitoring; detect significant deviations in risk and potential impacts; and take corrective actions when necessary.

The SPCs align with our risk appetite and our subsidiaries' capital targets, and are approved and monitored by senior managers at each subsidiary before the group reviews and validates them.

2. Risk assessment and credit rating

To analyse customers' ability to meet contractual obligations, we use assessment and parameter estimation models in each of our segments. Our credit quality assessment models are based on credit rating engines, which we monitor to calibrate and adjust the decisions and ratings they assign. Depending on each segment, engines can be:

1. **Rating**: From mathematical algorithms that use a quantitative module based on balance sheet ratios or macroeconomic variables, and a qualitative module supplemented by credit analysts' expert judgement. It is used in the SCIB, corporate and institutions, and SME segments (individually).
2. **Scoring**: Automated loan application assessment that assigns a score to retail customers and small enterprises that do not have an assigned analyst for subsequent decision-making.

Our parameter estimation models follow econometric models built on our portfolios' historical defaults and losses. We use them to calculate economic and regulatory capital as well as IFRS 9 provisions for each portfolio.

We regularly monitor and evaluate models' suitability, predictive capacity, performance, granularity, compliance with policies and other related factors. We review ratings with the latest financial and other relevant information. We increased the reviews for customers who are subject to close observation or automatic warnings in risk management systems.

3. Credit risk mitigation techniques

Risk approval is generally determined by the borrowers' ability to pay when financial obligations fall due, regardless of any additional collateral or personal guarantees we require from them. We analyse funds or net cash flows from their businesses or income with no guarantors or assets pledged as collateral. When approving a loan, we always consider guarantors and collateral as a secondary means of recourse if the first channel fails.

Guarantees are a reinforcement measure in a credit transaction to mitigate a loss if the borrower defaults on their payment obligation.

We have credit risk mitigation techniques for various types of customer and product. Some are for specific transactions (e.g. property) while others apply to a series of transactions (e.g. derivatives netting and collateral). They can be grouped into personal and real guarantees or with credit derivatives coverage.

4. Limits, pre-classifications and pre-approvals

We use SCPs to manage credit portfolios, defining limits for each of them and for new originations in line with our credit risk appetite and our target risk profile. Introducing our risk appetite into portfolio management strengthens controls over our credit portfolios.

Our limits setting processes, pre-classifications and pre-approvals determine the risk we can assume with each customer. Limits are approved by the executive risk committee (or delegated committees) and should reflect a transaction's expected risk-return. We use different limits models based on the segment:

- **Large corporates** are subject to a pre-classification model based on a system for measuring and monitoring economic capital. Pre-classification models set the level of risk we are willing to assume in transactions with customers or groups in terms of capital at risk (CaR), nominal CAP and maximum tenors, depending on the transaction type. To manage limits with financial entities, we use credit equivalent risk (CER), which includes current and expected risks with customers according to risk appetite and credit policies.

- **Corporates and institutions** that meet certain requirements (strong relationships, rating, etc.) are subject to a simpler pre-classification model with an internal limit that benchmarks a customer's risk level against their repayment capacity, overall indebtedness and pool of banks.

  Transactions with large corporates, corporates and institutions above certain limits or with special characteristics could require approval from a senior credit analyst or a committee.

- For **individual customers and SMEs** with low turnover, we manage large volumes of credit transactions with automated decision models to classify customers and transactions.

5. Scenario analysis

In line with section 2.4 'Management processes and tools' of this chapter, our scenario analyses determine potential risks in credit portfolios; give us a better understanding of their performance under various macroeconomic conditions; and enable us to employ management strategies that will avoid future deviations from set plans and targets.

They simulate the impact of alternative scenarios in portfolios' credit parameters (PD, LGD) and expected credit losses. We compare findings with the portfolio's credit profile indicators to find the right measures for managers to take. The credit risk management of portfolios and SCPs incorporate scenario analyses.

6. Monitoring

Regularly monitoring business performance and checking it according to our original plans is key to our risk management. Our holistic customer monitoring aids the early detection of impacts on risk performance and credit quality. We assign customers a monitoring classification with a pre-determined course of action and ad hoc measures to correct any deviations.

In monitoring customers, local and global risk teams consider transaction forecasts and characteristics as well as changes in classification. It is based on the following customer segmentation:

- Monitoring in SCIB is a function of business managers and risk analysts and provide an up-to-date view of customers' credit quality to predict a potential customer's deterioration.

- For corporates, institutions and SMEs with an assigned credit analyst, we monitor more closely those customers that require so and review their ratings based on relevant indicators.

- For individual customers, businesses and smaller SMEs, we use automatic alerts to detect shifts in portfolio performance.

Our monitoring function uses the Santander Customer Assessment Note (SCAN). It helps set individual monitoring levels and frequencies, policies and actions for customers.

In addition to monitoring customer credit quality, we draw up control procedures to analyse portfolios and performance, as well as any possible deviations from planning or approved alert levels.

7. Collections and recoveries

The Collections and Recoveries function is key to risk management and control. It sets a global strategy with general lines of action for our subsidiaries based on the economic landscape, business model and other local recovery conditions. Recovery management follows the EBA guidelines on the management of credit impaired and forborne exposures.

Its sustained value creation is based on effective and efficient collections management, for which digital channels that develop new customer relations are key. Our diverse customer base requires segmentation to manage recoveries competently. The highly technological and digital procedures we follow help us attend to large groups of customers with similar profiles and products. Our personalized management, however, focuses on customer profiles that require an assigned manager and tailored approach.

We split recovery management into four phases: arrears, credit impaired loans, write-offs and foreclosed assets. We may use mechanisms like portfolios sales and foreclosed assets in order to rapidly reduce deteriorated assets. We constantly seek alternatives to legal action in order to collect debt.

We include debt instruments in the write-off loans category (even if they are not past-due) if an individual analysis showing a noticeable and irreversible impairment leads us to believe recovery is remote. Though this may lead to full or partial cancellation and de-recognition of the gross carrying amount of debt, we never interrupt negotiations and existing legal proceedings to recover debt. In countries with high exposure to property risk, we have efficient sales management instruments that help maximize recovery and optimize balance sheet stocks.

Forbearance

Grupo Santander's internal forbearance policy is a reference for our subsidiaries locally and follows regulations and supervisory expectations such as the EBA Guidelines on the management of credit impaired and forborne exposures. It defines forbearance as the modification of a transaction's payment terms to enable a customer who is experiencing (or may foreseeably experience) financial difficulties to fulfil their payment obligations; otherwise, there would be reasonable certainty that the customer would not be able to meet those obligations.

This policy also sets out rigorous criteria for assessing, classifying and monitoring forbearances to ensure the strictest possible care and diligence in recovering due amounts. Forbearance must focus on recovering due amounts and adapting payment obligations to customers' current circumstances. Thus, we must recognize losses as soon as we deem any amounts irrecoverable. The loans we put into forbearance to recognize risks appropriately must remain classified as credit impaired or on a watch-list for as long as necessary to ensure reasonable certainty of repayment. Forbearance may never be used to delay the immediate recognition of losses or hinder the appropriate recognition of risk of default.

Total forbearance amounted to EUR 36,042 million at the end of December 2021. After years of important decreases, due to the positive macroeconomic situation of the Group's main geographies, forbearance stock remained flat in 2020. The portfolio increased by 24% in 2021, as a result of greater volume of forbearance carried out

to attend to the needs of customers facing financial difficulties. In terms of credit quality, 43% are classified as doubtful with a coverage of 41%

KEY FORBEARANCE FIGURES

EUR million

	2021	2020	2019
Performing	20,504	14,164	15,199
Credit impaired	15,538	14,995	17,276
Total forborne	**36,042**	**29,159**	**32,475**
% Total coverage[A]	**23%**	**28%**	**28%**

A. Total forbearance portfolio loan-loss allowances/total forborne portfolio.

Identifying and managing most vulnerable sectors

Grupo Santander has implemented a quarterly sectoral monitoring process that enables the identification of sectors that could potentially be of concern. This process considers, among other things, the following information at the sector level:

- Market information: Industries' stock market performance.
- Analysts' EBITDA forecasts for the coming years.
- Internal information: Changes in credit exposure, defaults (in different timelines) and stagings.
- Our industry experts' opinion, based on specific details about our exposures and our relationships with customers.

As at December 2021, we considered the industries listed in the table below as vulnerable based on our analysis and the covid landscape, including their exposure (excluding individuals):

EXPOSURE TO VULNERABLE SECTORS

EUR million

Industry	Exposure	Stage 1	Stage 2	Stage 3
Automobile	31,600	90.6 %	7.7 %	1.7 %
Hotels, leisure, cruises & restaurants[A]	16,400	57.4 %	27.5 %	15.1 %
Transport	17,100	85.1 %	9.2 %	5.7 %
Oil & Gas	22,100	96.5 %	2.3 %	1.2 %
Retail (non-food)	21,700	87.1 %	9.1 %	3.8 %
Construction[B]	12,800	78.5 %	12.1 %	9.4 %

A. Catering and others not included.
B. Property development not included.

Total exposure to the most vulnerable industries fell 3.1% from last year to EUR 121.700 million at year end. Exposure to the most short-term affected industries (hotels, leisure, cruises and restaurants; oil and gas; retail (non-food); and passenger transport) was EUR 65.300 million, down 1.4% compared to 2020.

Our findings were consistent with similar analyses conducted by the ECB, Banco de España and rating agencies.

Credit risk target operating model (ATOMiC)

We launched our advanced target operating model in collaboration (ATOMiC) to bolster our credit risk strategy, permanently challenge the Group's credit targets, and create the best bank in risk management in all of the markets where we operate. Its objective is to implement, extend, continuously improve and promote (under a realistic and medium-term goal) the credit target operating model (TOM) in our subsidiaries based on best practice in the Group and across the industry.

ATOMiC's success lies in the collaboration and best practice of experts from several geographies (Champions/Boosters/ATOMiC Team). Their over 40 success case studies (SCS) allowed to quantify benefits, apply lessons learned and identify impacts of each SCS, which enabled the development of TOM in each portfolio segment. They monitor progress twice a year through key performance indicators (KPIs) and have the support and commitment of a unique risk team.

ATOMiC has progressively embedded credit strategy in management and enabled us to bolster the control environment through greater preparation for unforeseen events like the Covid-19 crisis. It has also given us the ability to meet the EBA's Guidelines on loan origination and monitoring. In ATOMiC's first cycle, we accelerated and reinforced these priority initiatives:

- C&R efficiency and digital connectivity;
- foresight and preventive monitoring that use new data sources (transactional and CRM) and advanced analytics (early warning system) to determine what action to take towards customers;
- industry sensitivity and forward-looking analysis through pre-determined risk playbooks to make better decisions when anticipating unexpected changes;
- risk-based pricing tools to ensure sustainable portfolio growth; and;
- significant developments in customer pre-assessments and pre-approvals through greater automation and digitalization.

2021 was crucial in setting management metrics to demonstrate how ATOMiC enhances lending and customer onboarding across our footprint. We came up with several tangible and homogeneous metrics to report to the Group's senior management, uncover trends, make comparisons and agree on medium-term improvements. The main aim was to create a common language to show the fruits of credit risk transformation. ATOMiC laid down solid foundations for us to continue building up our credit risk strategy over a long period. Continuous challenging of our ambition was key, not to mention the commitment and collaborative culture among our subsidiaries. That, together with an agile working methodology and robust organizational structure, enabled us to address the next challenge of defining the strategic credit lines that will shape our strategy for 2022-2025 and that align with our risk strategy and priorities:

1. "Customer first" for an enhanced customer experience through digital processes and tailored solutions that help drive loyalty and grow the customer base;
2. Efficiency to increase volumes and expected profitability (risk-adjusted return);
3. "Responsible banking", with the inclusion of environmental, social and climate related risk in the lending process;
4. "Forward thinking", including climate related scenarios in stress test; and
5. Exploring opportunities for shared services and fintechs.

3.3 Key metrics

2021 general performance

2021 saw gradual economic recovery in our core markets, as well as progress with covid vaccination campaigns to ease the health crisis. That, along with effective credit risk management, helped boost Santander's performance.

Q1'21 was marked by new, targeted lockdown measures, inconsistent vaccination programmes and the extension and revision of economic policies. Growth in corporate and large corporate portfolios offset the decline in consumer portfolios, while credit quality indicators began to stabilize. Loan-loss provisions fell sharply in all regions and in most subsidiaries.

The second quarter brought economic recovery on the back of vaccination progress in all regions. Credit volumes grew despite the ongoing impact of the pandemic and heightened liquidity in our markets; a stronger Brazilian real also reinforced this trend. By segment, lending to corporates and large corporates remained high. Key credit indicators reflected our strong credit quality, supported by mitigation measures and portfolio growth. Loan-loss provisions continued to fall. Most notably in the UK and the US, a greater economic outlook led to lower provisions.

The third quarter saw further recovery (in all regions), higher vaccination rates and the gradual lifting of restrictions relating to the health crisis. Currency depreciation slowed credit volume growth in South America. Nonetheless, the wholesale and retail banking portfolios continued to flourish, and the corporate banking portfolio began to tail off. Loan-loss provisions returned to Q1 levels following unusual market behaviour in the UK and US in Q2.

In the last quarter of the year, revenues continued to grow steadily as business recovered across all regions. In contrast to previous quarters, loan-loss provisions plunged owing mainly to the provisions recognized to cope with the pandemic in 2020, brighter macroeconomic outlooks and overall positive NPL and loan loss trends, especially among customers who benefited from relief measures (e.g. payment holidays) and the general positive portfolio performance.

As of December 2021, credit risk with customers rose 6.2% from 2020 within the same perimeter. This was mainly due to currency appreciation in our core markets. All our subsidiaries saw growth in local currency with the exception of Santander Spain and Santander Chile. Our credit risk remained diversified, with a strong balance between mature and emerging markets: Europe[34] (61%), South America (13%), North America (14%) and Digital Consumer Bank (11%).

Loan book growth offset the rise in credit impaired loans to EUR 33,234 million (+4.6% vs 2020 year end) and reduced our NPL ratio to 3.16% (-5 bps vs 2020).

In accordance with IFRS 9, Santander recorded loan-loss provisions of EUR 7,436 million (-39% vs December 2020) driven by economic recovery, federal economic stimulus in the US, effective portfolio management and the use of additional provisions raised in 2020 to mitigate potential impact that could arise as a result of the covid-19 pandemic. Santander's total loan-loss allowances amounted to EUR 23,698 million. This brought our NPL coverage ratio to 71.3%, down from 76.4% in December 2020.

Regarding the support measures put in place in 2020 to tackle the covid-19 pandemic, at the end of December 2021, 99.8% of the payment holidays granted as part of Santander's response to the Covid-19 pandemic had ended and only 7% were classified as stage 3. The positive performance owed to better macroeconomic conditions in our main markets.

Government liquidity programmes remained in force in 2021. By geography, Spain makes up 68% of total exposure to those programmes with an average ICO guarantee coverage of 77%. The UK makes up 13% of total exposure, with an average coverage of 98%.

In light of those measures, Grupo Santander made additional credit loss allowances throughout 2020 upon analysing vulnerable sectors and struggling segments and estimating further impairment of loans and advances amid the economic crisis caused by the pandemic; those provisions are an indication of the economy's actual structural deterioration. Our estimation, which was based on available information and affected by the high uncertainty at the time, is consistent with ECB forecasts. The macroeconomic scenario was not "through the cycle" but included a balance sheet with short- and long-term provisions. We expected most macroeconomic indicators in those scenarios to reach pre-crisis levels in the first quarter of 2022 (with the exception of housing prices, which should reach them in the first quarter of 2023).

In 2020 and 2021, the Group closely and frequently monitored: (1) pandemic developments and macroeconomic outlooks; (2) institutions and central banks' forecasts; and (3) Santander's portfolios in each country.

In accordance with established governance, we monitored or updated macroeconomic scenarios according to new, realistic and substantiated information. When calculating IFRS 9 provisions at the end of 2021, we updated our most recent scenarios by eliminating the overlay (which accounts for structural economic deterioration), the effect of which had been assimilated by the model upon recalibrating its parameters according to current macroeconomic conditions and outlooks in order to re-estimate losses.

Also, we gradually used the additional credit loss allowances for the groups most affected by the pandemic in line with the portfolio's performance on the back of extraordinary support measures. The outstanding moratoria at the end of December 2021 amounted to EUR 166 million.

[34] "Others" not included make up the remaining 1% (Corporate Centre)

The tables below show the results of the key metrics of customer credit risk:

MAIN CREDIT RISK METRICS[A]

Data as of 31 December

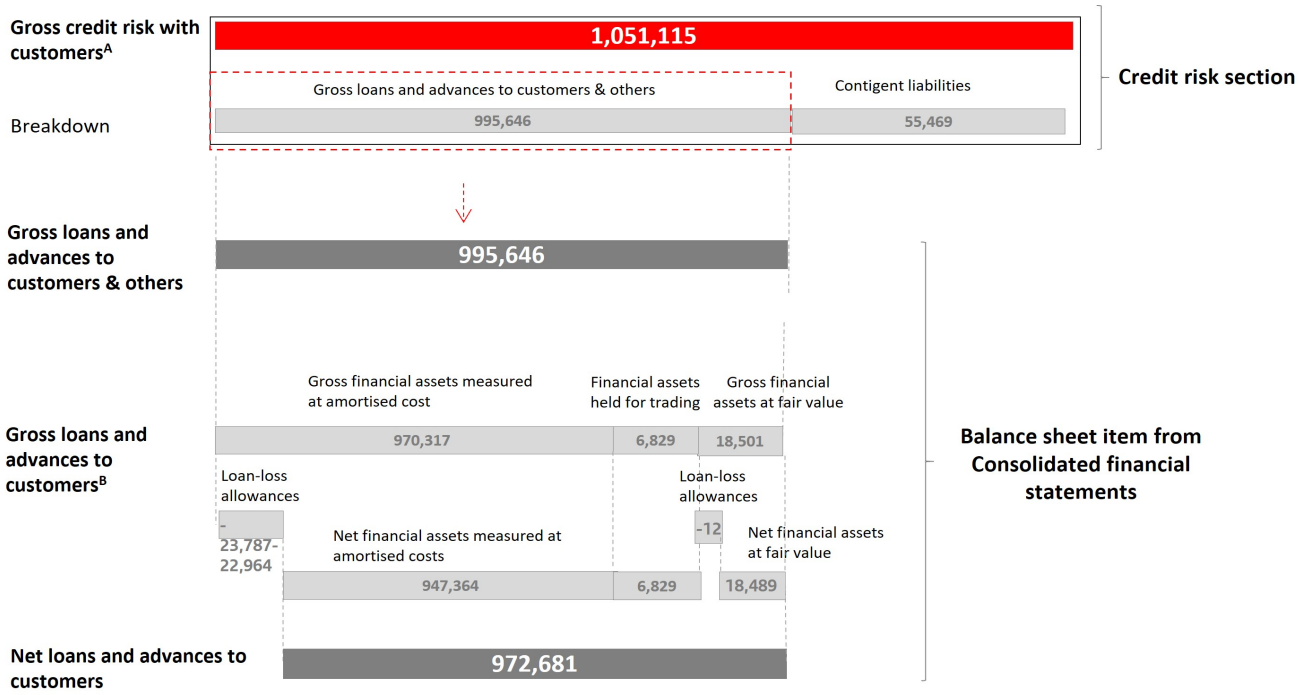
	Credit risk with customers[B] (EUR million)			Credit impaired loans (EUR million)			NPL ratio (%)		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
Europe	**636,123**	**606,997**	**605,969**	**19,822**	**20,272**	**21,054**	**3.12**	**0.03**	**0.03**
Spain	221,100	221,341	213,668	12,758	13,796	14,824	5.77	6.23	6.94
UK	262,869	252,255	264,297	3,766	3,138	2,736	1.43	1.24	1.04
Portugal	41,941	40,693	37,978	1,442	1,584	1,834	3.44	3.89	4.83
Poland	33,497	31,578	33,566	1,210	1,496	1,447	3.61	4.74	4.31
North America	**149,792**	**131,626**	**143,839**	**3,632**	**2,938**	**3,165**	**2.42**	**2.23**	**2.20**
US	112,808	99,135	105,792	2,624	2,025	2,331	2.33	2.04	2.20
Mexico	36,984	32,476	38,047	1,009	913	834	2.73	2.81	2.19
South America	**141,874**	**129,590**	**143,428**	**6,387**	**5,688**	**6,972**	**4.50**	**4.39**	**4.86**
Brazil	85,702	74,712	88,893	4,182	3,429	4,727	4.88	4.59	5.32
Chile	41,479	42,826	42,000	1,838	2,051	1,947	4.43	4.79	4.64
Argentina	5,481	4,418	5,044	198	93	171	3.61	2.11	3.39
Digital Consumer Bank	**117,049**	**116,381**	**117,399**	**2,490**	**2,525**	**2,470**	**2.13**	**2.17**	**2.10**
Corporate Centre	**6,277**	**4,862**	**5,872**	**903**	**344**	**138**	**14.38**	**7.08**	**2.34**
Total Group	**1,051,115**	**989,456**	**1,016,507**	**33,234**	**31,767**	**33,799**	**3.16**	**3.21**	**3.32**

	NPL coverage ratio (%)			Net ASR[C] provisions (EUR million)			Cost of credit (%/risk)[D]		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
Europe	**49.4**	**50.3**	**43.0**	**2,293**	**3,344**	**1,332**	**0.39**	**0.58**	**0.24**
Spain	52.2	47.1	41.1	1,833	2,001	856	0.92	1.01	0.43
UK	25.8	44.7	33.4	(245)	677	223	(0.09)	0.27	0.09
Portugal	71.7	66.5	52.8	38	193	(8)	0.09	0.51	(0.02)
Poland	73.9	70.7	66.8	200	330	217	0.67	1.10	0.72
North America	**134.9**	**182.5**	**153.0**	**1,210**	**3,917**	**3,656**	**0.93**	**2.92**	**2.76**
US	150.3	210.4	161.8	419	2,937	2,792	0.43	2.86	2.85
Mexico	95.0	120.8	128.3	791	979	863	2.44	3.03	2.49
South America	**98.3**	**97.4**	**88.4**	**3,251**	**3,923**	**3,789**	**2.60**	**3.32**	**2.92**
Brazil	111.2	113.2	99.8	2,715	3,018	3,036	3.73	4.35	3.93
Chile	63.3	61.4	56.0	341	594	443	0.85	1.50	1.08
Argentina	153.8	275.1	124.0	140	226	235	3.01	5.93	5.09
Digital Consumer Bank	**107.8**	**113.3**	**108.1**	**527**	**957**	**508**	**0.46**	**0.83**	**0.45**
Corporate Centre	**3.6**	**89.0**	**174.5**	**155**	**31**	**36**	**2.45**	**0.54**	**0.57**
Total Group	**71.3**	**76.4**	**67.9**	**7,436**	**12,173**	**9,321**	**0.77**	**1.28**	**1.00**

A. Management perimeter according to the reported segments.
B. Includes gross loans and advances to customers, guarantees and documentary credits.
C. Post write-off recoveries (EUR 1,383 million).
D. Cost of credit is the ratio of 12-month loan-loss provisions to average lending of the same period.

Reconciliation of key figures

Santander's 2021 consolidated financial statements disclose loans and advances to customers before and after provision allowances. Credit risk also includes off-balance sheet risk. The following table shows the relationship between those concepts:



A. Includes gross loans and advances to customers, guarantees and documentary credits.
B. Before loan-loss allowances.

Geographical distribution and segmentation

Santander organizes its credit risk function around three customer groups:

- **Individuals**: All salaried individuals, subdivided by income level to manage risk by customer type.

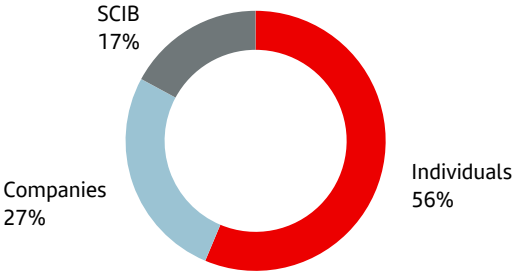
  Mortgages to individuals made up approximately 37% of net customers loans at the end of 2021. They are mainly in Spain and the UK, and primarily consist of residential mortgages with low risk profiles and NPL ratios as well as robust coverage levels. Low risk profiles produce low losses.

- **SME, commercial banking and institutions**: Companies and self-employed individuals, public entities and private not-for-profit entities.

- **Santander Corporate and Investment Banking (SCIB)**: Corporate customers, financial institutions and sovereigns in a closed list that is revised annually through comprehensive customer analysis (business type, geographic diversification, product types, revenue volume for Santander, etc.).

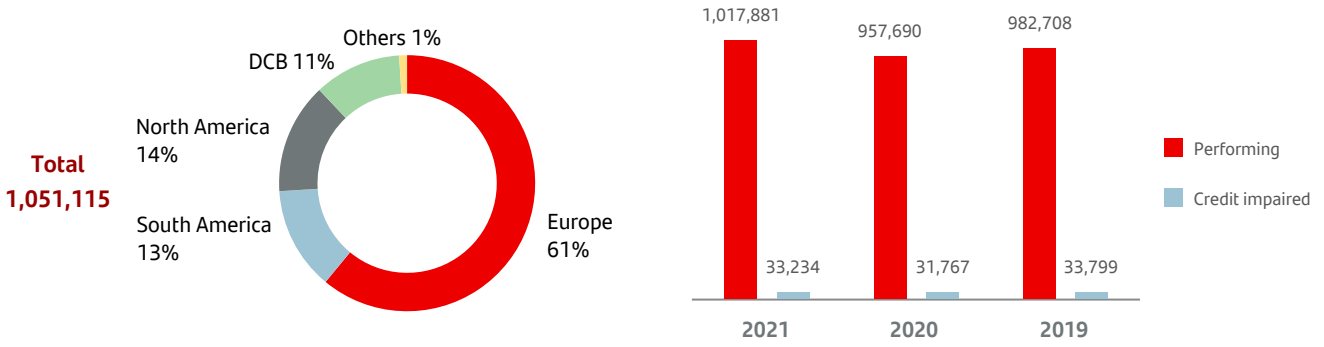
The graph below shows the breakdown of our credit risk (including gross loans and advances to customers, guarantees and documentary credits):

CREDIT RISK DISTRIBUTION

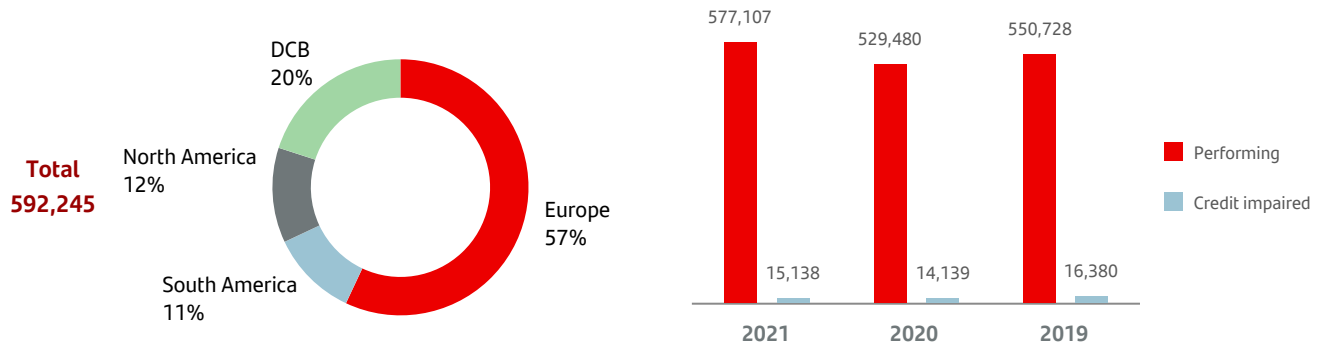


Below is a breakdown of the geographical distribution and amounts of performing and credit impaired loans:

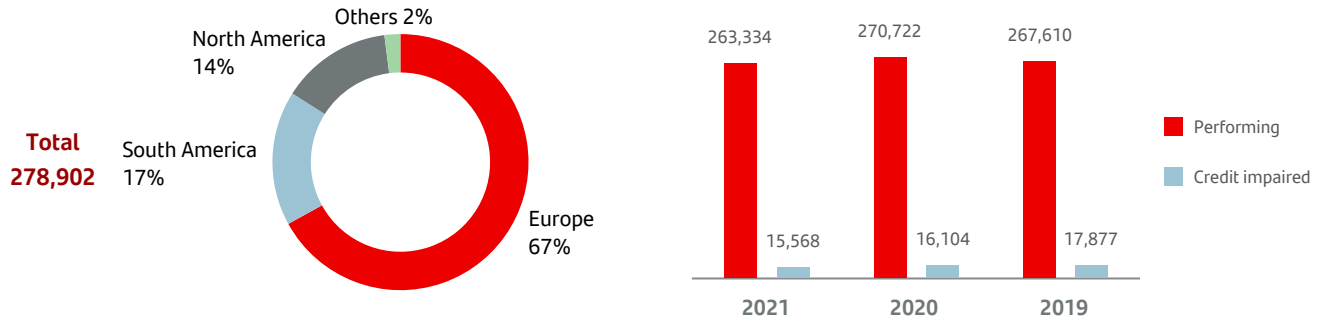
TOTAL



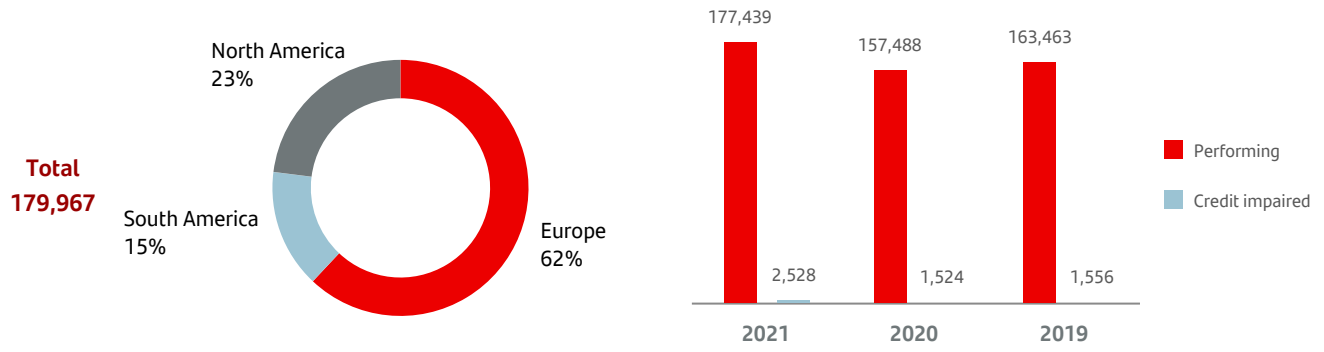
INDIVIDUALS



SME, COMMERCIAL BANKING AND INSTITUTIONS



SCIB



Others' include Corporate Centre.
Performing and non-performing exposure for 2020 and 2019 has been redistributed across segments.

- **Europe**: the NPL ratio fell 22 bps to 3.12% from 2020 due to a significant reduction in credit impaired loans in Spain and Poland, offsetting the increase in the UK.
- **North America**: The NPL ratio increased 19 bps to 2.42% from 2020, mainly due to increases at SC USA. credit impaired stock rose 24% year-on-year.
- **South America**: The NPL ratio rose 11 bps to 4.50%. comparing to 2020, due to the increase observed in Argentina (+150 bps) and Brazil (+29 bps), offsetting the decrease in Chile (-36 bps)
- **Digital Consumer Bank:** The NPL ratio decreased 4 bp to 2.13%, despite the decrease in automobile financing.

For more details, see section 3.4. 'Details of main geographies'.

Financial asset impairment

The IFRS 9 impairment model applies to financial assets valued at amortized cost; debt instruments valued at fair value with changes in other comprehensive income; leasing receivables; and commitments and guarantees not valued at fair value. The portfolio of financial instruments subject to IFRS 9 has three credit risk categories (or stages):

- **Stage 1**: Financial instruments with no significant increase in risk since initial recognition – the impairment provision reflects expected credit losses from defaults over the twelve months from the reporting date.
- **Stage 2**: Financial instruments with a significant credit risk increase since initial recognition but no materialized impairment event – the impairment provision reflects expected losses from defaults over the financial instrument's residual life.
- **Stage 3**: Financial instruments with true signs of impairment as a result of one or more events resulting in a loss – the impairment provision reflects expected losses for credit risk over the instrument's expected residual life.

The following table shows Grupo Santander's credit risk exposure by stages and geography:

EXPOSURE BY STAGE AND GEOGRAPHY[A]

EUR million

	Stage 1	Stage 2	Stage 3	Total
Europe	**544,590**	**41,953**	**19,822**	**606,365**
Spain	187,577	15,906	12,759	216,242
UK	225,846	18,079	3,767	247,692
Portugal	34,051	6,448	1,442	41,941
Poland	30,642	1,517	1,210	33,369
North America	**124,066**	**13,811**	**3,632**	**141,509**
US	90,179	12,155	2,623	104,957
Mexico	33,887	1,657	1,008	36,552
South America	**126,144**	**8,269**	**6,387**	**140,800**
Brazil	75,242	5,259	4,182	84,683
Chile	37,148	2,450	1,838	41,436
Argentina	5,039	244	198	5,481
Digital Consumer Bank	**110,605**	**3,932**	**2,490**	**117,027**
Corporate Centre	**193**	**2,873**	**903**	**3,969**
Total Group	905,598	70,838	33,234	1,009,670

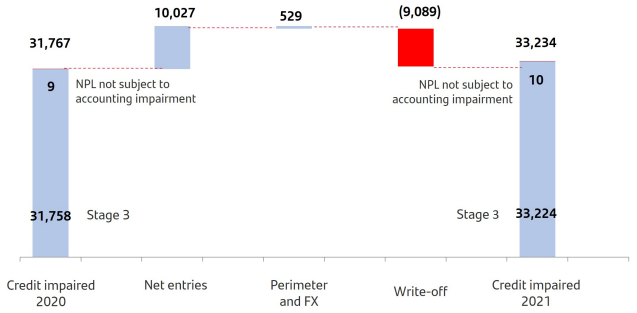
A. Excluding EUR 23,799 million from reverse repos. In addition excluding from the total, EUR 17,646 million from balances not subject to impairment accounting.

Impairment provisions include expected credit risk losses over the expected residual life of purchased or originated impaired (POCI) financial instruments.

Financial instruments with effective signs of impairment (stage 3) performed as follows:

NPL PERFORMANCE BY CONSTITUENT ITEM

EUR million



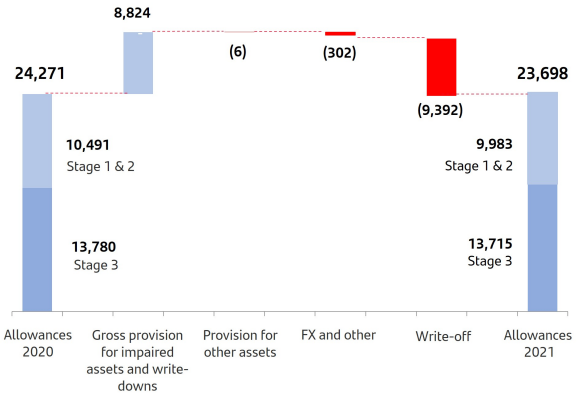
2019 - 2021 CREDIT IMPAIRED EVOLUTION

EUR million

	2019	2020	2021
Credit impaired (start of period)	**35,692**	**33,799**	**31,767**
Stage 3	35,670	33,783	31,758
NPL not subject to impairment accounting	22	16	9
Net entries	10,544	10,277	10,027
Perimeter	—	(44)	—
FX and others	156	(3,335)	529
Write-off	(12,593)	(8,930)	(9,089)
Credit impaired (end of period)	**33,799**	**31,767**	**33,234**
Stage 3	33,783	31,758	33,224
NPL not subject to impairment accounting	16	9	10

ALLOWANCES EVOLUTION ACCORDING TO CONSTITUENT ITEM

EUR million



2019 - 2021 ALLOWANCES

EUR million

	2019	2020	2021
Allowances (start of period)	**24,061**	**22,965**	**24,271**
Stage 1 and 2	8,913	8,872	10,491
Stage 3	15,148	14,093	13,780
Gross provision for impaired assets and write-downs	10,905	13,263	8,824
Provision for other assets	6	139	(6)
FX and other	586	(3,166)	(302)
Write-off	(12,593)	(8,930)	(9,089)
Allowances (end of period)	**22,965**	**24,271**	**23,698**
Stage 1 and 2	8,872	10,491	9,983
Stage 3	14,093	13,780	13,715

We quantify expected losses from credit events using an unbiased, weighted consideration of up to five future scenarios that could affect our ability to collect contractual cash flows. They consider the time-value of money, information from past events, and current conditions and projections of GDP, house pricing, unemployment and other important macroeconomic factors.

We calculated impairment losses using parameters (mainly EAD, PD, LGD and discount rate) based on internal models, and regulatory and management expertise. Far from being a simple adaptation, we defined and validated them according to specific requirements of IFRS 9 and other guidelines by regulators, supervisors and other international organizations (EBA, NCAs, BIS, GPPC, etc.), such as forward-looking information, point-in-time (PiT) vision, multiple scenarios, calculation of losses for the entire life of the transaction through lifetime PD, etc.

- **Identifying a significant increase in credit risk**: when classifying financial instruments under stage 2, we consider:
  - Quantitative criteria: We review and quantify changes in the risk of default during their expected life based on their credit risk level on initial recognition.

    To recognize significant changes so instruments can be classified in stage 2, each subsidiary set quantitative thresholds for its portfolios based on Santander's guidelines for consistent interpretation across all our footprint.

    Of those quantitative thresholds, we consider two: the relative threshold, which shows the difference in credit quality since the transaction was approved as a percentage of change; and the absolute threshold, which calculates the total difference in credit quality. All subsidiaries apply them (with different values) in the same manner. The use of one or both depends on portfolio type and other aspects, such as the starting point for average credit quality.

  - Qualitative criteria: Several indicators aligned with ordinary credit risk management indicators (e.g. past due for over 30 days, forbearance, etc.). Each subsidiary defined these criteria for its portfolios.

    We supplement these qualitative criteria with expert opinions.

- **Definition of default:** For provisions, we use the definition of default dictated by Article 178 of the CRR. We are gradually applying the new definition to provisions calculation according to

the EBA's guidelines; we are also considering applying it to prudential framework once the competent authorities approve it for calculating regulatory capital.

- **Past, present and future information:** To estimate expected losses, we require a great deal of expert analysis as well as past, present and future data. We base expected loss estimates on multiple macroeconomic scenarios, measure the probability of loss considering past events, current conditions, and future trends of GDP, unemployment and other macroeconomic indicators. We use forward-looking information in internal management and regulatory processes under several scenarios, which helps us make sure our processes are consistent.
- **Expected life of financial instruments:** We estimate the expected life of financial instruments according to their contractual terms (e.g. prepayments, duration, purchase options, etc.). The contractual period (including extension options) is the maximum time frame for measuring the expected credit loss. If financial instruments have an undefined maturity period and available balance (e.g. credit cards), we estimate its expected life based on the total exposure period and effective management practices to mitigate exposure.

3.4 Details of main geographies

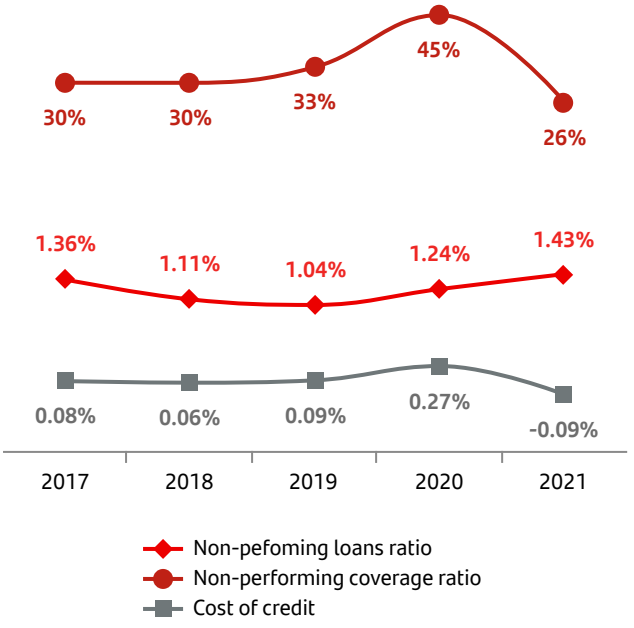
United Kingdom

General overview

Credit risk with customers in the UK (excluding Santander Consumer UK and Santander London Branch) grew 4.2% (-2.5% in local currency) year-on-year to EUR 262,869 million. The UK accounts for 25% of Santander's loan portfolio.

Since the pandemic began, we've granted 368,000 payment holidays and EUR 5,280 million in government-backed loans to help our customers.

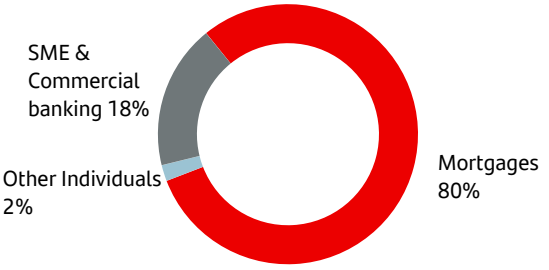
The NPL ratio, 1.43%, increased compared to 2020 (+19 bps), due to the increase in the SME portfolio offset by the decrease observed in the wholesale portfolio. The profile of the different segments remains stable.



The Santander UK portfolio is divided into these segments:

PORTFOLIO SEGMENTATION[A]

Dec. 21 data



A. Excluding SCF UK and London Branch

Mortgage portfolio performance

Because of its size, we closely monitor Santander UK's mortgage portfolio for both the entity itself and the group. As of December 2021, the portfolio amounted to EUR 209,949 million, growing by 4.3% in local currency. It comprises residential mortgages granted to new and existing customers which are first lien mortgages. There are no second or more liens on mortgaged properties.

2021 was a year of strong mortgage activity, mainly due to the higher demand after the covid-19 restrictions were lifted and the reduction of the stamp duty rates up until September. As a consequence, Santander UK achieved all-time high mortgage lending origination levels in June.

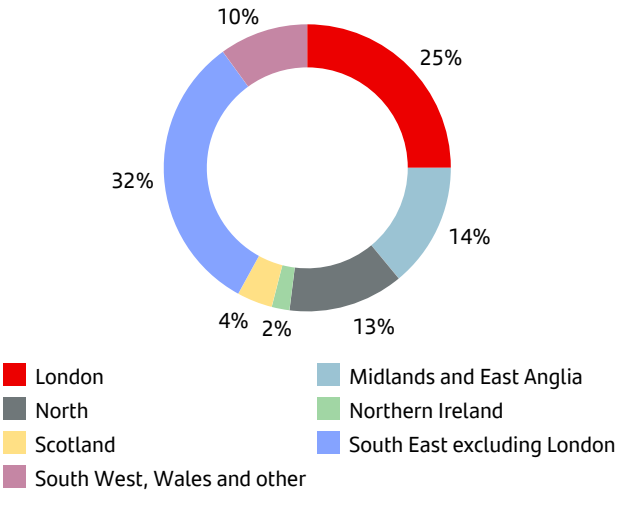
In accordance with Santander's risk management principles, properties are appraised independently before we approve a new mortgage. In line with market practice and legislation, property values used as collateral for granted mortgages are updated quarterly by an independent agency's automatic appraisal system.

Credit exposures are predominantly in Southeast UK and the London metropolitan area.

Geographically, credit exposures are predominantly in the South East of the UK and the London metropolitan area.

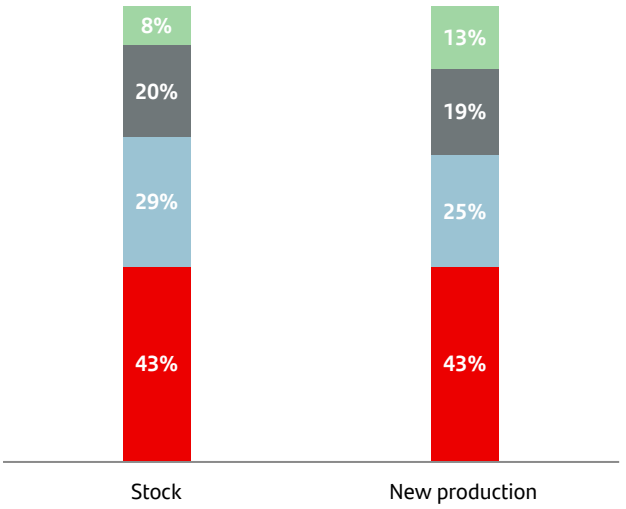
GEOGRAPHICAL DISTRIBUTION

Dec. 21 data



The chart below breaks down the portfolio by borrower type:

MORTGAGE PORTFOLIO LOAN TYPE



- Home mover: customers who change houses, with or without changing the bank granting the loan.
- Remortgage: customers who switch the mortgage from another financial entity.
- First time buyer: customers who purchase a home for the first time.
- Buy to let: houses bought for renting out.

Santander UK's wide range of mortgage products include:

- **Interest-only loans** (23%): Customers pay interest every month and repay the principal at maturity. Loans require an appropriate repayment vehicle, such as a pension plan or an investment fund. This product is common in the UK. Santander UK applies restrictive policies to mitigate inherent risks. For instance, a maximum loan-to-value (LTV) ratio of 50% entails more stringent approval criteria and assessment of ability to pay, simulating the repayment of both interest and capital.
- **Flexible loans** (5%): Loan agreements allow borrowers to modify monthly payments or draw down additional funds up to a set limit under various conditions.
- **Buy-to-let** (8%): Buy-to-let mortgages account for a small portion of the total portfolio and are subject to strict risk approval policies.

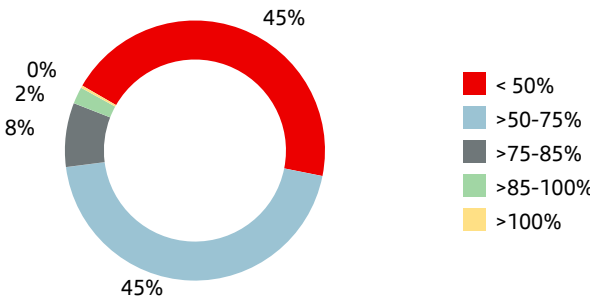
The NPL ratio reflects the mortgage portfolio's strength, which was stable at 1.01% at the end of December 2021 (-5 bp YoY). The portfolio's credit quality owed to high repayment rates as payment holidays expired (of which, 100% expired), and to low levels of default.

Prudent approval policies put the portfolio's simple average LTV at 41%. 2% of the portfolio has a LTV of between 85% and 100%. These policies resulted in no sign of risk quality deterioration in new business.

The chart below shows the LTV structure of residential mortgages as of December 2021:

LOAN TO VALUE

Dec. 21 data



Loan to value: relation between the amount of the loan and the appraised value of the property. Based on indices.

Our credit risk policies forbid loans considered "high risk" (e.g. subprime mortgages) and set out strict credit quality requirements for transactions and customers.

Spain

General overview

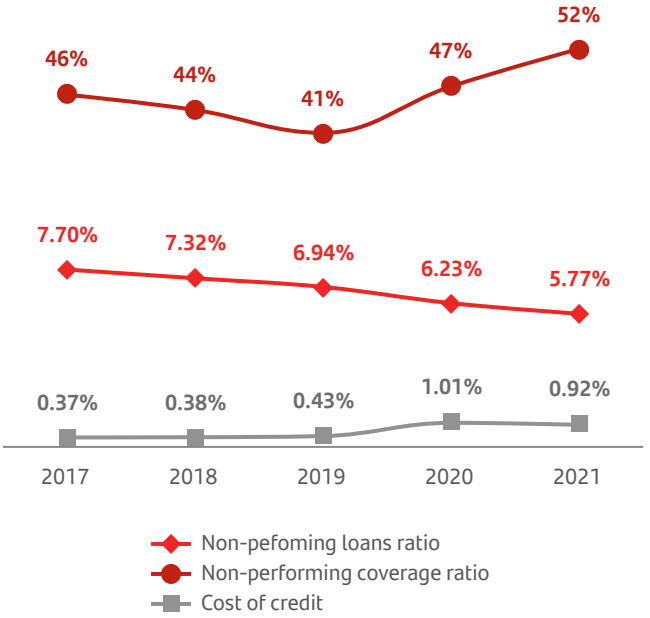
Santander España's credit risk totalled EUR 221,100 million (21% of the Group's total). It is appropriately diversified among products and customer segments.

Amid economic and credit recovery, as macroeconomic figures improved following covid-19 lockdowns in 2020, consumer loans (especially mortgages) grew significantly; but the corporate and SME lending remained below 2020 numbers, while we maintained positions with customers in liquidity support programmes (i.e. ICO lines of credit) without having to seek new financing. Total credit risk decreased -0.1% from December 2020. The ICO loans in corporate and SME lending amounted to a significant EUR 27,294 million; around half of them were extended.

The credit portfolio's NPL ratio was 5.77%, 46 bps lower than in December 2020. This better overall portfolio performance was driven by customer support programmes; the regularization of several restructured positions; and portfolio sales.

The additional provisions raised to mitigate the potential impacts from the exceptional circumstances of the covid-19 pandemic, increased the NPL coverage ratio to 52% (+5 pp vs December 2020). The credit impaired portfolio declined mainly from loans with the highest expected losses.

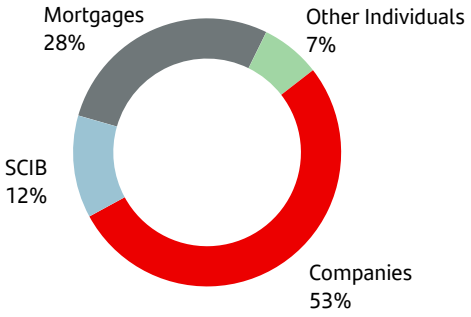
The cost of credit reflects the rise in covid provisions, with slight improvement at the end of 2021 compared to December 2020.



Santander España's portfolio is divided into these segments:

PORTFOLIO SEGMENTATION

Dec. 21 data



Residential mortgages performance

Santander España's residential mortgages portfolio amounted to EUR 60,948 million, 28% of its total credit risk. 99.3% have a mortgage guarantee.

RESIDENTIAL MORTGAGES[A]

EUR million

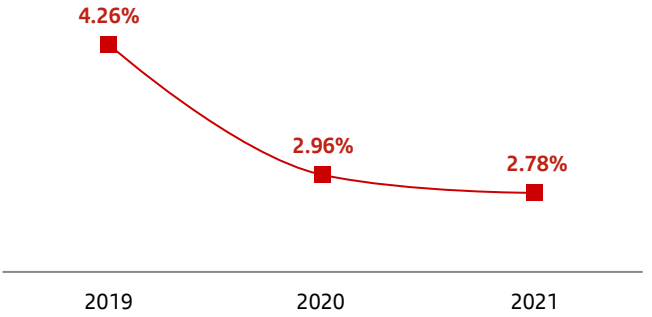
	2021	2020	2019
Gross Amount	60,948	58,079	60,557
Without mortgage guarantee	419	387	306
With mortgage guarantee	60,529	57,692	60,251
of which credit impaired loans	1,798	1,784	2,581
Without mortgage guarantee	115	75	14
With mortgage guarantee	1,683	1,709	2,567

A. Excluding SC España mortgage portfolio (EUR 1,376 million in December 2021 with doubtful loans for EUR 62 million, and EUR 1,526 million with doubtful loans for EUR 66 million in 2020).

The NPL ratio for residential mortgages granted to households fell 18 bps to 2.78%, mainly owing to non-performing portfolio sales.

NPL RATIO, RESIDENTIAL MORTAGES

%

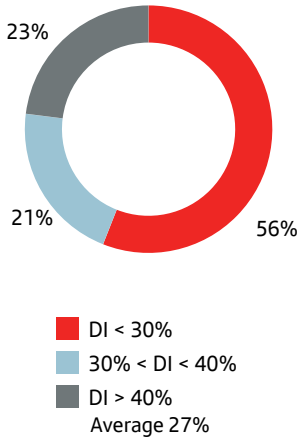


In 2021, mortgage origination soared 94% year-on-year on the back of higher customer demand caused by the pandemic. The residential mortgage portfolio in Spain maintained a medium-low risk profile with low expectations of additional impairment:

- Principal repayment starts on the first day of all mortgage transactions.
- Because early repayment is common, so the average transaction life is shorter than the agreement term.
- High-quality collateral, concentrated almost exclusively in financing for first-time buyers.
- The average affordability rate stood at 26%.
- 90% of the portfolio has an LTV below 80%, calculated as the ratio of total risk to the latest available appraisal.
- All customers applying for a residential mortgage are subject to a rigorous credit risk and solvency assessment by credit analysts to determine if their income will be sufficient to pay loan instalments and stable until the end of the mortgage term.

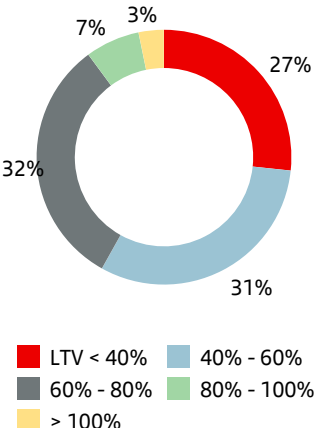
DEBT TO INCOME*

Dec. 21 data



LOAN TO VALUE**

Dec. 21 data



(*) Debt to income: relation between the annual instalments and the customer's net income.
(**) Loan to value: percentage indicating the total risk/latest available home appraisal.

Corporate and SME financing

Credit risk with SME and corporates in commercial banking, which is Santander España's core lending segment (at 53% of total credit risk) declined 3.1% from December 2020 to EUR 117,544 million, mainly due to a drop in the SME portfolio. Most of the portfolio is customers with an assigned credit analyst to monitor their loans throughout the risk cycle.

The portfolio is highly diversified and not concentrated in any industry. Its NPL ratio stood at 7.50% in December 2021, up 8 bps from December 2020 due to lower volume; meanwhile, credit impaired stock remained flat. 2021 brought stable portfolio figures after significant growth in 2020 due to liquidity support programmes (ICO), which after the initial grace period are now being repaid.

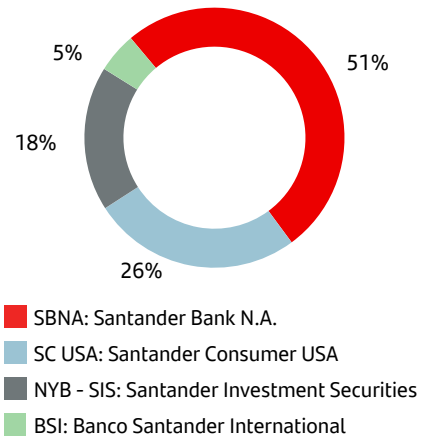
United States

General overview

Santander US's credit risk stood at EUR 112,808 million at the end of December. It makes up 11% of the Group's total credit risk and includes these business units:

BUSINESS UNITS SEGMENTATION

Dec. 21 data



Fiscal stimulus together with the reopening of the economy favoured a strong recovery that was moderated as of the summer due to problems on the supply side. The supply chain and labour constraints pushed inflation up to 7.0%, while the unemployment rate fell to 3.9% in November, leading to the start of the Fed's withdrawal of monetary stimulus.

As of December, Santander US's lending had grown 13.8% from 2020, particularly in SCIB portfolios in Santander Bank N.A., the New York branch, and the Miami branch. Excluding foreign exchange (FX) effect, growth was 8%.

Santander US remains focused on supporting its customers and making inroads with its strategic initiatives to enhance customer experience and allocate capital to its businesses.

Its NPL ratio rose to 2.33% (+29 bps in the year), while the cost of credit fell to 0.43% (-243 bps YoY). Loan-loss provisions dropped 82% due to lower net charges, and the improved macroeconomic outlook, customer loan relief measures and steadfast used car prices prompted lending growth.

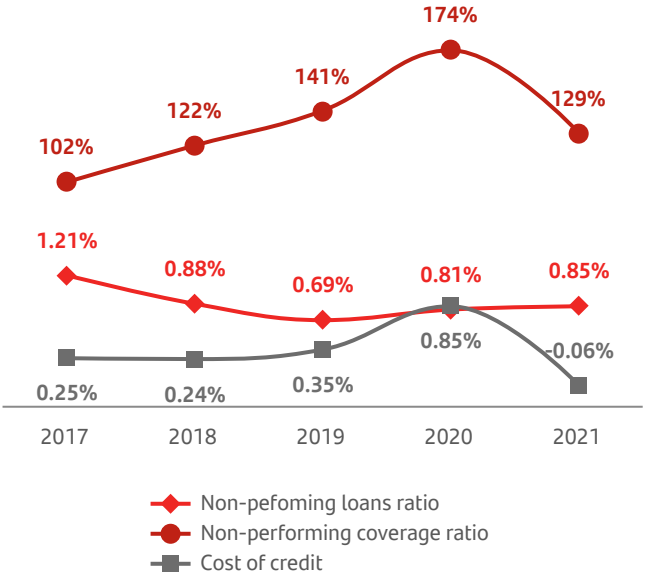
The performance of Santander US's core units is described below.

Business units performance

Santander Bank N.A.

At 78% of total credit risk, retail and commercial banking is Santander Bank N.A.'s main business. 24% of the portfolio is with individuals, and approximately 76% with corporates. The bank's primary goals include increasing the SCIB business — 22% of total credit risk — by enhancing customer experience and growing core customers and deposits through digital, branch and commercial transformation initiatives; leveraging its deposit base to support its commercial real estate business; and strengthening its auto finance partnerships. Its 15.1% hike in lending spanned all segments. Minus the FX effect, the increase was lower, standing at 9.2%.

Its NPL ratio increased to 0.85% (+4 bps in the year) as of December 2021, and the cost of credit fell to -0.06% due to the release of provisions based on better-than-expected market performance, customer behaviour (support programmes and fiscal stimulus) and greater recovery.



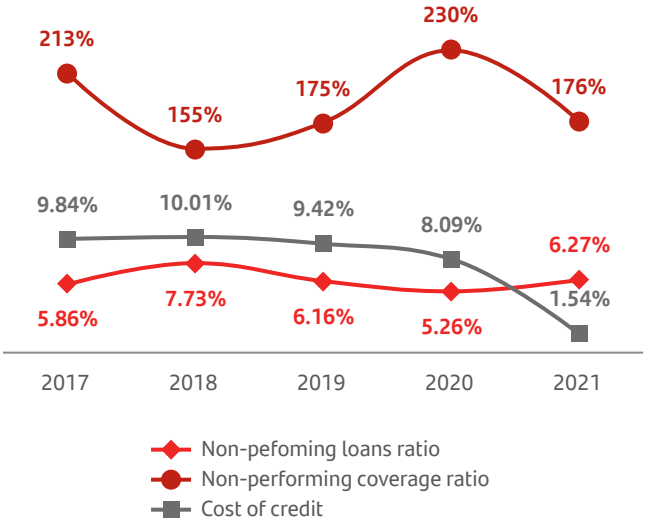
Santander Consumer USA

Santander Consumer USA (SC USA) presents higher risk indicators than other Santander US units due to the nature of its business (auto loans and leasing). Its focus remains on managing the profitability-to-risk balance through pricing aligned with the credit quality of the customer/transaction, while improving the dealer experience.

In 2021, loan originations grew more than 4% year-on-year, returning to the pre-pandemic prime and non-prime mix on the back of the commercial relationship we have with Stellantis Group.

Auto originations continued to increase, driven mainly by hikes in used car prices and demand. As of December, the NPL ratio rose to 6.27% (+101 bps in the year) and the cost of credit stood at 1.54% (-654 bps YoY). Annual net credit losses fell year on year due to customer support programmes (triggered by the health crisis), federal fiscal stimulus packages and greater recovery driven by a surge in used car prices. Due to the increase in defaults, the non-performing coverage ratio fell to 176% (-54 pp in the year).

Furthermore, leases carried out exclusively under the Stellantis Group agreement (primarily with highly creditworthy customers) dropped 5% to EUR 13,600 million, providing stable and recurring earnings. Risk management and residual value mitigation measures remain a priority.



Brazil

General overview

Despite the economic recovery due to the reopening of the service sector, in line with the advances in the vaccination campaigns and the lift of restrictions, international supply problems have continued to hamper industry growth.

Santander Brasil's credit risk amounted to EUR 85,702 million. It increased by 15% from 2020. Excluding the exchange rate effect, it grew by 13%. As of December 2021, Santander Brasil accounts for 8% of Grupo Santander's loan book.

In line with the commercial strategy, we continued to build an auto platform focused on end-to-end customer experience, thanks to which we achieved a 20% market share in vehicles (including individuals and companies). Santander Auto began selling insurance to corporates and had 19% penetration in insurance.

Credit cards broke customer capture records and remained third in the market. We also hit records figures in billing. The surge in mortgage origination continued, where Santander Brasil leads the home equity segment with a market share of 25%.

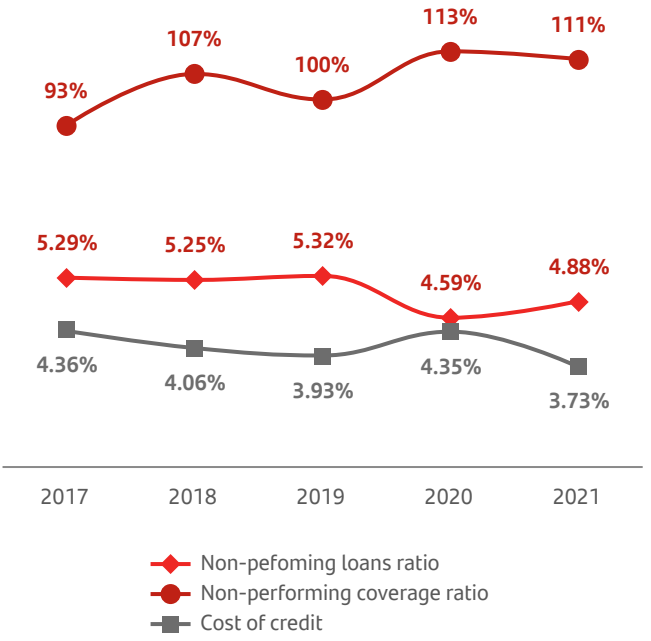
The SME portfolio (*Varejo PJ*) grew significantly due to the contribution of the different billing clusters that make the portfolio and its different products. State-backed guarantees to combat the effects of the pandemic ended in December 2020, although a new window opened in July 2021.

Our digital business continued to grow. 90% of transactions were digital. Furthermore, *Gente*, our virtual assistance channel based on artificial intelligence, has over 18 million hits per month.

Our leadership of the wholesale sector makes us one of the top corporate banks, thanks to our experience as a global bank — the biggest in FX transactions for the last eight years — in infrastructure, agribusiness — Brazil's largest agricultural commodities desk — and equities.

In ESG, Santander is a leader in sustainable solutions. It channelled EUR 5,000 million in social and environmental business. Progress continues on *Plano Amazônia*, our joint project with Brazil's other two largest private banks. We created a new business unit in the region that has already channelled EUR 43 million.

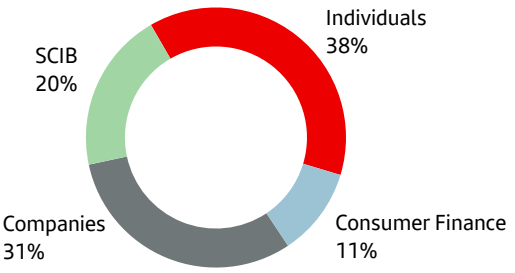
Net loan-loss provisions stood at EUR 2,715 million (-10% compared to 2020), a decrease driven by additional provision made in 2020 related to covid-19. In local currency, provisions declined by 11%. Cost of credit decreased to 3.73% from 4.35% at the end of 2020, driven by the provisions evolution aforementioned.



Santander Brasil's loan book is distributed as follows:

Portfolio segmentation

Dec.21 data



It is diversified and has an increasing retail profile, with 80% of loans extended to individuals, consumer financing and companies.

Portfolio performance

In 2020 moratorium campaigns had a strong influence on the portfolio. The NPL ratio rose from 4.59% to 4.88% at December 2021, and the coverage ratio decreased slightly to 111% from 113%.

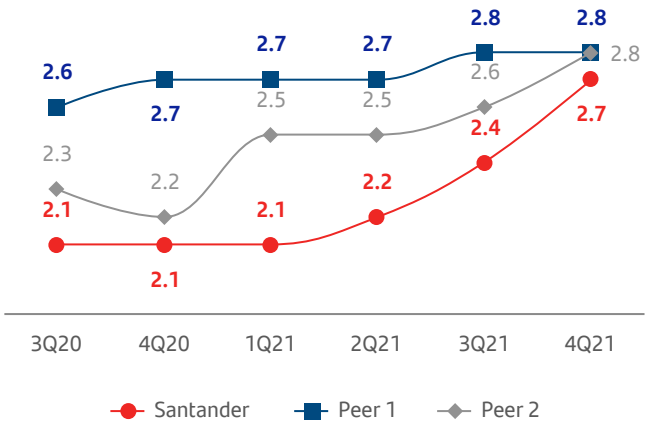
In the individuals segment, growth in local currency was strong. Market share of payroll loans, mortgages and other low-risk products increased.

SME lending performed beyond expectations and started to show signs of recovery. All ratios returned to pre-crisis levels. The portfolio was also well provisioned and saw continuous improvement in its risk profile. We must pay close attention to the maturities of government programmes and other payment deferrals to confirm the recovery of the SME market.

To monitor the credit quality of our loan book and prevent deterioration, one of the main credit risk performance indicators we track is the 'Over 90' impairment ratio. It continues to indicate that Grupo Santander is outperforming its local peers, having stood at 2.7% at December 2021 (+60 bps vs 2020 year-end), below the average of its competitors.

Over 90 total (%) - PDTE

Dec. 21 data



3.5 Other credit risk details

Credit risk from financial markets activities

This section covers credit risk from treasury management through money market financing and counterparty risk products to satisfy customers' (especially credit institutions) needs.

According to the CRR, counterparty credit risk results from the likelihood that a customer in a derivatives contract on financial securities or commodities, repurchase agreement, securities lending, long settlement transactions, margin lending and other transactions could default before the final settlement of the transaction's cash flows.

To measure exposure, we use two methods: "Mark-to-market" (MtM) (replacement cost of derivatives) plus potential future exposure ("add-on"); and the Montecarlo simulation to calculate exposure for certain countries and products. We also calculate capital at risk and unexpected loss (economic capital, net of collateral and recoveries, after deducting expected loss). At market close, we recalculate exposures by adjusting all transactions to their new time horizon, adapting potential future exposure and applying netting, collateral and other mitigants. Thus, we can check exposures daily against the limits approved by senior management. For risk control, we use a real-time integrated system that shows the exposure limit with any counterparty, for any product and term, and in all subsidiaries.

Counterparty risk exposures: over-the-counter (OTC) transactions and organised markets (OM)

By December 2021, after applying netting and collateral agreements for counterparty risk, the positive market value of total exposure (under management criteria) was EUR 5,491 million (net exposure of EUR 31,444 million).

COUNTERPARTY RISK: MARKET VALUE EXPOSURE AND CREDIT RISK EQUIVALENT, INCLUDING MITIGATION EFFECT[A]

EUR million

	2021	2020	2019
Market value, netting effect[B]	31,390	37,204	37,365
Collateral received[C]	25,899	31,970	30,100
Market value with netting effect and collateral[D]	5,491	5,235	7,265
Net CRE[E]	31,444	30,139	32,552

A. Figures under internal risk management criteria. Listed derivatives have a market value of zero. No collateral is received for these types of transactions.
B. Market value used to include the effects of mitigation agreements to calculate exposure for counterparty risk.
C. Included variation margin, initial margin and secured finance transactions collateral.
D. Including the mitigation of netting agreements and deducting the collateral received.
E. CRE (credit risk equivalent): net value of replacement plus the maximum potential value, less collateral received.

The chart below shows products that generate counterparty risk (especially interest rate and FX hedging instruments) by their nominal risk and market value:

COUNTERPARTY RISK BY NOMINAL RISK AND GROSS MARKET VALUE[A]

EUR million

	2021			2020			2019		
		Market value			Market value			Market value	
	Nominal	Positive	Negative	Nominal	Positive	Negative	Nominal	Positive	Negative
Credit derivatives[B]	17,164	228	(346)	14,530	145	(215)	29,805	312	(1,357)
Equity derivatives	79,062	3,244	(2,553)	53,821	2,973	(1,848)	71,401	2,481	(1,836)
Fixed income derivatives	4,409	275	(123)	11,370	47	(386)	23,136	119	(177)
Exchange rate derivatives	947,061	22,329	(26,965)	863,001	25,341	(27,071)	897,886	21,053	(23,260)
Interest rate derivatives	4,915,150	106,341	(103,074)	4,917,944	143,679	(139,261)	5,089,817	112,128	(108,651)
Commodity derivatives	12,022	722	(32)	3,732	83	(15)	735	56	(27)
Total OTC derivatives	**5,786,114**	**131,243**	**(131,316)**	**5,695,339**	**170,911**	**(167,650)**	**5,944,977**	**135,194**	**(134,392)**
Derivatives organised markets[C]	**188,755**	**1,896**	**(1,777)**	**169,059**	**1,357**	**(1,147)**	**167,803**	**955**	**(917)**
Repos	**129,085**	**4,404**	**(5,997)**	**146,984**	**3,978**	**(7,311)**	**143,163**	**4,334**	**(2,722)**
Securities lending	**48,346**	**12,802**	**(29,919)**	**46,418**	**12,500**	**(26,072)**	**48,786**	**17,490**	**(23,652)**
Total counterparty risk[D]	**6,152,300**	**150,345**	**(169,009)**	**6,057,800**	**188,746**	**(202,180)**	**6,304,729**	**157,973**	**(161,682)**

A. Figures under internal risk management criteria.
B. Credit derivatives acquired including hedging of loans.
C. Refers to transactions involving listed derivatives (proprietary portfolio). Listed derivatives have a market value of zero. No collateral is received for these types of transactions.
D. Spot transaction not included.

As the following table shows, most of Santander's derivatives reach maturity in up to five years, while its repurchase agreements and securities lending reach maturity in up to one year.

COUNTERPARTY RISK BY NOMINAL RISK AND MATURITY[A]

EUR million. Dec.21 data

	Up to 1 year	Up to 5 years	Up to 10 years	More than 10 years	TOTAL
Credit derivatives[B]	23%	68%	2%	6%	17,164
Equity derivatives	50%	48%	2%	—%	79,062
Fixed income derivatives	86%	8%	6%	—%	4,409
Exchange rate derivatives	51%	30%	13%	6%	947,061
Interest rate derivatives	34%	39%	17%	10%	4,915,150
Commodity derivatives	85%	14%	1%	—%	12,022
Total OTC derivatives	**37%**	**37%**	**16%**	**10%**	**5,786,114**
Derivatives organised markets[C]	**59%**	**39%**	**1%**	**—%**	**188,755**
Repos	**93%**	**7%**	**—%**	**—%**	**129,085**
Securities lending	**100%**	**—%**	**—%**	**—%**	**48,346**
Total counterparty risk	**39%**	**37%**	**15%**	**9%**	**6,152,300**

A. Figures under internal risk management criteria.
B. Credit derivatives acquired including hedging of loans.
C. Refers to transactions involving listed derivatives (proprietary portfolio). Listed derivatives have a market value of zero. No collateral is received for these types of transactions.

Even if the credit quality of some counterparties declines, we focus counterparty credit risk on customers with high credit quality (85% of counterparties have a rating of A or higher), especially financial institutions (23%) and clearing houses (71%).

NOMINAL COUNTERPARTY RISK BY CUSTOMER RATING[A]

Dec.21 data

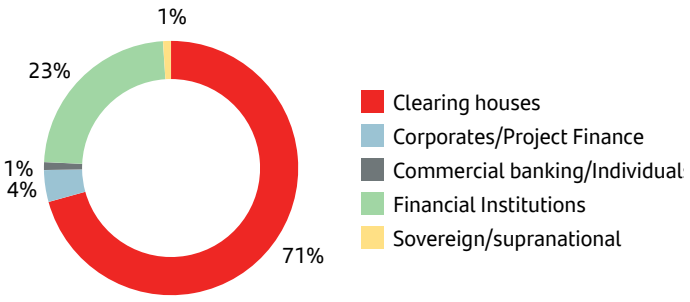
Rating	%
AAA	0.98%
AA	0.34%
A	83.83%
BBB	13.34%
BB	1.43%
B	0.05%
Other	0.02%

A. Ratings based on internally defined equivalences between internal ratings and credit agency ratings.

Transactions with clearing houses and financial institutions are subject to netting and collateral agreements. We constantly aim to have all other transactions covered by such agreements as well. In general, the collateral agreements Santander signs are bilateral; still, there are a few exceptions of unilateral agreements in the customer's favour, mainly with multilateral organizations and securitization funds.

COUNTERPARTY RISK BY CUSTOMER SEGMENT

Dec.21 data

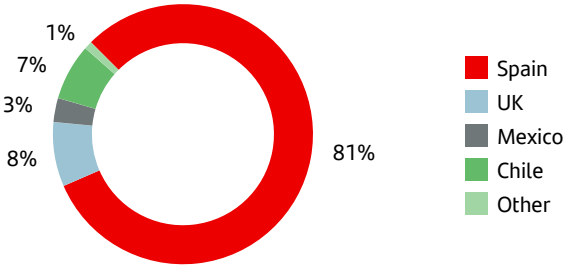


Collateral helps reduce counterparty risk. It consists of highly liquid instruments with economic value that are deposited or transferred from one counterparty to another to guarantee or reduce counterparty credit risk from portfolios of cross-risk derivatives. We usually measure transactions subject to collateral agreements daily, applying contractual parameters to quantify the collateral (in cash or securities) to pay or receive from the counterparty. Amid the pandemic, the processes we have in place to manage collateral in the Group properly and more often have proved effective. The collateral received under CSA, OSLA, ISMA, GMRA and other collateral agreements signed by the Group amounted to EUR 25,899 million (including EUR 15,089 million in received collateral for derivatives), with 41% in cash. The remaining collateral is subject to strict quality policies in regard to the issuer and their rating, debt seniority and haircuts.

Received collateral is distributed among the following geographies:

COLLATERAL RECEIVED. GEOGRAPHIC DISTRIBUTION

Dec.21 data



Due to counterparty credit risk, we calculate the results of trading portfolios by applying credit valuation adjustments (CVA) to over-the-counter (OTC) derivatives. We also make debt valuation adjustments (DVA) in view of the risk of Santander that our counterparties assume.

At the end of December 2021, CVA adjustments amounted to EUR 236.5 million (a decrease of 31% compared to the end of 2020) and DVA adjustments were EUR 161.8 million (a decrease of 17,5% compared to the end of 2020). These impacts are mainly due to the continuous credit market improvement , the creation of specific credit curves for certain counterparties and the introduction of methodological improvements in the exposure calculation.

The definition and methodology for calculating the CVA and DVA are set out in the section 4.2 'Market risk management'.

Counterparty risk, organized markets and clearing houses

Santander's policies aim to promote early action according to regulation for OTC derivatives, repurchase agreements and securities lending (whether settled through clearing houses or bilaterally). In recent years, we have gradually standardized OTC transactions to settle and clear new contracts through clearing houses according to current regulation, in addition to increasing internal use of electronic execution systems. We also manage transactions not settled by clearing houses actively to optimize their volume according to regulation on margins and capital. While our counterparty risk management does not contemplate the credit risk in such transactions, we have been calculating regulatory credit exposure for organized market exchanges since the Capital Requirements Directive (CRD) IV and the Capital Requirements Regulation (CRR) took effect in 2014, transposing the Basel III principles on capital calculation.

The tables below show the weight of transactions settled by clearing houses versus total counterparty as of December 2021:

COUNTERPARTY RISK BY SETTLEMENT CHANNEL AND PRODUCT TYPE[A]

Nominal in EUR million

	Bilateral		CCP[B]		Organised markets[C]		Total
	Nominal	%	Nominal	%	Nominal	%	
Credit derivatives	10,450	60.9%	6,714	39.1%	—	—%	17,164
Equity derivatives	18,173	23.0%	—	—%	60,889	77.0%	79,062
Fixed income derivatives	4,409	100.0%	—	—%	—	—%	4,409
Exchange rate derivatives	900,845	95.1%	38,755	4.1%	7,462	0.8%	947,061
Interest rate derivatives	740,599	15.1%	4,054,711	82.5%	119,841	2.4%	4,915,150
Commodity derivatives	11,459	95.3%	—	—%	563	4.7%	12,022
Repos	93,800	72.7%	35,284	27.3%	—	—%	129,085
Securities lending	48,346	100.0%	—	—%	—	—%	48,346
Total	**1,828,081**		**4,135,464**		**188,754**		**6,152,300**

A. Figures under internal risk management criteria.
B. Central counterparties (CCP).
C. Refers to transactions involving listed derivatives (proprietary portfolio). Listed derivatives have a market value of zero. No collateral is received for these types of transactions.

RISK SETTLED BY CCP AND ORGANIZED MARKETS BY PRODUCT[A]

Nominal in EUR million

	2021	2020	2019
Credit derivatives	6,714	6,245	11,556
Equity derivatives	—	62	370
Fixed income derivatives	—	—	—
Exchange rate derivatives	38,755	31,043	43,358
Interest rate derivatives	4,054,711	4,020,927	4,087,255
Commodity derivatives	—	—	—
Repos	35,284	39,397	23,933
Securities lending	—	—	—
Total	**4,135,464**	**4,097,674**	**4,166,472**

A. Figures under internal risk management criteria.

Credit derivatives

We use credit derivatives to hedge transactions, customer business in financial markets and trading. The notional value of the credit derivatives Santander has negotiated is low (0.3% of the notional value of counterparty risk). Furthermore, we subject credit derivatives to internal robust controls and procedures to minimize operational risk.

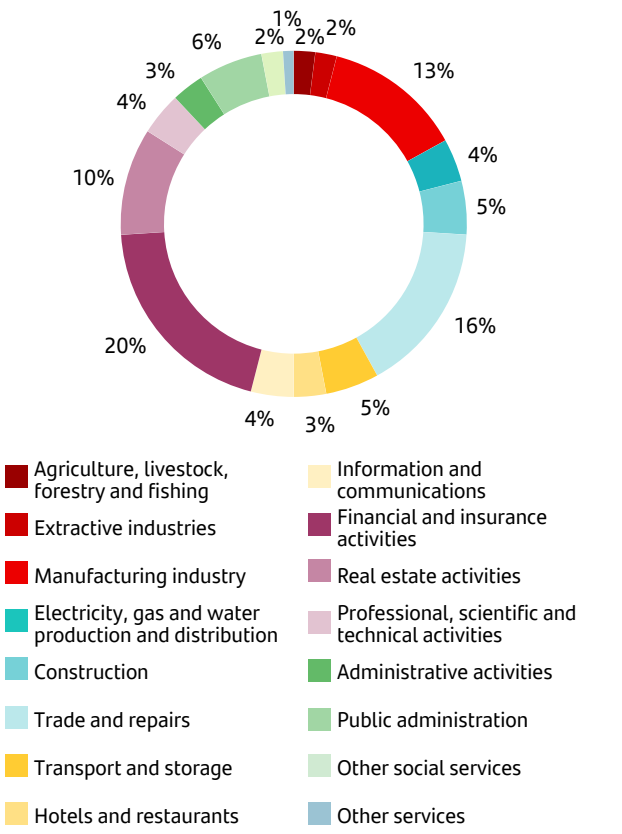
Concentration risk

Concentration risk control is key for our management. We continuously monitor credit risk concentration by region and country, economic sector, customer type and other criteria.

The board sets concentration limits according to risk appetite (See 'Risk appetite framework and structure of limits' in 2.4 'Management processes and tools'). Accordingly, the executive risk committee develops risk policies and reviews the appropriate exposure levels so we can effectively manage credit risk concentration.

As indicated in the key metrics section of this chapter, our credit risk is diversified among our core markets (UK 25%, Spain 21%, United States 11%, Brazil 8%, etc.). In terms of sector diversification, 56% of our credit risk is with individuals, who are inherently highly diverse. Our lending portfolio is also well distributed, with no significant concentrations in any specific industry. The chart below shows the distribution as of December 2021:

DIVERSIFICATION BY ECONOMIC SECTOR[A]



A. Excluding individuals and reverse repos.

Because Santander is subject to the CRR stipulations on large risks, exposure with a customer or group of associated customers will be considered "large exposure" if its value is equal to, or greater than, 10% of eligible capital. To limit large exposures, no entity may assume any exposure with a single customer or group of associated customers if it exceeds 25% of their eligible capital, having factored in the credit risk reduction effect set out in the regulation.

The use of risk mitigation techniques resulted in no groups triggering those thresholds as of the end of December. Regulatory credit exposure with the 20 biggest groups within the scope of large risks made up 5% of credit risk (lending to customers and off-balance sheet risks) as of December 2021.

Our Risk division works closely with the Finance division to manage credit portfolios, aimed at reducing the concentration of exposures through credit derivatives, securitizations and other techniques to optimize the risk-reward of the entire portfolio.

Country risk

Country risk is a component of credit risk arising in transactions with clients resident in a particular country due to circumstances other than usual business risks. It consists of sovereign risk, transfer risk and others that might affect international financing transactions (wars, natural disasters, current account balance crises, among others). It is embedded in our provisioning models and processes, in compliance with the applicable regulation.

Our country risk management continued to follow a standard of maximum prudence. We assume country risk very selectively in transactions that enhance the global relationship with our customers.

Sovereign risk and risk with government agencies

Sovereign risk arises from central bank transactions (including regulatory cash reserves), government bonds (public debt) and transactions with non-commercial government institutions funded exclusively by a state's budget revenue. In some respects, Banco Santander's standard for sovereign risk differs from the European Banking Authority's (EBA) standard for regular stress testing. In particular, the EBA does not consider deposits with central banks, exposures with insurance companies or indirect exposures to guarantees and other financial instruments; however, its standard does generally include central, regional and local government agencies.

Our local sovereign exposure, in currencies other than the official currency of the country of issuance, is not significant (EUR 10,013 million, 2.6% of total sovereign risk) according to our management criteria. Furthermore, exposure to non-local sovereign issuers involving cross-border risk is even less significant (EUR 7,011 million, 1.8% of total sovereign risk).The sovereign debt we hold in Latin America is almost entirely in local currency, recorded in local ledgers and predominantly short-term.

In recent years, our total sovereign risk exposure has been consistent with both regulation and our strategy. Because it spans countries with diverse macroeconomic conditions, growth scenarios, interest rates and exchange rates, it varies on account of our strategy to manage liquidity and hedge both interest rate and foreign exchange risk. Furthermore, our sovereign debt strategy also sets exposure limits based on each country's credit rating. The table below shows exposure ratios by level[20]:

	2021	2020	2019
AAA	15%	18%	20%
AA	32%	25%	24%
A	26%	25%	18%
BBB	11%	14%	15%
Lower than BBB	16%	18%	23%

19. Countries that are not considered low risk by Banco de España
20. Internal rating are applied'.

Sovereign exposure at the end of December 2021 is shown in the table below (data in million euros):

	2021					2020
	Portfolio					
	Financial assets held for trading and Financial assets designated as FV with changes in results	Financial assets at fair value through other comprehensive income	Financial assets at amortised cost	Non-trading financial assets mandatory at fair value through profit or loss	Total net direct exposure	Total net direct exposure
Spain	2,574	2,805	14,178	—	19,557	24,245
Portugal	(20)	2,287	4,277	—	6,544	8,730
Italy	(73)	634	323	—	884	4,015
Greece	—	—	—	—	—	—
Ireland	—	—	9	—	9	—
Rest Eurozone	(233)	1,231	2,631	—	3,629	4,054
UK	(538)	676	228	—	366	(97)
Poland	(15)	10,819	489	—	11,293	10,947
Rest of Europe	—	77	1,291	—	1,368	1,070
US	1,050	13,803	7,616	—	22,469	15,548
Brazil	8,733	16,432	3,394	—	28,559	27,717
Mexico	2,150	10,253	1,106	—	13,509	21,029
Chile	56	1,134	4,881	—	6,071	6,955
Rest of America	94	651	680	—	1,425	958
Rest of the World	2	1,524	1,811	—	3,337	4,752
Total	**13,780**	**62,326**	**42,914**	**—**	**119,020**	**129,923**

4. Market, structural and liquidity risk

4.1 Introduction

This section describes our market risk management and control in 2021, covering trading risk as well as liquidity and structural risks. It also contains a brief description of our methodologies and metrics.

Activities exposed to market risk encompass transactions where risk is assumed as a consequence of potential changes in interest rates, inflation rates, exchange rates, stock prices, credit spreads, commodity prices, volatility and other market factors; the liquidity risk from our products and markets, and the balance-sheet liquidity risk. Therefore, they include trading risks and structural risks.

- **Interest rate risk** arises from movements in interest rates that reduce the value of a financial instrument, a portfolio or the Group. It can affect loans, deposits, debt securities, most assets and liabilities held for trading, and derivatives.
- **Inflation rate risk** arises from movements in inflation that can reduce the value of a financial instrument, a portfolio or the Group. It can affect loans, debt securities and derivatives (e.g. inflation swaps and futures) whose profitability is linked to inflation.
- **Exchange rate risk** is the possibility of loss because the currency of a long or open position will depreciate against the base currency. It can affect debt in subsidiaries whose local currency is not the euro, as well as loans denominated in a foreign currency.
- **Equity risk** is the possibility of loss from open positions in securities if their market price or expected future dividends fall. It affects shares, stock market indices, convertible bonds and derivatives with shares as the underlying asset (put, call, equity swaps, etc.).
- **Credit spread risk** is the possibility of loss from open positions in fixed-income securities or credit derivatives if their yield curve, or the recovery rate of their issuer or type change. A spread is the yield difference between financial instruments against a benchmark (e.g. the internal rate of return (IRR) of government bonds and interbank interest rates).
- **Commodity price risk** is the possibility of loss from movements in commodity prices. Our commodity exposure is minor and stems mainly from commodity derivatives.
- **Volatility risk** is the possibility of loss caused by movements in interest rates, exchange rates, the stock market, credit spreads and other risk factors affecting portfolio value. It is inherent to all financial instruments whose value considers volatility (especially options contracts).

Derivative contracts (such as options, futures, forwards and swaps) can mitigate market risks partially or fully.

Some market risks that require more complex hedging are:

- **Correlation risk** is the possibility of loss due to an adverse correlation between risk variables that affect portfolio value. Risk variables could be the same (e.g. two FX rates) or different (e.g. an interest rate and a commodity price).
- **Market liquidity risk** is the possibility that fewer market makers or institutional investors, a large number of transactions, market instability and other factors will cause the Group or a subsidiary to exit a position at a worse market price or trade cost. Exposure to different products and currencies can also increase this risk.
- **Pre-payment or cancellation risk** originates when mortgages, deposits and other on-balance-sheet instruments give holders the option to buy or sell them, thus altering future cash flows. Potential mismatches on the balance sheet pose a risk since cash flows may have to be reinvested at an interest rate that is potentially lower (assets) or higher (liabilities).
- **Underwriting risk** is the possibility that the bank will have to hold part of a debt issue it has underwritten or agreed to place if it cannot all be placed among potential buyers.

In addition, during 2021, there was an increased focus on **climate and environmental risk**, which arise from the possibility that changes in climate may adversely affect the value of a financial instrument, a portfolio or the Group as a whole. Changes in climate include both extreme weather scenarios as well as gradual climate change and other situations where there is environmental degradation. This risk may have an impact both on financial instruments value or portfolios and on Santander's liquidity. The Group measures this risk through stress scenarios for both market and liquidity risk.

Balance sheet liquidity risk (unlike market liquidity risk) is the possibility of loss caused by forced disposal of assets or cash flow imbalance if the bank meets its payment obligations late or at excessive cost. It can cause losses by forced asset sales or impacts on margins due to the mismatch between expected cash inflows and outflows.

Pension and actuarial risks (explained at the end of this section) also depend on market variables.

We aim to comply with the *Basel Committee's Fundamental Review of the Trading Book* (FRTB) and the EBA's Guidelines on the management of interest rate risk arising from non-trading book activities. The purpose of several projects we run is to provide risk control managers and teams with the best market risk management tools under the right governance framework for the models we use

for metric reporting; and to comply with regulation on the risks mentioned above.

IBOR Reform

Since 2015, central banks and regulators have organized working groups to propose alternative risk-free-rates to the Euro Overnight Index Average (EONIA), the London Interbank Offered Rate (LIBOR).

For the purpose of risk control during the transition, we launched the Santander's global IBOR Transition Programme in 2019, making sure concerned business units and subsidiaries understand risks regarding the transition and can take the right mitigating measures.

It takes recommendations, guidance and targets from regulators and working groups into account. The areas it is structured on are Technology and operations; the Legal department; Customer relations; Risk and model management; Conduct and communications; and Accounting and Finance.

In 2021, the programme focused on handling the transition to LIBOR and EONIA rates in December 2021. In 2022, the program will continue to address next steps in the transition related to the contract history management and the LIBOR dollar termination milestone in June 2023.

Santander also keeps taking part in public and private initiatives on benchmark interest rate indices reform.

For more details on IBOR reform, see Notes to the consolidated annual accounts nº 53 section 'c) Trading market risk management'.

4.2 Market risk management

Limits management and control system

The Market Risk function's daily control keeps market risk positions within approved limits, and evaluates performance and significant fluctuations in metrics. This assessments inform regular reports for senior management and both internal and external stakeholders to ensure proper oversight of market risk management.

We set market risk limits in a dynamic process according to the risk appetite in the annual limits plan prepared by senior management and extended to all subsidiaries (See "Risk appetite and structure of limits" under Section 2.4 'Management processes and tools').

To ensure limits cover operations exposed to market risk from various perspectives, we take a prudent approach involving these metrics:

- Value at Risk (VaR) and Stressed VaR limits.
- Limits of equivalent and/or nominal positions.
- Interest rate sensitivity limits.
- Vega limits.
- Delivery risk limits for short positions in securities (fixed-income and securities)
- Limits on the volume of effective losses to protect earnings from the period.:
  - Loss trigger.
  - Stop loss.
- Credit limits:
  - Total exposure limit.
  - Jump-to-default limit by issuer .
  - Others.
- Limits for origination transactions.

Those general limits include sub-limits that make the structure granular enough to control market risks from Santander's trading operations. We monitor subsidiaries' positions daily, checking changes in portfolios and at trading desks in order to detect events that may necessitate immediate mitigation.

The Group establishes global approval and control limits; global approval limits with local control; and local approval and control limits. They are requested by each subsidiary's business manager in consideration of business particulars, budgetary targets and the risk/reward ratio. They are then approved by risk bodies according to internal governance processes. Subsidiaries must adhere to approved limits. On the day a limit breach occurs, subsidiary business managers must provide a written explanation with an action plan and corrective measures, such as reducing a position within the limits or formulating a strategy that justifies raising limits.

Methodologies and key aspects

a) Value at Risk

Value at risk (VaR), our standard methodology for managing and controlling market risk, measures maximum expected loss with a certain confidence level over a given time. For standard historical simulation, the confidence level is 99% and the time horizon is one day. We also make statistical adjustments (i.e. a two-year horizon or daily figures from the 520 days since the reference date for calculating VaR) to account for recent events that influence our risk levels in a quick and efficient manner.

We report the highest of two VaR figures, which we calculate every day. To one of them, we apply an exponential decay factor, which assigns a low weighting to the oldest observations; the other assigns the same weighting to all observations. At the same time, we use the same methodology for VaR to calculate "value at earnings" (VaE), which gives maximum potential earnings with a certain confidence level over a given time.

As a risk metric, historical VaR simulation has many advantages. It states a portfolio's market risk in a single figure according to market movements, without assumptions about functions, forms or correlations between market variables.

Still, it also has limitations. Some are inherent to the VaR metric, no matter the methodology used to calculate it. In particular:

- Because VaR is calibrated at a certain confidence level, it does not reveal potential losses beyond the VaR level.
- The liquidity horizon of certain products in a portfolio is longer than the VaR model's.

- VaR is a static measurement of portfolios' risk and subject every day to significant (albeit unlikely) changes.

Historical simulation also has limitations, such as:

- high sensitivity to time frame used
- inability to show plausible high-impact events outside the time frame used;
- no market inputs (e.g. correlations, dividends or recovery rates) for measurement parameters; and
- slow adaptation to new volatility and correlations, as the weighting of the newest and the oldest data is the same.

To circumvent some limitations, we use stressed VaR (sVaR) and expected shortfall (ES); calculate VaR with exponential decay; make conservative measurement adjustments; and run analyses and backtesting to assess the accuracy of the VaR calculation model.

b) Stressed VaR (sVaR) and Expected Shortfall (ES)

Every day, we calculate sVaR for our main portfolios using the same VaR calculation method but with these exceptions:

- A window of 260 observations (as opposed to 520 for VaR) over a continuous stress period. For each portfolio, we review the history of a subset of market risk factors (selected with expert criteria) and the most significant positions per books.
- Unlike with VaR, the percentile we take to get sVaR has uniform weighting and is not the highest one based on exponential and uniform weightings.

To calculate ES, we estimate expected potential loss above the level obtained from VaR and assign uniform weightings to all observations. Unlike VaR, ES has the advantage of showing tail risk (i.e. the risk of loss due to a rare event) while being a subadditive metric. According to the Basel Committee, ES with 97.5% confidence interval is at a similar risk level than VaR with 99% confidence interval.

c) Scenario analysis

Santander's risk measures are based on normal market conditions, price stability, sufficient liquidity and other assumptions used in daily risk management and decision-making. However, it is possible that extreme movements and strong unforeseen changes will not be properly anticipated. Therefore, we run scenario analyses, which prove important to predict the outcome of a wide range of risks and estimate the capital needed to absorb any losses in case such unexpected events occur.

The scenarios we use to predict future risks are important to overcome the limitations of models and historic data; support liquidity and capital plans; report on risk tolerance levels in place; and help us execute risk reduction and contingency plans under stress. All units engaged in trading regularly calculate and review historical, hypothetical and reverse stress-test scenarios.

d) Gauging and backtesting measures

According to regulation, the VaR model must accurately show material risks. Because VaR uses statistical techniques under normal conditions for a certain confidence level over a set time horizon, the estimate of maximum potential loss may differ from actual losses.

Santander reviews and contrasts the VaR calculation model on a regular basis to verify its accuracy.

Our Market risk functions run internal backtesting, contrast VaR and review hypothesis about portfolios for subsidiaries that apply the internal market risk model. For subsidiaries with an approved internal model, we run regulatory backtesting to find exceptions (where daily profit or loss is higher than VaR or VaE) that will influence the calculation of regulatory capital requirements for market risk.

Through backtesting, we assess the quality and general effectiveness of our risk measurement model, comparing daily VaR or VaE from *D-1* with these P&L figures on *D*:

- Economic P&L: P&L at end-of-day mark-to-market or mark-to-model value. Backtesting indicates if VaR/VaE methodology to measure and aggregate risk is appropriate.
- Current P&L: The difference between a portfolio's end-of-day value and real value by the end of the next day, in light of intraday trading but not fees or interest margin. Backtesting results enable us to determine the number of regulatory exceptions.
- Hypothetical P&L: The difference between a portfolio's end-of-day value and real value by the end of the next day, based on the assumption that positions will not vary. This backtesting does not consider the time effect, intraday trading, nor changes in portfolio positions in order to maintain consistency with VaR. We use it to determine if portfolios can withstand an intraday risk not reflected in closing positions (nor in VaR) over time. We also use it to count the number of regulatory surpluses.
- Theoretical P&L: Calculated with the market risk calculation engine, without intraday trading, changes in portfolio positions or time ("*Theta*"). We use this backtesting to check the quality of the internal VaR model.

Every day, we run backtesting for our subsidiaries. We also do internal (non-regulatory) backtesting every day, week or month depending on portfolio granularity.

The number (or proportion) of exceptions we record is one of the most intuitive indicators of a model's soundness. As our regulatory backtesting covers a historical period of one year (250 days) and a 99% VaR, we expect two to three exceptions per year. To calculate regulatory capital for market risk, we take the regulatory K[35] from the number of exceptions we find in actual and hypothetical backtesting.

e) Analysis of positions, sensitivities and results

Santander uses positions to quantify the market value of derivative transactions by main risk factor and with the *Delta* value of futures and options. We can express risk positions in subsidiaries' base currency and in the currency used to standardize information. We monitor positions every day to correct any incidents we uncover immediately.

Sensitivity to market risk is the estimated impact of change in a risk factor on the market value of an instrument or portfolio. To measure it, we take analytical approximations from partial derivatives or a full portfolio revaluation.

The Risk function's daily P&L statement is an excellent indicator of the impact of changes of financial variables on portfolios.

[35] K: Parameter used for calculating the consumption of regulatory capital due to market risk.

f) Derivatives activities and credit management

Because of their atypical characteristics, we have special measures to monitor derivatives and credit management daily. We monitor the sensitivity of underlying assets to price movements (*Delta* and *Gamma*), to volatility (*Vega*[36]) and over time (*Theta*). We also systematically check measurements of their sensitivity to spread, jump-to-default risk and position concentrations by rating.

According to regulation and the Basel Committee's recommendations, we also calculate the incremental risk charge (IRC), an additional metric for credit risk in the trading book. The IRC covers default risk and rating migration risk (which VaR does not show adequately) by taking credit spread changes into account. In general, we apply it to government and corporate bonds; to forwards, options and other bond derivatives; and to credit default swaps, asset-backed securities and other credit derivatives. To calculate it, we take direct measurements of loss distribution tails at the right percentile (99.9%) over a one-year horizon and follow the Montecarlo method with one million simulations.

g) Credit valuation adjustment and debit valuation adjustment

Santander makes credit and debit valuation adjustments to calculate trading book value.

A credit valuation adjustment (CVA) is a change in the value of OTC derivatives to take into account counterparty credit risk. For a given counterparty, it adds up to the CVAs for all its maturity dates. We calculate it based on exposure at default, loss given default, probability of default, the discount curve and other inputs.

A debit valuation adjustment (DVA) is similar to a CVA but results from the risk our counterparties assume with OTC derivatives traded with Banco Santander.

4.3 Market risk key metrics

In 2021, risk levels from trading generally remained low amid less volatility than in 2020, as well as economic recovery spurred by vaccination progress. However, uncertainty persisted in light of the possibility of new covid variants. Risks mainly originated from trading non-complex instruments with customers. Most were to hedge interest rate and FX risks. Like last year, our own trading portfolio positions' contribution to overall risk stayed lower than in previous years.

2021 saw generally low consumption of trading limits, which correspond to the Group's market risk appetite.

Our stressed scenarios also revealed low risk levels based on observed losses in stress testing. We run the scenarios time and again to measure any risk not covered by the usual metrics for monitoring and controlling market risks.

Market risk capital requirements

We use internal and standard models to determine market risk-related capital requirements.

In 2019, the ECB authorized Santander to use internal market risk models to calculate regulatory capital for the trading portfolios of our subsidiaries in Spain, Chile and Mexico; and to extend our Spain subsidiary's internal model to our London branch. As we aim to get the rest of our subsidiaries gradually approved, we have been working closely with the ECB and reviewing the new requirements recently published by the Basel Committee to strengthen financial institutions' capital.

Santander launched the Market risk advanced platform (MRAP), a global initiative to strengthen market risk infrastructure according to the new Fundamental Review of the Trading Book (FRTB); and to adapt internal market risk models to the latest Targeted Review of Internal Models (TRIM) and to supervisory demands. MRAP takes a multi-disciplinary and multi-regional approach. It includes all subsidiaries that generate market risk, as well as the Market risk function, IT, Front office, the Finance function, the Regulatory affairs function and other relevant stakeholders. In 2021, it continued to improve our functional and IT architecture and our operational models significantly, while generating synergies between initiatives and resources.

According to Santander's internal market risk model, we calculate consolidated regulatory capital as the total regulatory capital of the subsidiaries that the ECB has approved. This standard for consolidating capital does not consider capital savings owing to geographical diversification and is, therefore, conservative.

In light of the ECB's approval, we use advanced methods with VaR, sVaR and IRC as fundamental metrics to calculate market risk-related regulatory capital consistently with the Basel requirements and, in particular, with the EU Capital Requirements Regulation (CRR).

[36] Vega, a Greek term, is the sensitivity of the value of a portfolio to changes in the price of market volatility

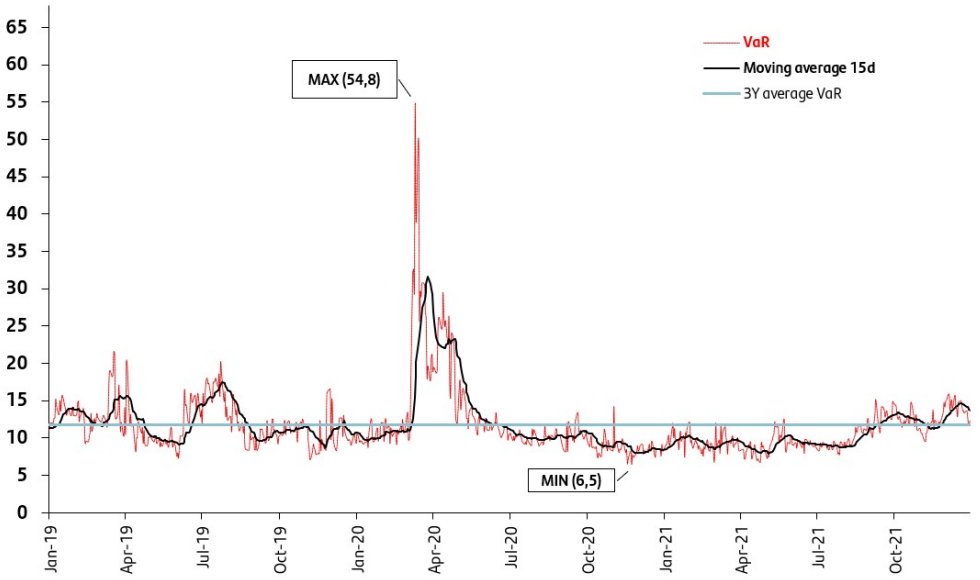
VaR analysis

As demonstrated by the VaR of SCIB's trading portfolio, Santander's market risk strategy focuses on trading with customers to minimize net directional exposure and keep risk diversified by geography and risk factor.

Despite constant market volatility (especially in regard to interest and FX rates), VaR stayed mostly below the average of the last three years, with the exception of a spike in the last quarter of the year . In this period, there was an increase in market volatility due to the uncertainty caused by the potential impact of the new covid variant (Omicron). This could lead to a possible economic growth slowdown, mainly due to new disruptions in supply chains together with increases in energy prices, closing December VaR at EUR 12.3 million.

VaR 2019-2021

EUR million. VaR at 99% over a one day horizon



In 2021, VaR fluctuated between EUR 15.9 million and EUR 6.8 million. The average VaR in 2021 was EUR 10.5 million, lower than in 2020 and 2019 (EUR 12.5 million and EUR 12.1 million, respectively).

Risk per factor

This table shows the latest and average VaR at a 99% confidence level by risk factor in the last three years. It also shows the minimum and maximum VaR values in 2021 and 97.5% ES at the end of December 2021:

VaR STATISTICS AND EXPECTED SHORTFALL BY RISK FACTOR[A]

EUR million. VaR at 99% and ES at 97.5% with one day time horizon

	2021					2020		2019	
	VaR (99%)				ES (97.5%)	VaR		VaR	
	Min	Average	Max	Latest	Latest	Average	Latest	Average	Latest
Total Trading	**6.8**	**10.5**	**15.9**	**12.3**	**11.9**	**12.5**	**8.3**	**12.1**	**10.3**
Diversification effect	(6.3)	(12.9)	(26.6)	(13.4)	(15.0)	(13.0)	(11.8)	(8.1)	(9.8)
Interest rate	6.0	9.6	15.3	9.1	9.4	9.2	5.4	10.0	9.2
Equities	2.2	3.5	7.7	5.1	5.1	4.4	3.1	2.9	4.8
Exchange rate	1.9	4.2	8.0	5.7	5.6	5.9	6.0	3.9	2.6
Credit spread	2.6	4.8	8.0	5.1	6.0	5.5	4.5	3.4	3.5
Commodities	0.4	1.3	3.5	0.7	0.8	0.5	1.1	—	—
Total Europe	**6.1**	**9.3**	**16.1**	**9.9**	**9.7**	**10.5**	**8.0**	**6.3**	**10.1**
Diversification effect	(5.2)	(9.3)	(16.9)	(12.6)	(13.1)	(10.7)	(8.9)	(6.9)	(8.4)
Interest rate	5.3	7.7	11.7	7.1	6.7	7.9	6.5	6.0	8.2
Equities	1.8	3.3	8.3	5.8	5.2	4.3	3.0	1.9	4.9
Exchange rate	1.6	2.8	5.0	4.5	4.9	3.5	2.9	1.9	1.9
Credit spread	2.6	4.8	8.0	5.1	6.0	5.5	4.5	3.4	3.5
Commodities	—	—	—	—	—	—	—	—	—
Total North America	**1.6**	**2.5**	**7.4**	**2.7**	**2.8**	**6.6**	**2.9**	**3.5**	**3.8**
Diversification effect	0.2	(0.7)	(2.9)	(0.6)	(0.5)	(2.2)	(1.0)	(1.3)	(2.1)
Interest rate	1.3	2.5	7.0	2.7	2.7	3.4	3.3	2.6	3.4
Equities	—	0.1	1.5	—	—	0.3	0.1	0.2	0.1
Exchange rate	0.1	0.6	1.8	0.6	0.6	5.1	0.5	2.0	2.4
Total South America	**3.3**	**5.9**	**10.5**	**6.3**	**6.4**	**5.6**	**4.5**	**9.5**	**6.0**
Diversification effect	(1.2)	(4.9)	(16.0)	(5.1)	(3.8)	(3.8)	(5.4)	(2.9)	(3.7)
Interest rate	3.0	5.5	12.2	5.8	6.3	5.2	4.1	7.8	5.9
Equities	0.4	1.2	3.2	1.1	1.0	1.0	0.5	2.0	1.7
Exchange rate	0.7	2.8	7.6	3.8	2.1	2.7	4.2	2.6	2.1
Commodities	0.4	1.3	3.5	0.7	0.8	0.5	1.1	—	—

A. In North America and South America, VaR levels of credit spreads, and in North America for VaR of commodities, are not shown separately due to their low or null materiality.

At the end of December, VaR was EUR 4.0 million higher than at the end of 2020; however, average VaR fell by EUR 2.0 million. Average VaR fell for most risk factors owing to low market volatility throughout the year. By region, average VaR decreased in Europe and especially in North America with lower exchange rate volatility.

By risk factor, VaR has followed a generally stable trend in recent years. For many factors, temporary VaR increases generally owe more to short-term price volatility than to significant changes in positions.

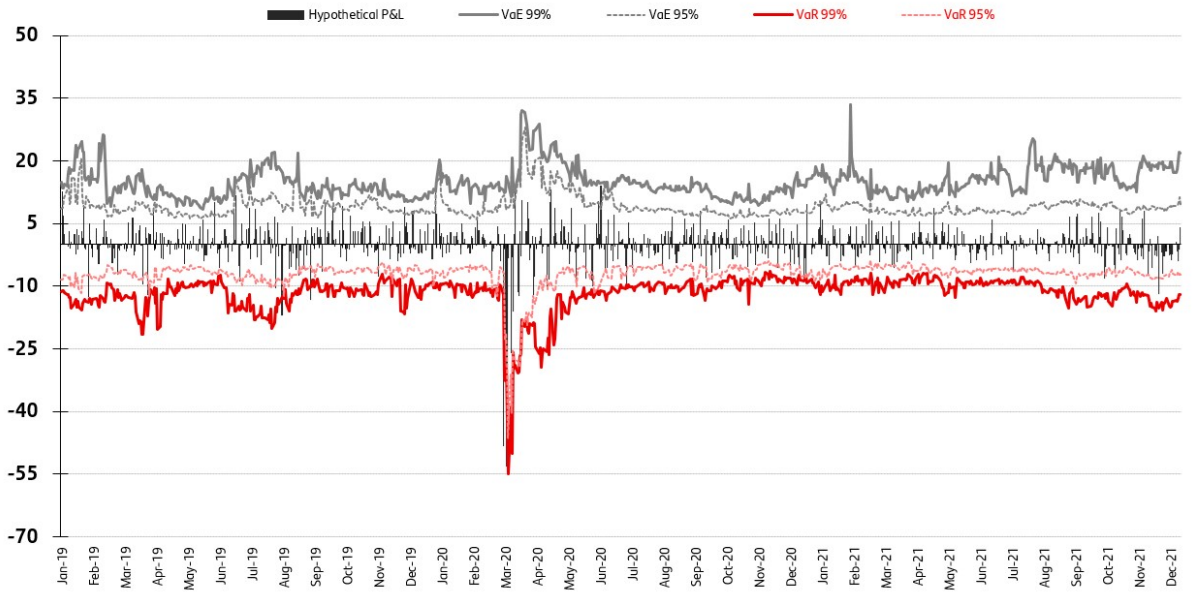
Backtesting

Actual losses can differ from predicted losses because of the mentioned VaR's limitations. Santander measures the accuracy of our VaR calculation model to make sure it is reliable (see "Methodologies and other key details" under section 4.2 'Market risk management'). The most important tests we run involve backtesting:

- Backtesting of hypothetical P&L and of the entire trading book showed no exceptions to 99% VaR and VaE in 2021.
- The results for the past year are consistent with the assumptions of the VaR calculation model.

BACKTESTING OF TRADING PORTFOLIOS: DAILY RESULTS VS. VaR FOR PREVIOUS DAY

EUR million



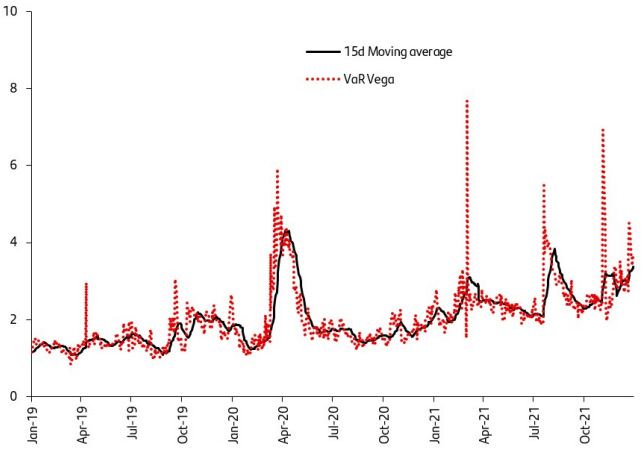
Derivatives risk management

Our operations with derivatives consist mainly in selling investment products and hedging risks for customers. We aim to keep open net risk as low as possible. Trading includes equity, fixed-income and FX options, chiefly in Spain, Brazil, the UK and Mexico.

The graph below shows the *Vega VaR* of structural derivatives over the last three years. It has fluctuated around an average of EUR 2.0 million. In general, high VaR values stem from significantly high market volatility, such as at the start of the health crisis, amid changes to monetary policy, or at times of political uncertainty in our geographies.

CHANGE IN RISK OVER TIME (VaR) OF STRUCTURE DERIVATIVES

EUR million. VaR Vega at a 99% over a one day horizon



Average VaR was based on interest rates, equities and FX rates. In 2021, average risk (EUR 2.6 million) was slightly higher than in 2019 and 2020 (see table below):

FINANCIAL DERIVATIVES. RISK (VaR) BY RISK FACTOR

EUR million. VaR at a 99% over a one day horizon

	2021				2020		2019	
	Minimum	Average	Maximum	Latest	Average	Latest	Average	Latest
Total VaR Vega	**1.5**	**2.6**	**7.7**	**3.7**	**1.9**	**2.3**	**1.5**	**2.6**
Diversification effect	(0.6)	(0.9)	(2.3)	(0.1)	(1.3)	(1.7)	(1.1)	(1.3)
VaR interest rate	0.7	1.4	6.7	1.2	1.0	1.8	1.1	2.7
VaR equities	0.9	1.2	1.8	1.6	1.3	1.4	0.8	0.8
VaR exchange rate	0.5	0.9	1.5	1.0	0.9	0.8	0.6	0.4
VaR commodities	—	—	—	—	—	—	—	—

Thanks to our risk culture and prudent risk management, exposure to complex structured instruments and vehicles is minor. At the end of December 2021, we had exposure to:

- hedge funds (as the counterparty in derivative contracts): EUR 109 million (indirect). We review this type of counterparty risk on a case by case basis, setting collateralization ratios based on each fund's characteristics and assets.
- monolines: no exposure at the end of December 2021.

Santander's policy on approving new derivatives transactions has always been extremely prudent and conservative. It is closely monitored by senior management.

Scenario analysis

We regularly calculate and review stress test scenarios for all the trading portfolios of the group and its subsidiaries, such as:

Historical scenarios

Historical scenarios consider trading portfolio performance during a crisis or significant past market events to estimate maximum losses if such events reoccur.

- "Subprime crisis": Historical scenario based on 2007-2008 events arising from the US subprime mortgage crisis. The financial crisis caused high volatility and drastically low liquidity in markets across the globe. For each market risk factor, we determine the worst market shocks over one-day and ten-day horizons.
- "Covid crisis": Historical scenario added to our stress testing programme in 2020 and based on abrupt movements in financial markets owing to the health crisis. After calculating a ten-day horizon of peak trading losses in the first half of 2020, all risk factors were affected. Stock indices plummeted, volatility increased for all risk factors, emerging market currencies depreciated, government bond yields hit record lows and credit spreads widened significantly.

Hypothetical scenarios

We use extreme scenarios based on market risk shocks that do not necessarily relate to past events. Unlike generally *ex post* historical scenarios, hypothetical scenarios are *ex ante*.

- "Abrupt crisis": A scenario of strong, sudden movements in all risk factors, including higher yield curves, stock market crashes, a stronger US dollar against other currencies, higher volatility, wider credit spreads, declines in commodity prices, reduction in dividends and default from main fixed-income and equity positions.
- "Worst case": A hypothetical scenario that combines movements of each risk factor with its volatility. We base these scenarios on historical volatility with between ± 3 and ±6 standard deviations per day (irrespective of any historical correlation between them) in order to review trading books' risk profile and potential maximum losses under the worst possible scenario.
- EBA's adverse scenario: A hypothetical scenario based on the EBA's proposed adverse macroeconomic scenario for all market risk factors in biennial EU-wide stress testing.
- Forward-looking scenario: A plausible hypothetical scenario defined and calculated on the basis of portfolio positions and expert opinions about expected short-term market risk movements that could have a negative effect on trading positions.

Reverse stress test scenarios

Reverse stress test scenarios identify market variable shifts that can lead to a loss that will endanger our survival. They complement traditional stress scenarios and help signal business vulnerabilities, hidden risks and interactions between risk factors. They begin with a known stress result (such as failure to achieve determined capital, liquidity or solvency ratios) and identify extreme scenarios.

Other stress test scenarios

We also run different quarterly stress tests based on extreme market movements to determine potential losses or major impacts on capital:

- IRC scenarios: Designed to stress market risk capital consumption by incremental risk charge (IRC), associated with default risk and credit rating change risk of issuers of debt instruments present in trading portfolios.
- Stress proxy scenario: Specially constructed to measure how selecting the wrong proxies would affect VaR.
- Illiquidity and concentration scenarios: To show the impact of scarce liquidity in markets under stress, price gaps and concentration risk.

The table below shows the worst scenario outcomes at the end of December 2021:

STRESS SCENARIO: MAXIMUM VOLATILITY (WORST CASE)

EUR million. Dec. 2021 data

	Interest rate	Equities	Exchange rate	Credit spread	Commodities	Total
Total trading	**(22.6)**	**(17.5)**	**(13.2)**	**(21.1)**	**—**	**(74.4)**
Europe	(15.1)	(14.8)	(4.9)	(21.1)	—	(55.9)
North America	(4.4)	—	(2.1)	—	—	(6.5)
South America	(3.1)	(2.7)	(6.2)	—	—	(12.0)

Our analysis concludes that Santander's trading portfolios would lose EUR 74 million in market value in the worst-case scenario of market stress. The loss would mainly affect Europe (in this order: credit spread, interest rates, equities, and FX rates).

Connection with balance sheet items

Below are items on Santander's consolidated balance sheet that generate market risk. The table distinguishes positions whose main risk metric is VaR from other positions that are monitored with other risk metrics.

RISK METRIC VALUES ON THE CONSOLIDATED BALANCE SHEET

EUR Million. As of Dec. 2021

		Main market risk metrics		
Assets subject to market risk	Balance sheet amount	VaR	Other	Main risk factors for 'Other' balance
Cash, cash balances at central banks and other deposits on demand	210,689		210,689	Interest rate
Financial assets held for trading	116,953	116,953		
Non-trading financial assets mandatorily at fair value through profit or loss	5,536	4,042	1,494	Interest rate, spread
Financial assets designated at fair value through profit or loss	15,957	5,489	10,468	Interest rate, spread
Financial assets at fair value through other comprehensive income	108,038	2,453	105,585	Interest rate, spread
Financial assets measured at amortised cost	1,037,898		1,037,898	Interest rate, spread
Hedging derivatives	4,761		4,761	Interest rate, exchange rate
Changes in the fair value of hedged items in portfolio hedges of interest risk	410		410	Interest rate
Other assets	95,593			
Total assets	**1,595,835**			
Liabilities subject to market risk				
Financial liabilities held for trading	79,469	79,469		
Financial liabilities designated at fair value through profit or loss	32,733	390	32,343	Interest rate, spread
Financial liabilities at amortised cost	1,349,169		1,349,169	Interest rate, spread
Hedging derivatives	5,463		5,463	Interest rate, exchange rate
Changes in the fair value hedged items in portfolio hedges of interest rate risk	248		248	Interest rate
Other liabilities	31,700			
Total liabilities	**1,498,782**			
Total equity	**97,053**			

4.4 Structural balance sheet risk management

Limits management and control systems

The policies of senior management dictate mechanisms to monitor and control structural risk according to regulatory requirements and our risk appetite. The mechanisms consider sub-types of structural risk and their implications, contingencies and interrelations.

The Structural risk function's role in the second line of defence is to ensure structural risks are understood, controlled and reported to senior management according to established governance:

- It sets interest rate risk metrics and reviews and challenges structural risk appetite and limits proposed by the first line of defence.
- It oversees the first line of defence's structural risk management and checks compliance with set limits.
- It regularly reports on risk profile to senior management and issues guidelines to business lines about measures it deems necessary.
- It evaluates and challenges commercial proposals and gives senior management and business units information to understand the interest rate risk of Santander's businesses and operations.
- It confirms proper structural risk procedure, in addition to formulating and overseeing models and policies.

Like market risk, structural risk also has an annual plan framework to set structural balance sheet risk limits according to risk appetite.

- Balance-sheet structural interest-rate risk:
  - Limit on net interest income (NII) sensitivity over a 1 year horizon.
  - Limit on the sensitivity of economic value of equity (EVE).
  - Limit on the market value of ALCO portfolios under stress scenarios and that given their accounting classification (fair value with changes in equity) could have an impact on shareholders' equity.
- Structural exchange rate risk:
  - Limit on the net permanent position of the core capital ratio.
  - Limit on individual hedge required for each currency.

Business lines' risk managers must prove explanations for potential limit and sub-limit breaches as well as an action plan to correct them.

Methodologies and other key details

a) Structural interest-rate risk

As part of structural risk, interest rate risk in the banking book (IRRBB) is the main source of balance sheet risk.

Santander measures the potential impact of interest rate movements on EVE and NII. Because changing rates may generate impacts, we must manage and control many subtypes of interest rate risk, such as repricing risk, curve risk, basis risk and option risk (e.g. behavioural or automatic). Interest rate risk in the balance sheet and market conditions and outlooks could necessitate certain financial measures to achieve Santander's desired risk profile (such as selling positions or setting interest rates on products we market). The metrics we use to monitor IRRBB include NII and EVE sensitivity to interest rate movements.

- Net interest income sensitivity

Net interest income (NII) is the difference between interest income from assets and the interest cost of liabilities in the banking book over a typical one- to three-year horizon (one year being standard in Santander). Because NII sensitivity is the difference in income between a selected scenario and the base scenario, its values can be as many as considered scenarios. It enables us to see short-term risks and supplement economic value of equity (EVE) sensitivity.

- Economic value of equity sensitivity

Economic value of equity (EVE) is the difference between the net current value of all assets minus the net current value of all liabilities in the banking book. It does not include shareholders' equity and non-interest-bearing instruments. Because EVE sensitivity is the difference in EVE between a selected scenario and the base scenario, it can have as many values as considered scenarios. It enables us to see long-term risks and supplement NII sensitivity.

b) Interest rate models

Interest rate risk metrics consider the behaviour of financial products under stress scenarios in which uncertainty is common and the failure to meet contractual terms is possible. We have methodologies that help explain how such products will behave. These are our key interest rate risk models:

- Treatment of liabilities without stated maturity

  Santander's model uses such variables as stable and unstable volumes, the rate of settlement over time and the difference between customer rates and market rates to model non-maturity account balances.

- Prepayment treatment for certain assets

  Prepayment risk mainly affects fixed-rate mortgages at subsidiaries where their contractual rates are low compared to market levels and there is an incentive for customers to amortize in advance (in whole or in part). In variable rate products, the prepayment is due to other factors such as economic cycle, tax factors, cultural factors, etc. The impact in terms of IRRBB risk is more limited by having a variable repricing. In the Group, this risk is modelled and included in the risk appetite metrics.

c) Structural foreign exchange rate risk/hedging of results

Every day, we measure FX positions, VaR and P&L.

d) Structural equity risk

We measure equity positions, VaR and P&L.

4.5 Structural balance sheet risk key metrics

Consistent with previous years, the market risk profile of Santander's balance sheet remained moderate in 2021 in terms of asset, shareholders' equity and NII volumes. Each subsidiary's Finance division manages interest rate risk from commercial banking and is responsible for handling structural risk from interest rate fluctuations.

To measure interest rate risk, Santander uses statistical models based on strategies to mitigate structural risk with interest-rate

instruments (such as bonds and derivatives) to keep risk profile within risk appetite.

The NII and EVE sensitivities below are based on scenarios of parallel interest rate movements from -100 to +100 basis points.

Structural interest rate risk

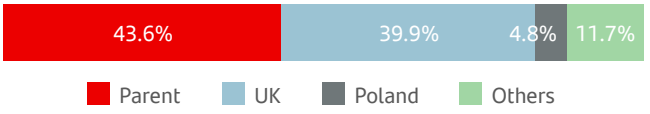
Europe

In general, the NII and EVE of our main balance sheets (i.e. Santander España and Santander UK) show positive sensitivity to rising interest rates. Across our footprint, exposure was moderate in relation to annual budget and capital levels in 2021.

At the end of December 2021, under the scenarios previously described, the most significant NII sensitivity risk concentration in euros amounted to EUR 703 million; in pounds sterling, EUR 541 million; in Polish złoty, EUR 65 million; and in US dollars, EUR 54 million, all relating to interest rate cut risks.

NET INTEREST INCOME (NII) SENSITIVITY

% of total



* Other: Portugal and SCF.

The most significant EVE risk concentration amounted to EUR 3,684 million in the yield curve of the euro ; of the pound sterling, EUR 1,056 million; of the US dollar, EUR 221 million; and of the Polish złoty, EUR 56 million, all relating to interest rate cut risks.

ECONOMIC VALUE OF EQUITY (EVE) SENSITIVITY

% of total



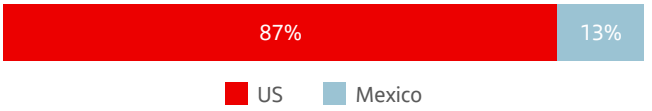
* Other: Poland, Portugal and SCF.

North America

In general, the NII and EVE of our North American balance sheets tend to show positive sensitivity to rising interest rates. Exposure was moderate in relation to annual budget and capital levels in 2021. At the end of December, the most significant risk to NII was mainly in the US and amounted to EUR 152 million.

NET INTEREST INCOME (NII) SENSITIVITY

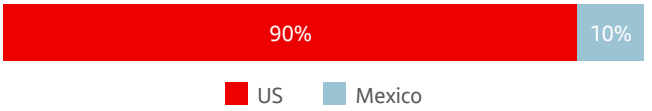
% of total



The most significant risk to EVE was in the US and amounted to EUR 590 million.

ECONOMIC VALUE OF EQUITY (EVE) SENSITIVITY

% of total



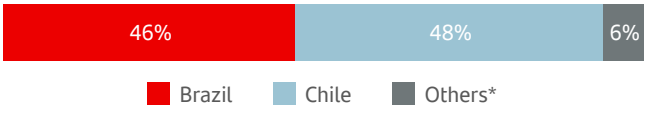
South America

The EVE and NII of our main South American balance sheets are positioned for interest rate cuts.

In 2021, exposure was moderate in relation to annual budget and capital levels. At the end of December, the most significant risks to NII were mainly in Chile (EUR 86 million) and Brazil (EUR 83 million).

NET INTEREST INCOME (NII) SENSITIVITY

% of total

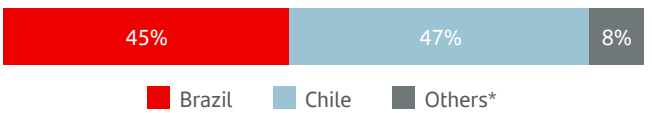


* Other: Argentina, Peru and Uruguay.

The most significant risks to EVE were recorded in Brazil (EUR 271 million) and Chile (EUR 258 million).

ECONOMIC VALUE OF EQUITY SENSITIVITY

% of total



* Other: Argentina, Peru and Uruguay.

Structural foreign exchange rate risk/results hedging

Our structural FX risk stems mainly from the income and hedging of foreign currency transactions for permanent financial investments. In our dynamic management of this risk, we aim to limit the impact of FX rate movements on the core capital ratio. In 2021, we hedged nearly all currencies that have an impact on our core capital ratio.

In December 2021, our permanent exposures (with potential impact on shareholders' equity) were, from largest to smallest, in US dollars, British pounds sterling, Brazilian *reais*, Mexican pesos, Chilean *pesos* and Polish złoty.

We use FX derivatives to hedge part of those permanent positions. The Finance division manages FX risk and hedging for the expected profits and dividends of subsidiaries whose base currency is not the euro.

Structural equity risk

Santander holds equity positions in its banking and trading books. They are either equity instruments or stock, depending on the share of ownership or control. By the end of December 2021, the equities and shareholdings in the banking book were diversified among Spain, China, Morocco, Poland and other countries. Most of them invest in the financial and insurance sectors. We have minor equity exposure to property and other sectors.

Structural equity positions are exposed to market risk. We calculate their VaR with a set of market prices or proxies. At the end of December 2021, VaR at a 99% confidence level over a one-day horizon was EUR 309 million (EUR 319 million in 2020 and EUR 170 million in 2019).

Structural VaR

With such a homogeneous metric as VaR, we can fully monitor market risk in the banking book (not including SCIB's trading operations, as explained in Section 4.3 'Market risk key metrics').We differentiate fixed income based on interest rates and credit spreads in ALCO portfolios, FX rates and shares.

In general, the structural VaR of our total assets and equity is minor.

STRUCTURAL VaR

EUR million. VaR at a 99% over a one day horizon

	2021				2020		2019	
	Minimum	Average	Maximum	Latest	Average	Latest	Average	Latest
Structural VaR	**895.8**	**993.7**	**1,090.7**	**1,011.9**	**911.0**	**903.1**	**511.4**	**729.1**
Diversification effect	(158.8)	(327.3)	(431.4)	(240.2)	(349.8)	(263.4)	(304.2)	(402.0)
VaR Interest Rate[A]	224.2	400.7	540.5	287.8	465.1	345.5	345.6	629.7
VaR Exchange Rate	521.3	600.6	655.2	655.2	499.9	502.6	308.1	331.7
VaR Equities	309.1	319.7	326.4	309.1	295.9	318.5	161.9	169.8

A. Includes credit spread VaR on ALCO portfolios.

4.6 Liquidity risk management

The Liquidity risk function's role in the second line of defence is to ensure liquidity risks are understood, controlled and reported to senior management and across the Group according to established governance:

- It determines liquidity risk and provides detailed measurements of current and emerging risks.
- It sets liquidity risk metrics, and reviews and challenges liquidity risk appetite and limits proposed by the first line of defence.
- It oversees the first line of defence's liquidity risk management; measures how long business will remain within risk appetite limits; and checks compliance with liquidity risk limits.
- It reports to governing bodies on risk, risk appetite and exceptions.
- It evaluates and challenges commercial and business proposals, and gives senior management and business units the information they need to understand Santander's liquidity risk.
- It provides a comprehensive overview of our liquidity risk exposure and profile.
- It makes sure the liquidity risk procedures in place are appropriate to manage business within risk appetite limits.

Methodologies and key other key details

Grupo Santander measures liquidity risk with tools and metrics that account for the appropriate risk factors.

a) Liquidity buffer

The liquidity buffer is the total liquid assets a bank has to cope with cash outflows during periods of stress. The assets are free of encumbrances and can be used immediately to generate liquidity without losses or excessive discounts. The liquidity buffer is a tool for calculating most liquidity metrics. It is also a metric with defined limits for each subsidiary.

b) Liquidity coverage ratio (LCR)

The liquidity coverage ratio (LCR) is a regulatory metric. Its purpose is to promote the short-term resilience of a bank's liquidity profile and make sure it has enough high-quality liquid assets to withstand a considerable idiosyncratic or market stress scenario over 30 calendar days, in addition to a currency distribution according to its needs.

c) Wholesale gap metric

The wholesale liquidity metric measures the number of days the Group would survive if it used liquid assets to cover lost liquidity from a wholesale deposit run-off (without possible renewal) over a set

time horizon. We also use it as an internal short-term liquidity metric to reduce risk from dependence on wholesale funding

d) Net stable funding ratio

The net stable funding ratio (NSFR) is a regulatory metric we use to measure long-term liquidity risk. It is the ratio of available stable funding to required stable funding. It requires banks to keep a robust balance sheet, with off-balance-sheet assets and operations financed by stable liabilities.

e) Asset encumbrance metrics

We calculate two metrics to measure asset encumbrance risk. On the one hand, the asset encumbrance ratio gives the proportion of encumbered assets to total assets; on the other, the structural asset encumbrance ratio gives the proportion of encumbered assets by structural funding transaction (namely long-term collateralized issues and credit transactions with central banks).

f) Other liquidity indicators

In addition to traditional tools to measure short and long-term liquidity and funding risk, Santander has a set of additional liquidity indicators to complement those and to measure other non-covered liquidity risk factors. These include concentration metrics, such as the main and the five largest funding counterparties, or the distribution of funding by maturity. Additionally, we calculate a number of metrics on the institution's ability to generate liquidity through collateralized financing, such as overcollateralization, eligibility ratios assets without charges and deadlines for their placement.

g) Liquidity scenario analysis

Our four standard liquidity stress test scenarios are:

i. an idiosyncratic scenario of events detrimental only to Santander;

ii. a local market scenario of events highly detrimental to a base country's financial system or real economy;

iii. a global market scenario of events highly detrimental to the global financial system; and

iv. a combined scenario of the most severe idiosyncratic and local and global market events, occurring simultaneously in an interconnected manner.

We use these stress test outcomes as tools to determine risk appetite and support business decision-making.

h) Liquidity early warning indicators (EWI)

The system of early warning indicators (EWI) consists of quantitative and qualitative liquidity indicators that help predict stress situations and weaknesses in the funding and liquidity structure of Santander entities. External indicators relate to market-based financial variables; internal indicators relate to our own performance.

i) Intraday liquidity metrics

Santander follows Basel regulation and calculates several metrics and stress scenarios for intraday liquidity risk to maintain a high level of control.

4.7 Liquidity risk key metrics

Santander's sound liquidity and funding situation stands on a decentralized liquidity model. Each subsidiary manages its own liquidity independently, keeping a large stock of highly liquid assets.

In general, our LCR remained stable and well above the regulatory threshold. In 2021, our minimum required LCR was 100% and our risk appetite limit was 110%. We calculate and monitor this metric every day.

We manage liquidity buffers effectively to maintain a sound risk profile within regulatory limits and a profitable balance sheet. They mostly consist of level 1 assets: cash and sovereign debt, adequately diversified by currency according to the Group's balance sheet needs.

Our subsidiaries have a sound balance sheet and stable funding structure, supported by a large base of customer deposits, low dependence on short-term funding and liquidity metrics well above local and corporate regulatory requirements and within risk appetite limits.

The regulatory NSFR of our core subsidiaries and the Group remained above the regulatory requirement and internal risk appetite. In June 2021, we adapted our metric calculation to the new implementing technical standards (ITS) in the EBA's Reporting framework 3.0.

Our main sources of structural asset encumbrance are collateralized issues (e.g. securitizations and covered bonds) and credit transactions with central banks with collateral. The higher asset encumbrance from 2020 carried over into 2021 on the back of more appeals to central banks by using the management drivers provided for the covid scenario. Santander's asset encumbrance is consistent with the other European banks'.

As demonstrated by stress scenarios run under uniform corporate standards, the balance sheets of Santander's units are robust. Under the worst scenario, every unit would survive and handle liquidity needs with nothing more than its liquidity buffer for at least 45 days.

Santander has worked to introduce intraday liquidity risk management into its main metrics by setting daily limits and warning indicators to help anticipate contingencies.

For more details on liquidity metrics, see section 3.4 'Liquidity and funding management' of the chapter on Economic and financial review.

4.8 Pension and actuarial risk management

Pension risk

Santander covers financial, market, credit and liquidity risks from the assets and investments of employees' defined benefit pension funds, as well as actuarial risks from pension obligations. We aim to recognize, measure, control, mitigate and report on pension risk and all its sources. We estimate combined losses each year on assets and liabilities under a stress scenario that accounts for shifting interest rates, exchange rates, inflation, stock markets, property values and credit spreads.

In 2021, the markets' effect on our pension risk was positive mainly because of higher discount rates in our main geographies. Also, Santander took measures in core units to reduce exposure to actuarial and pension risk.

Actuarial risk

Actuarial risk stems from biometric changes in defined benefit recipients and life insurance policyholders' life expectancy; from suddenly higher non-life insurance payments; and from

policyholders' unexpected behaviour to file claims covered by insurance policies.

These are the actuarial risks we distinguish:

- Life liability risk: risk of loss on liabilities due to changing risk factors that affect pension obligations. We split it into:
  - mortality/longevity risk: risk of loss on liabilities due to death or survival rates that exceed expectations.
  - morbidity risk: risk of loss on liabilities due to changes in estimated policyholder disability or incapacitation rates.
  - surrender/lapse risk: risk of loss on liabilities due to early policy surrender or changes in policyholders' exercise of withdrawal rights, extraordinary premium payments or suspension of premium payments.
  - expense risk: risk of loss on liabilities from negative shifts in expected costs.
  - catastrophe risk: losses caused by catastrophic events that increase the bank's life insurance obligations.
- Non-life liability risk: risk of loss on liabilities from risk variations that increase Santander's non-life payment obligations towards employees. We split it into:
  - premium risk: loss from insufficient premiums to cover future claims.
  - reserve risk: loss from insufficient reserves for unpaid claims (including management costs).
  - catastrophe risk: losses caused by catastrophic events that increase the bank's non-life insurance obligations.

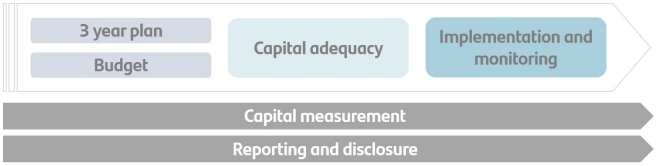
5. Capital risk

5.1 Introduction

Our structural risk includes the risk of insufficient quality or quantity of capital to meet internal business objectives, regulatory requirements and market expectations.

Our Capital Risk function, which is part of our second line of defence, controls and oversees first-line capital management. It checks that our capital adequacy and coverage match our risk profile. It also approves and monitors transactions that could be significant risk transfers (SRT).

It brings together capital planning, budget execution and tracking, and the ongoing measurement, reporting and disclosure of capital data (described below).



The Capital Risk function controls and oversees the capital activities carried out by the first line of defence. These activities split into four workflows to ensure monitoring is adequate to Santander's risk profile:

- **Capital planning:** internal process to determine capital levels and returns according to our strategy. Because we must ensure solvency and efficiency of capital, we identify the necessary measures to achieve our capital ratios and return on capital targets.
- **Capital adequacy:** assessment of capital levels against the type and amount of risk assumed based on the risk profile assessment (RPA), our strategy and risk appetite. For more details, see section 2.4 'Management processes and tools' - Risk profile assessment and Risk appetite and structure of limits.
- **Capital risk measurement:** process to cover required actions to measure capital metrics, based on a set methodology for obtain final figures required. It also supports the stages of capital management, monitoring, oversight and control.
- **Origination:** assessment of our portfolios' capital efficiency for identifying securitization, risk mitigation techniques, asset sales and other capital optimization initiatives.

In 2021, the function continued to work on implementing capital risk operating model improvements across the Group. A key objective was to reduce the capital risk profile through more robust control and oversight environment, which we achieved by:

- revising and updating corporate and local capital risk procedures;
- improved traceability on capital planning;
- standardization of capital reporting under our common guidelines while adapting to local market and regulations; and
- following up regularly on local progress made on the TOM rollout.

Key initiatives 2021

The year 2021 saw economic recovery on the back of progress in the vaccination process and the gradual lifting of restrictions. Capital risk management focused on protecting solvency and making sure internal objectives were met. We identified and assessed the risks that could affect solvency and continuously monitored key metrics.

We closely track the evolution of our organic capital generation and securitizations plan and the impact of regulators' market risk and credit risk model reviews, such as the targeted review of internal models (TRIM) on low default portfolios; the new definition of default (NDD); and the amendments to counterparty credit risk (SA-CCR) and NPL provision regulations. We also checked the impact of market variables on capital levels. We continued to implement hedging policies to mitigate exchange rate volatility on our CET1 ratio.

The Capital Risk function periodically establishes uncertainty levels on budget execution, evaluating forecast possible deviations.

At year-end, our fully-loaded CET1 was 12.12%, above our 11-12% target. When including the minority interest acquisition of SC USA, which closed on 31 January 2022, and the announced acquisition of Amherst Pierpont Securities (APS) by Santander Holding USA - still subject to complete regulatory approval - , the fully-loaded CET1 ratio would be 11.96%, at the top of our 11-12% target.

The increase in fully-loaded CET1 ratio for the year is 23 bps, which reflects the strong organic generation of 118 bps based mainly on the year's profit and the growth in risk-weighted assets (RWA). This is supported by an adequate management, as well as by the recovery of the securitization activity.

In addition, we registered -49 bps from regulatory and model impacts and -46 bps from other items on the back of market developments.

Under IFRS 9 transitional arrangements, the phased-in CET1 ratio was 12.51% and the total phased-in capital ratio was 16.81%, comfortably meeting the ECB's 8.85% and 13.01% minimum levels, respectively. The fully-loaded leverage ratio was 5.21% and the phased-in ratio was 5.37%.

We kept all ratios above solvency appetite limits throughout the whole year.

For more details, see the section 3.5 'Capital management and adequacy. Solvency ratios' in the Economic and financial review.

5.2 Capital risk management

In the second line of defence, capital risk management can independently challenge business and first-line activities by:

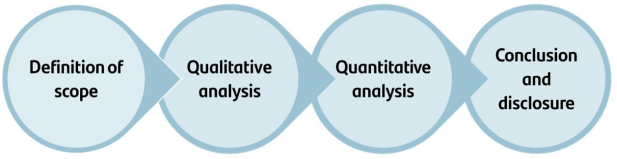
- reviewing key items affecting capital ratios to supervise capital planning and adequacy exercises.
- identifying key metrics to calculate regulatory capital; setting tolerance levels; and analysing significant variations and single transactions that impact on capital; and
- reviewing and challenging proposed capital actions according to capital planning and risk appetite.

Supervision of capital planning and adequacy exercises

The Capital Risk function reviews capital planning and adequacy exercises to make sure capital is consistent with risk appetite and the risk profile. Its core objectives are:

- ensuring the monitoring of Grupo Santander's significant risks in the course of its operations;
- checking that planning methodologies and assumptions are appropriate,
- confirming that results are reasonable and consistent with business strategy, the macroeconomic environment and system variables;
- assessing the consistency of exercises, especially ones that use baseline and stressed scenarios.

Capital planning and adequacy supervision follows these phases:



Definition of scope

Supervising capital planning and adequacy begins with proposed materiality based on the level of importance of subsidiaries' risk-weighted assets to the Group. It may include other units, businesses and portfolios (even if they are not significantly material) whose impact on strategy, compliance with the global plan or timely relevance might require analysis.

Qualitative analysis

We run a qualitative review of forecasting to ensure proper governance.

Quantitative analysis

We quantitatively assess metrics and components affecting RWA, available capital forecasts and pre-provisions net revenues (PPNRs). This phase requires proper coordination with subsidiaries to analyse local projections, which underpin group-wide projections and ensure traceability.

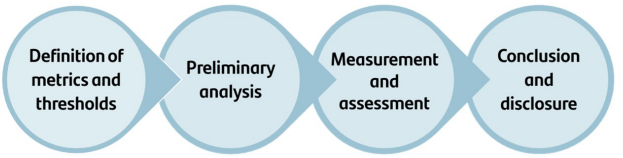
Conclusions and disclosure

Based on the outcomes of the capital planning and adequacy phases, Grupo Santander conducts a final assessment that covers the scope of analysis, detected weaknesses and areas for improvement. We report to senior management according to governance procedures, ensuring effective and constructive challenge of proposed capital plans from the second line of defence.

Ongoing oversight of capital measurement

Continuous monitoring of our regulatory capital measurement is an additional capital risk control function to ensure the right capital risk profile. We conduct a qualitative analysis of the regulatory and supervisory framework and a review of capital metrics and specific thresholds. We also monitor compliance with capital risk appetite to maintain capital levels above regulatory requirements and market expectations.

This function follows these phases and procedures:



Definition of metrics and thresholds

The function sets metrics and thresholds used in supervision every year to monitor and control capital risk. They consist of:

- Primary metrics, which cover capital ratios and numerator and denominator components at the highest level.
- Secondary metrics, which include a more extensive breakdown (for instance, credit RWA or the basis for measuring market RWA).
- Supplementary metrics for more detailed analyses.

Thresholds for certain metrics trigger a more detailed analysis and explanation.

The internal 'Capital measurement control metrics guidelines' outline these metrics, thresholds and sources of information.

Preliminary analysis

At this stage of the control process, we analyse qualitative issues, such as process governance and the regulatory framework. We review our capital management measures to fulfil supervisory authorities' recommendations and instructions.

Assessment and measurement

The Capital Risk function uses received information to review primary and secondary metrics, detect variations that might exceed defined thresholds and run a detailed analysis of the causes based on the supplementary metrics. If a subsidiary or global area is the cause of a threshold breach, it must provide the Capital Risk function with additional information on volume variations, one-off events, capital actions and other items.

We also monitor capital appetite metrics every month to check for excesses in the Group and our subsidiaries, which we report to the corresponding governing bodies every quarter.

Conclusions and disclosure

The body responsible for capital risk control analyses the report and conclusions. If needed, it will submit them to the second-line (capital

committee) or first-line (risk control committee) committees for deliberation.

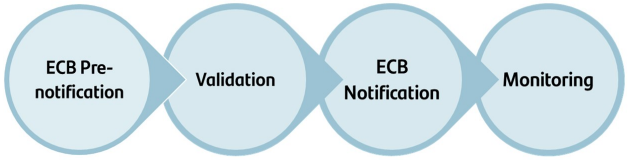
Securitizations oversight

The Capital Risk function oversees securitizations that might be significant risk transfers (SRT) originated by Santander, in accordance with articles 243 and 245 of Regulations (EU) 2017/2401 and 2017/2402.

Oversight is an essential prerequisite for synthetic and traditional securitization, especially if they can reduce RWA under regulatory standards. It aims to make sure that the Capital risk function analyses the conditions that could alter a securitization's SRT classification, namely:

- if it can effectively transfer risk;
- if it complies with all prudential regulation requirements;
- if its risk parameters follow our methodology; and
- if its economic rationale that meets group-wide standards.

SRT supervision is split into these stages:



- ECB pre-notification: The Capital Risk function issues an assessment before notifying the ECB of an intended securitization that may be an SRT.
- Validation: Capital and risk committees review the securitization based on the capital risk function's assessment to validate it.
- ECB notification: Submission of final securitization documents to the ECB take place no later than 15 days after the securitization's closing date.
- Monitoring: The Capital Risk function regularly monitors executed securitizations and reports its findings to the corresponding bodies.

5.3 Key metrics

Grupo Santander's strong capital position is consistent with our business model, balance sheet structure, risk profile and regulatory requirements. Our strong balance sheet and profitability enables us to finance growth and continue to accumulate capital.

Our model of subsidiaries with autonomy over liquidity and capital allows us to mitigate the risk that one subsidiary experiencing difficulties could affect others. Our capital metrics are stable, as ratios remain comfortably above the regulatory requirements and are consistent with senior management-approved risk appetite.

For more details, see the section 3.5 'Capital management and adequacy. Solvency ratios' in the Economic and financial review.

6. Operational risk

6.1 Introduction

In accordance with the Basel framework, Santander defines "operational risk" as the risk of loss due to inadequate or failed internal processes, people and systems or to external events. It covers fraud, technological risk, cyber risk, legal[37] and conduct risk.

Operational risk is inherent in all products, activities, processes and systems. It is generated in all business and support areas. All employees are responsible for managing and controlling the operational risks generated by their activities.

Our operational risk (OR) management and control model is based on a continual process of identifying, evaluating and mitigating sources of risk (regardless of whether they have materialized), ensuring that risk management priorities are established appropriately.

6.2 Operational risk management

Grupo Santander's operational risk management is based on the following elements:

Management and control model

Santander's operational risk model establishes the elements needed to manage and control operational risk properly according to advanced regulatory standards and best management practice. Its phases are:

- strategy and planning;
- identification, measurement and monitoring of risks and internal controls;
- implementation and monitoring of mitigation measures; and
- disclosure, proper reporting and escalation of relevant matters.

Operational risk management in Grupo Santander is underpinned by the following items:

- **Internal events database:** registry of operational risk events whose impact could be financial (e.g. losses, regardless of their amount) or non-financial (i.e. relating to regulation, customers or services). This information:
  - enables the analysis of root causes;
  - increases the awareness of risks for better operational risk management;
  - enables the escalation of relevant operational risk events to senior risk executives in the shortest time possible;
  - facilitates regulatory reporting; and
  - facilitates the economic capital model within the internal capital adequacy assessment process (ICAAP).
- **Operational risk and control self-assessment (RCSA):** a qualitative process that evaluates each area´s operational risks and assesses the control environment based on the opinion of experts from each function. Its purpose is to identify, assess and measure material operational risks that could prevent the business or support units from achieving their objectives. After assessing risks and internal controls, mitigating measures for risk levels above tolerance are identified.

  Our RCSA integrates specific reviews that allow to identify cyber, technology, fraud, third party supplier and other risk drivers that could lead to operational risk as well as the failure to meet regulations. In addition, the RCSA incorporates reviews related to conduct and financial crime risk (for more details, see section 7.2 'Compliance and conduct risk management').
- **External event database:** quantitative and qualitative information about external operational risk events. The database facilitates detailed and structured analysis of relevant events in the industry; the comparison of the Group and subsidiaries' loss profile; as well as the preparation for RCSA exercises, insurance and scenario analysis.
- **Operational risk scenario analyses:** identifies highly unlikely events that could result in significant losses for Santander, and establishes appropriate mitigating measures based on the assessment and opinion of experts from business lines and risk managers.
- **Key risk indicators**: indicators that provide quantitative information about Santander's risk exposure and control environment. The most significant indicators related to main risk exposure are part of operational risk appetite.
- **Risk appetite,** which has the following structure:
  - a global non-financial risk appetite statement, which asserts Santander's commitment to controlling and limiting: non-financial risk events that can or will result in financial losses; fraud events; operational and technological incidents; legal and regulatory infractions; issues associated with conduct; or reputational damage. While some losses are expected, high severity unexpected losses resulting from failed controls are not acceptable. This statement is associated with our loss and control environment metrics.
  - statements regarding technological risk, cyber risk, cloud, fraud, money laundering, product sales, regulatory compliance, model risk and supplier risk management, each with their own forward-looking monitoring metrics.

[37] Legal processes with an operational risk root cause.

- **Recommendations from internal audit, external audit and regulators**: provide independent information about inherent and residual risk, identifying controls and processes improvements.
- **Economic capital model:** a loss distribution approach (LDA) model that captures Grupo Santander's operational risk profile, with information collected from the internal loss database, external data and scenarios. It is mainly used to determine operational risk economic capital and estimate expected and stressed losses for operational risk appetite.
- **Other specific instruments** are used to analyse and manage operational risk; assess new products and services; manage business continuity plans (BCP); review and revise perimeters; and run quality assurance reviews.

Our management and reporting system for operational risk, Heracles, supports the operational risk programme and tools with a Governance, Risk and Compliance (GRC) approach. It provides information for management and reporting at subsidiaries and throughout the group. Heracles facilitates better operational risk management decisions by consolidating information, preventing duplication and simplifying reporting. To achieve this, we ensure that employees can have a timely, full and precise view of their risks by using a common set of taxonomies and methodological standards.

Implementing the model and initiatives

In 2021, we enhanced our operational risk model by:

- enhancing the risk appetite framework: establishing new metrics (inclusion of new internal control metrics and of a qualitative statement regarding cloud risk in risk appetite for 2022); and improving defined thresholds and measurements;
- developing models used to conduct an independent assessment of our risk profile and control environment to assist subsidiaries in their oversight and help to challenge the accuracy of local assessments;
- improving and progressing with our holistic risk assessment programme, in which each specialist second line monitors and contrasts the principal risks that are integrated within non-financial risks;
- improvements in the process to determine, identify and assess reference risks and standard controls with the objective of strengthening and ensuring consistency of our risk and control environment;
- establishing initiatives to assess climate risk as related to operational risk within our management model;
- improving the assessment methodology of the global cyber security transformation plan to identify and measure the reduction in risk due to the implementation of new information security developments;
- improvements to contingency, business continuity and crisis management plans, in coordination with the recovery and resolution plans, while also hedging emerging risks; and
- developing the methodology to analyse and assess transformation risk, with an approved operating model.

Operational resilience and business continuity plan (BCP)

Digital transformation is revolutionizing how banks operate, presenting new business opportunities. At the same time this structural change is also giving rise to new emerging risks such as technology risk, cyber risk and an increased dependency on third party suppliers, which increase the potential exposure to events that could affect the provision of services to our clients.

We are also witnessing changes in regulation that are increasingly focused on the importance of Operational Resilience, such as in the recently published Basel Principles for Operational Resilience; in the policy statement and final rules, Building the UK Financial Sector's Operational Resilience, by Bank of England (BoE), the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); and in the EU's Digital Operational Resilience Act (DORA). In particular, these regulations require banks to strengthen their ability to recover from disruptive events that could have an impact on their core business operations.

Grupo Santander is firmly committed to maintaining a robust control environment according to the best standards in the banking industry. This allows us to reinforce our operational resilience against potential disruptive events thus ensuring the provision of services to our customers as well as ensuring systemic stability.

A major pillar of our operational resilience is our business continuity management system (BCMS), which ensures the continuity of our business processes in all our subsidiaries in the event of a severe incident or disaster. It is a holistic management process that identifies potential threats and their impact to our operations and resources as well as defines the proper protocols and governance in order to provide an effective response. Its main objectives are:

- safeguarding people's safety in a contingency situation;
- guaranteeing that core functions are performed, and service is delivered to our customers;
- fulfilling our obligations towards employees, customers, shareholders, and other stakeholders;
- to comply with regulatory requirements;
- to minimize potential losses to Grupo Santander as well as the impact on business activities;
- to safeguard the bank's reputation and credibility, as well as our client's confidence in the bank;
- to reduce the effects of an incident by ensuring efficient procedures, priorities, and strategy for the recovery and restoration of business operations in a contingency situation; and
- contribute to a stable financial system.

The pandemic challenged the business continuity plan frameworks and strategies of our subsidiaries. While we did have to adapt some protocols, the crisis has demonstrated that Santander has a robust BCMS. In 2021, we continued to enhance and revise our BCMS incorporating conclusions and lessons learned from the management of the pandemic. In particular:

- revision of the scope and extent of the critical processes that should be considered in the definition and determination of business continuity strategy and plans (especially for prolonged contingencies);

- reinforcement of infrastructure and protocols to establish the possibility of remote working as a valid and effective strategic alternative within continuity plans;
- mandatory risk assessments and cost-benefit analyses in order to select the necessary continuity strategies for each contingency scenario identified;
- implementation of flexible solutions (such as robotics and the digitization of documents) in order to be able to respond quickly to the needs of our customers and business units during a contingency;
- development of a methodology and tool to manage and monitor the maturity level of subsidiary business continuity programmes.

In addition, we have formed a multidisciplinary working group led by the non-financial risk function in order to review the risk identification and management frameworks that are currently in place. The objective of the working group is to ensure proper coverage of the new Operational Resilience regulatory requirements.

Relevant mitigation actions

Grupo Santander continuously implements and monitors mitigation actions for major sources of risk identified by internal management tools and other external sources of information.

Fraud

The transformation and digitalization of the business has given rise to new risks and threats, such as more payment scams and credit fraud (fraud in origination). To mitigate these risks, we enhanced control mechanisms and designed new products. Strong customer authentication processes, in line with the EU's Payment Service Directive (PSD2), such as biometric validation (e.g., facial recognition) in customer onboarding and enhancing anti-fraud alerts in origination are becoming increasingly widespread to mitigate fraud risk.

To reduce fraud, Grupo Santander applies special measures in some geographies, such as:

- Card fraud:
  - Generalized use of chip and PIN (transactions with chip cards that require a numeric verification code) for all transactions in ATMs and stores, with advanced authentication mechanisms between ATMs, points of sale and Grupo Santander's systems.
  - Continuously improved card protection against e-commerce fraud, with a secure standard (3D Secure) via two-step authentication based on one-time passwords, mobile applications that enable card deactivation for e-commerce transactions, or virtual cards issuance with dynamic authentication passwords.
  - Use of a new biometric authentication system in ATMs and branches in Santander Brazil. Customers could use their fingerprint to withdraw cash from ATMs.
  - Continuous integration of monitoring and fraud detection tools with internal and external systems for better detection of suspicious activity.
  - Reinforced ATM security with new physical protection and anti-skimming elements, as well as improved logical security of devices.
- Online/mobile banking fraud:
  - Online banking transaction verification with a second security factor of one-time passwords. The evolution of technologies differ across geographies, e.g., the use of QR codes generated from transactional data.
  - Continuous improvements to online banking security with a transaction scoring system that assigns transactions a risk level, which trigger additional authentication when a given security threshold is breached.
  - Implementation of specific mobile banking protections, such as identification and registration of customer devices.
  - Monitoring of the e-banking platform security to avoid systems attacks.
- Forgery and identity theft fraud:
  - Enhanced fraud controls that verify the applicant's identity and the device used to submit the request.
  - Implementation of biometrics for customers and employees.
  - Transfer of the credit fraud prevention function to the Credit Risk area for enhanced mitigation of fraud in origination as well as strengthening of alerts.
  - New management and authentication platforms.

Cyber risk

In 2021, cyberthreats were more frequent and stronger, as hackers continued to enhance their capabilities. This is a trend that is expected to continue in coming years and the financial sector will remain a primary target. This trend as well as Santander's increasing reliance on digital systems, make cyber risk one of the top non-financial risks for the business.

Therefore, our objective is to make Santander a cyber resilient organization that can withstand, detect and rapidly react to cyber-attacks, while constantly evolving and improving our defences. We continue to enhance our cyber security controls, policies, and procedures according to our global cyber security framework and international best practices.

During 2021, several key strategic cyber security pillars and initiatives, described on section 5. Research, development & innovation (R&D&I) of Economic & Financial Review chapter, have been established to help Santander evolve its cyber defences in line with emerging threats and technologies.

In the second line of defence, the cybersecurity risk team developed and implemented a cyber risk management and control framework that assesses and evaluates the cyber risk profile and control environment of the bank. The main focal points have been:

- approval and implementation of an operating model that drives and steers the second line of defence cyber-risk function. The model provides a structured approach and enables effective and proactive risk management. It establishes the mission, principles, procedures, tools and required skills for cyber risk management;
- implementation of a holistic procedure across all second line functions to regularly measure and assess the cyber security control environment and risk profile. The assessment has been

integrated with the different Non-Financial Risk instruments and tools, which enables the second line of defence to provide an independent opinion and challenge of control effectiveness and risk reduction;

- simplification and automation of existing processes to improve operating performance. Creation of an automated tool enabling cyber risk data correlation, analysis and reporting, significantly reducing information gathering and consolidation to enable prioritization of risk management activities;
- establishment of group-wide governance to verify that subsidiaries have properly implemented the operating model and to ensure consistency of the risk control tools and procedures implemented across our footprint.

For more details on cyber security, see section 5 'Research, development and innovation (R&D&I)'.

IT risk

The process of digital transformation as well as Santander's mission to become the best open financial services platform requires that we constantly review, assess and improve our controls to mitigate and manage IT risk. Along these lines, the risk analyses that we perform on key transformation initiatives help us understand and escalate, as necessary, to senior management the risk profile of these initiatives in terms of inherent and residual risks.

Despite a demanding environment that is constantly changing, we have quickly adapted our technology to meet the new needs of our customers as well as meet new regulatory requirements. It is important to note that, even with the current digital transformation, total IT incidents at Group level have continued their downward trend in comparison with figures from previous years. For 2021 key aspects of our IT Risk Management programme are summarized below:

- The adoption of a risk-based approach to ensure we prioritize the necessary resources and corrective actions taking into consideration the criticality of our IT assets. These critical assets have corresponding risk appetite metrics that are used to monitor the level of IT risk in areas such as availability, obsolescence, and the application of security patches. We have made significant progress on reducing the level of obsolescence in key IT assets in all subsidiaries.
- As with cyber risk, we have developed and implemented an automated tool that enables IT risk data correlation, analysis, and reporting. This tool has facilitated information gathering and consolidation to enable the prioritization of risk management activities, allowing for more efficient supervision and oversight of IT risk.
- Detailed analyses of the most relevant IT risks as identified in our RCSA to gain an in-depth understanding of these risks, and ensure appropriate mitigation plans.
- The issuance of a new IT risk supervision and oversight policy that establishes common protocols and standards for the monitoring and controlling of IT risks, in conjunction with functional and governance aspects.

Supplier management

Our digitalization strategy sets out to offer our customers the best solutions and products in the market. This can entail an increase in third-party services and the use of new technologies such as cloud. In light of the increase in cyber risks and regulatory requirements, we continue to update and strengthen our supplier risk management model, internal control framework, and risk culture to properly assess and manage the risks in outsourcing and third-party agreements

In 2021, we adopted a risk-based approach that focused on those suppliers, in the different entities of the Group, that could increase the potential risk level in our operations and client services. We have implemented enhanced monitoring of those suppliers to ensure:

- they present an appropriate control environment in accordance with established Group policies and with the risk level of the service provided;
- business continuity plans are in place to guarantee the delivery of the service even in the event of a disruption;
- the proper controls are in place to guarantee the protection of information processed during the provision of service;
- contracts and third party agreements include the required clauses to protect the interests of the Group and our customers, while providing coverage of the legal obligations in force;
- regular monitoring of these providers is carried out, with particular attention to the monitoring of service level agreements and to the regular testing of the provider's business continuity plans; and
- exit strategies are defined, including reversion or migration plans, particularly for those services with a high impact on business continuity and complex substitution.

We began the implementation of a new certification process to ensure our suppliers follow the same ESG sustainability standards and criteria. Santander has defined ESG sustainability as integral to our way of operating and doing business.

Lastly, we revised our supervision methodologies and tools to enhance the monitoring of third-party risk in our subsidiaries.

Other key mitigating actions

We are constantly improving our risk mitigation measures related to customer, products, and business practices. Santander has specific frameworks and policies on the marketing and selling of products and services; customer complaint handling and analysis; financial crime prevention; and compliance with new regulations.

For more details on compliance risk mitigation, see section 7.2 'Compliance and conduct risk management'.

Insurance in operational risk management

Santander considers insurance to be a key component in the management of operational risk. The Own Insurance function is responsible for the use of risk transfer formulas to optimize and safeguard the bank´s financial results. The Own Insurance function, in collaboration with non- financial Risk (NFR), performs the continuous oversight and supervision of entities across the Group to ensure the proper application of policies and procedures to manage risk that is insurable. This collaboration is governed by:

- NFR participation as a permanent member in the quarterly Own Insurance forum.
- NFR attendance of the quarterly Claims forum, which monitors and enhances processes for loss recovery via insurance.
- Procedures outlining the interaction model between NFR and Own insurance, as well as other functions that correspond to the various insurance typologies (e.g. Facilities, Legal, etc.). These procedures ensure the proper management of insurance throughout the entire process of identification, assessment, transfer, and retention of risk.
- the coordination on an annual basis of the mapping of risks to insurance across the Group, with the objective of monitoring the effectiveness of insurance coverage, and identifying and correcting any potential gaps in coverage.

We continue to adapt the use of insurance to align our management with changes in the risk environment. As a result, we have expanded our analysis and implemented coverage related to climate-related risk, the digital environment, and other elements. To respond to these and other transversal risks, Santander has global insurance programmes for property damage, general civil liability, fraud, expenses arising from cyber security breaches, and third-party claims against directors and officers of the Group (D&O insurance). These global policies are complemented by local insurance policies that adapt to the characteristics of each subsidiary and are purchased according to the Own Insurance risk management model implemented in each geography.

Analysis and monitoring of controls in Santander Corporate & Investment Banking

In 2021, SCIB maintained normal activity and its robust internal control environment without major incidents. Preventative measures related to the pandemic continued to be applied and were consistent with recommendations by local authorities.

Given the nature, specificity and complexity of financial markets, SCIB improves operational risk management and control on a continuous basis. The following enhancements were implemented in 2021:

- Continued to monitor the risk of unauthorized trading via a specific risk appetite metric that measures the periodic assessment of key risk mitigation controls. Global guidelines were updated with new requirements. We continued to strengthen the control framework by performing the regular review of controls, as well as incorporating reports to facilitate the holistic supervision and monitoring of markets' activity.
- Increased incident and risk surveillance to make resolution quicker and operational risk mitigation measures more effective.
- Continued to enhance processes and drive the operational excellence of services provided to our customers by reinforcing a culture of quality and promoting the best standards in all SCIB geographies.
- Strengthened the governance and oversight of third-party risk management through the creation of a specialized function within the division to mitigate the risks inherent in our business.
- Advanced the maturity of the control framework that covers cyber security risks with special focus on the risks related to data leaks, vulnerability management (ransomware), identity management and access control.
- Continuous improvement of the control model related to regulatory requirements such as MiFID II, the Dodd-Frank Act, EMIR, IFRS 9, GDPR and other regulations.



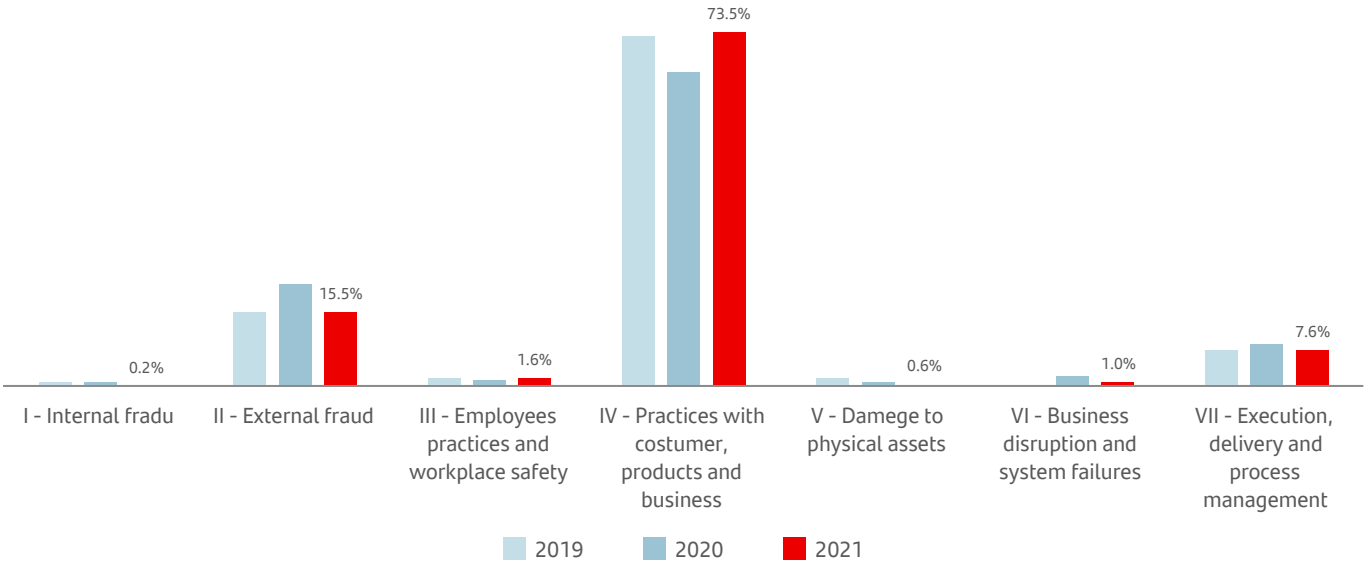
For more details on regulatory compliance in markets, see section 7.2 'Compliance and conduct risk management'

6.3 Key metrics

Net losses (including incurred losses and net provisions) as per Basel[38] risk categories for the last three years were:

NET LOSSES BY OPERATIONAL RISK CATEGORY[A]

(% o/total)



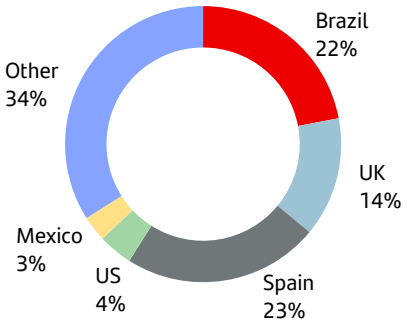
A. Excluding employee litigation from Santander Brazil

Losses due to Fraud, as well as those due to Processing errors were lower than in the previous year. However, Customers, products and business practices losses increased.

The chart below shows net losses by country:

NET LOSSES BY COUNTRY[A]

(% o/total)



A. Excluding *Trabalhistas* events from Brazil

Santander considers employee litigation in Santander Brasil to be a staff expense. Our governing bodies continuously monitor expense levels with specific risk appetite metrics and take special actions to reduce them. These expenses are reported under the categories defined by the Basel Operational Risk framework.

In 2021, the most significant losses by geography are related to litigation in Santander Brazil (with ongoing root cause analyses of the main products), Poland and Spain (due to legacy cases). Additionally, the amount of losses in the US continues to decrease due to a reduction in legal cases provisions.

[38] The Basel categories incorporate risks which are detailed in section 7 'Compliance and conduct risk'.

7. Compliance and conduct risk

7.1 Introduction

According to our three lines of defence model, the Compliance and Conduct risk function is an independent control function within the second line of defence. It reports directly and periodically to the Board of Directors and its committees through the Group Chief Compliance Officer (GCCO).

The Compliance and Conduct function, as the second line of defence, will facilitate critical and independent debate. It will also exercise oversight and control of the first line of defence's management of regulatory compliance, product governance and consumer protection, financial crime compliance, and reputational risk. Additionally, it will ensure that risks are managed in accordance with the risk appetite formulated by senior management while assessing the impact on our risk appetite and risk profile.

The responsibility of the second line of defence includes the obligation to inform the relevant governance bodies when necessary, of risks, risk appetite and risk excesses. It should adopt and promote a common risk culture and provide guidance, advice and expert judgment on all relevant matters relating to compliance and conduct business.

The compliance program is one of the key processes of the compliance and conduct risk function and details the main activities to be developed throughout the year. The parent company and each of the subsidiaries execute a compliance program appropriate to their size and complexity which is structured around the four management areas mentioned above, being a key tool that enables the supervision of our subsidiaries and the control environment.

7.2 Compliance and conduct risk management

The compliance and conduct risk ensures compliance with the General code of conduct ("GCC") under the supervision of the compliance and the risk supervision, regulation and compliance committees. The GCC dictates the ethical principles and conduct rules that must govern our employees' work. It is to be understood and applied along with all other internal regulation. It sets out:

- compliance functions and duties;
- the Group's general ethical principles;
- the general rules of conduct;
- the consequences for failure to comply;
- an ethical channel (*Canal Abierto*) to report possible misconduct in a confidential and anonymous manner.

Regulatory Compliance

The Regulatory compliance function monitors and controls regulatory risk from employees, data processing and market regulations (together with SCIB's compliance team). Its core areas are:

A. Employees

The Regulatory compliance function promotes a culture of ethics and compliance among our employees. It sets internal standards to prevent criminal risks, conflicts of interest and anti-competitive practices according to the GCC. It also manages *Canal Abierto*.

To enhance the Group's compliance system, in 2021 the function launched in our core units a competition law programme based on international standards and best practices from competition authorities. Its main elements are "Tone from the top", policies, training, awareness, identification of risk areas, risk domains, controls, *Canal Abierto* and disciplinary proceedings. It helped us reduce risk from failure to comply with competition regulation while tightening our monitoring and awareness so employees could recognize and report breaches.

This year:

- we updated mandatory employee training, with a message from senior management (Expanding "Tone from the top" is key to the cultural transformation needed for the programme to be successful).
- We enhanced our methodology for measuring competition risk.
- We drafted conduct guidelines so employees can recognize and report risk situations and seek advice from our Legal and Compliance areas.

Real ethics: Employees' compliance functions

Canal Abierto

- → Provide a channel for employees to report unethical conduct and breaches of internal regulation.
- → Manage and investigate reported cases.
- → Promote a culture of speaking up and truly listening.

Disciplinary proceedings

- → Investigate conduct that is misaligned with our ethics and compliance principles.
- → Assess disciplinary measures.

Appointments

- → Assess the suitability of the Group's board and senior management appointments.*

Competition Programme

- → Manage the Competition compliance programme.

* Carried out by the Corporate compliance function

Training and awareness

- → Develop and implement training programmes and awareness campaigns among employees on Corporate Defense and Employees compliance.
- → Issue messages about ethics to the entire Group and promote relationships built on trust.

Policies and procedures

- → Ensure compliance with the GCC and design special policies and procedures to enforce it.
- → Report to governing bodies regularly.

Queries about ethics

- → Manage queries from employees and members of governing bodies about ethics and internal regulation.
- → Provide ethical advice in controversial situations.

For more details on Canal Abierto and its management during covid-19, see section 'A strong and inclusive culture' of the Responsible Banking chapter.

B. Market abuse

The Market abuse function's Control room team applies the *Code of conduct in securities markets* (CCSM) to prevent risk from trading with or making unlawful disclosures of inside information and from market manipulation.

In 2021 the Surveillance team has worked together with the SCIB compliance area performing the monitoring of the traders and overseeing their trades and communications.

Control Room

Control of the personal operations of persons subject to CCMV and the flow of sensitive information.

Main achievements

- → Global Control Room: Initiated a strategic and multi-year project to remodel the Group's Control Room, aiming at creating a single team with members in different locations who assists to manage potential conflicts of interests arising from deals originated from the Group units.
- → Treasury Shares Activity: improvements have been made in the controls in place to ensure compliance with the Treasury Shares Policy approved by the Board.
- → Euribor: adaptation of internal procedures in accordance with the new requirements of the benchmark administrator, as part of the contribution process oversight.
- → Training: course update on the CCSM, which has been carried out by the 97% of the covered persons.
- → Countries Oversight: update of the countries supervision manual adapted to the new structure of the Control Room function.

C. Regulatory compliance is responsible for:

- Announcing the Group's relevant information to markets. This year, Banco Santander made public several inside information and other relevant information, which are available on the Group's website and on the *Comisión Nacional del Mercado de Valores's* (Spanish securities market commission or "CNMV") website.
- Disclosing transactions relating to own shares (CNMV) and major shareholding notifications of Banco Santander; and major shareholding notification and remuneration schemes of the Group's board members and senior managers (CNMV and other regulatory bodies of those markets where Santander share is listed).

D. Data processing

In 2021, Data processing focused on:

Data protection

- Adopting measures to comply with new regulation on international data transfers: identification of data flows and affected suppliers; impact analyses and additional guarantee proposals; and negotiation and signing of new agreements.
- Monitoring closely the Group's adaptation of digital assets to regulation on transparency obligations and consent management.

We have made significant progress on our control framework by updating our unit-monitoring programme, improving management metric traceability, enhancing reporting and monitoring tools, and expanding our perimeter to countries outside the European Economic Area (EEA). We also revised and approved a new corporate policy on data protection.

Foreign Account Tax Compliance Act (FATCA) and Common Reporting Standards (CRS)

Corporate oversight for automatic exchange of information for tax purposes between countries (pursuant to FATCA and CRS) focused on monitoring subsidiaries' regular reporting obligations and three-year FATCA certification under the 2 IGA model or by direct agreement with the US Internal Revenue Service (IRS).

E. SCIB markets regulation

SCIB's compliance team manages risks from core international market regulation that affects Banco Santander.

EU regulation	US regulation
It continued to reinforce its control environment to monitor compliance with EU regulation (market regulations, mainly MiFID and EMIR). It paid close attention to reporting and monitoring the quality of transactions. It also enhanced its system for monitoring the bank's high-frequency trading in real time.	It reviewed and adapted its swap dealer compliance programme to new cross-border regulation. It also reinforced its control environment to monitor compliance with US regulation. It implemented the security-based swap dealer compliance programme to meet imminent US Securities and Exchange Commission (SEC) requirements.

Product governance and consumer protection

Our product governance and customer protection function promotes that our actions are based on our customers' interests, regulation, our values and our principles by:



1 Promoting a culture with a Simple, Personal and Fair approach towards our customers:

- Establishing the consumer protection and conduct principles for marketing, customer engagement and the promotion of a solid culture, which are found in the Corporate framework of commercialization of products and services and consumer protection (and the internal regulation that builds on it).
- Running corporate and local product governance forums and escalating customer conduct risk monitoring and related issues to the compliance, risk and responsible banking committees.

2 Overseeing key procedures to make sure:

- our products will meet customer needs under the right balance of risks, costs and profitability;
- we are selling to the right target markets; providing transparent information; training our sales force appropriately; and implementing remuneration schemes centred on meeting customers' expectations; and
- our customer service, post-sale systems and processes are Simple, Personal and Fair, and we check for deterioration in products and services and process shortcomings to manage them promptly.

3 Managing risk by:

- making correct decisions; drawing up and tracking action plans; and keeping senior managers and statutory bodies properly informed;
- overseeing the design and execution of controls for marketing and customer relations; and assessing the second line of defence management and control model;
- identifying new risks in regulatory guidelines, industry practices, supervisor and auditor opinions and learning from internal and external events; and
- applying group risk assessment methodologies, such as customer survey analysis, management indicator tracking, thematic assessments and first-line self-assessments.

Our product approval governance operates on two levels. All subsidiaries have their own approval bodies to ensure new products and services will meet the needs of their target market, are being sold through the appropriate channels and processes, and have fair and transparent terms and conditions. Products and services classified as new are then escalated to the corporate product governance forum (CPGF) to be approved before launch. This two-tier approval system helps us share best practices and manage product and service risk in line with risk appetite.

In addition, the Fiduciary Risk function meetings follow-up that the investment products have a proper definition of their policies and that their management is carried out in a robust risk control environment, aligned with the Group's policy on approval, monitoring and control of fiduciary risks.

In 2021, the Product governance and consumer protection function introduced these new features in the design of products and services:

Adapting our products to the landscape:

- Analysis and transparency of our growing ESG product development.
- Replacement of IBOR indices with new risk-free rates.
- Management of Santander Corporate Investment Banking – ALCO proposals.
- Enhanced alternative investment propositions for professional and private banking clients that offer greater potential returns amid low interest rates.

Supporting our digital strategy

- Governance of PagoNxt proposals that are to be distributed across our footprint.
- Focus on elevating customer experience on digital channels, especially by removing difficulties in acquiring and cancelling products and services. Implementation of good practice in accordance with the Product governance and consumer protection function's Digital product and service design guide.

Key conducts risk lines of action in 2021

	Objectives	Lines of action
Vulnerable customers and special cases	Effective protection of vulnerable customers and special cases (including, but not limited to, people affected by Covid).	→ Global vulnerable customer strategy and support to units for its roll-out. → Monthly monitoring of collection and recovery indicators.
Customer focus	Research into big data and artificial intelligence analysis on customer survey findings and business indicators.	→ Development of a root-cause analysis methodology for customer complaints. → Creation of consumer protection indicators.
Sustainable products and services	Support in collaboration with the Risk and Responsible banking functions on projects relating to the Group's transition towards a more sustainable economy.	→ Transparent information on the investment products and services we offer to retail customers. → ESG risks embedded in our management through measurement tools and methodologies. → Meeting our customers' sustainability preferences.
Awareness and accountability of the first line of defence	Ongoing raising of awareness by the business and support functions of conduct risk prevention and management.	→ Mandatory conduct training; risk and control self-assessment exercises; and the creation of working groups led by the first line. → First line teams' remuneration linked to conduct and quality. → Medium-term project to come up with a rating scheme (conduct branch rating) to promote conduct risk management in our employees' work.
Control	Further strengthening of retail conduct risk management with a focus on continuous improvement.	→ List of standard controls that all geographies must perform when marketing products and services, and awareness of local controls. → Spotting areas for improvement and including them in other risk assessment exercises for more robust monitoring in risk-based testing.

Financial Crime Compliance (FCC)

Financial crimes are universal, globalised phenomena that take advantage of the international economy, and thus their detection, deterrence and disruption call for a coordinated global response by the international community and the financial sector. Santander Group is wholly committed to the fight against financial crime and does not tolerate compliance failures with financial crime regulations both internationally and in the countries in which it operates.

The business functions within the Group maintain the primary responsibility for managing financial crime risk and to support and promote the organization's risk culture. The FCC Function in turn is responsible for monitoring and overseeing financial crime risks and for ensuring adequate policies and procedures have been implemented to manage the business within the Group's established risk appetite.

In 2021, the Board of Directors approved an expanded FCC Corporate Framework, which establishes:

- The principles that must be adhered to by entities of the Group in relation to the prevention of financial crime;
- The roles and responsibilities for effective financial crime risk management;
- The key FCC processes to be developed and embedded within the entities of the Group in compliance with the Group policies and procedures that must be adopted locally; and
- The essential features of FCC governance at a Corporation and local level.

Under this expanded FCC Corporate Framework, the scope of financial crime related risk includes not only money laundering, terrorist financing, and the violation of international sanctions programmes, but also bribery, corruption, tax evasion and external fraud, as well as any other priority criminal activity reportable under AML/CFT regulation.

The Group has significantly advanced the FCC strategic transformation plan over 2021, initially defined in 2020, designing a bank-wide FCC target operating model that reaffirms the role of the business functions in assuming responsibility and accountability for managing financial crime risk. The strategic transformation plan continues to work toward the centralization of key FCC controls along with their maintenance and calibration. The transformation plan embraces the responsible use of automation, artificial intelligence and machine learning, and the use of reliable third-party data sources, all to improve financial crime risk management, enhance the customer experience, and give the business the necessary risk management tools to continue to pursue financial inclusion initiatives.

The on-going implementation of the FCC strategic transformation has relied on a series of successes over 2021, including:

- The transposition of enhanced policies and procedures, tracking control implementation on a country-by-country, control-by-control basis;
- The establishment of a legal framework that will facilitate over the long-term inter-group information sharing;
- Continued intensive subsidiary oversight to ensure country-by-country advancements on key FCC pillars;
- The addition of new members to the FCC Corporate Forum, increasing the representation of accountable stakeholders from the business functions;
- And regular key risk indicator reporting and an annual FCC risk and controls self-assessment exercise, paired with a risk-pro culture that encourages self-identified issues and the identification of risk events.

Highlights over 2021 in key activities include:

221
subsidiary reviews (+3% vs. 2020)

150,343
disclosures to authorities (+64% vs. 2020)

315,512
investigations conducted

164,547
employees trained

In addition, the FCC Function implemented over 2021 a significant FCC upskilling training initiative in line with the expanded FCC corporate framework. Further, following a series of successful group-wide awareness sessions in 2020, over 2021 the FCC introductory training module was fully redesigned to highlight, for example, risks associated with crypto-assets, compliance challenges faced in designing innovative digital products, trends in responding to complex international sanctions regimes, and awareness on drug trafficking, human trafficking and online child sexual exploitation risks, and environmental crime.

The Group continues to play a leading role in key industry groups and public-private initiatives, including as a founding member of the Wolfsberg Group, a representative on the Europol Financial Intelligence Public Private Partnership (EFIPPP) Steering Group, a member of the United for Wildlife Financial Taskforce, a member of the European Banking Federation, and a frequent contributor to private sector consultations from the Financial Action Task Force (FATF). Notably in 2021 the Santander FCC Function was asked by the FATF to represent the private sector in an awareness-raising webcast on environmental crime, and the United Nations Office on Drugs and Crime (UNODC) named the Santander FCC function as the chair of the UNODC's quarterly Private Sector Dialogue on Disruption of Financial Crimes Related to Forestry Crimes.

Reputational risk

Santander classifies reputational risk as the risk of loss due to damage to the bank's reputation among employees, customers, shareholders, investors and broader society. It may come from various sources or even other risks relating to business and support operations; the economic, social and political climate; and events involving our competitors.

Our reputational risk model is based on a preventive risk management and control approach, with effective handling of early warnings and monitoring of events and detected risks. This requires regular update and review of the Group's risk appetite and preventative risk management and control.

Key actions in 2021:

We continued to enhance our risk management and control, as well as reviewing and updating our action guidelines for certain areas. These were the most significant actions we took:

- Revision of the Group's policies on the defence industry and other sensitive industries, including new standards for banking in the cannabis, tobacco, defence and other sensitive industries as well as for social contributions.
- New operating procedure approved by the Group and subsidiaries to analyse reputational risk in a broader scope of activities.
- New guidelines for supplier reputation assessments.
- Reputational impact analysis, prevention and mitigation measures and best practices on branch and workforce restructuring in Europe.
- E-learning modules for all corporation employees. Thematic reputational risk training sessions with the business, risks and support functions on sensitive transactions and customers, and general awareness for employees across our footprint.
- Global reputational risk assessment that involved all corporate risk management and control areas as well as all key group units to draw up a more comprehensive risk road map.
- A new reputational risk tool that assesses stakeholder perception of the bank and finance industry.
- Earlier and more coordinated risk management as part of forward-looking reputational risk analysis.
- More advanced reputational risk approach for measuring global risk profile.
- Better governance and challenge in oversight of subsidiaries.

8. Model risk

8.1 Introduction

A model is a system, approach or method that makes quantitative estimations based on statistical, economic, financial or mathematical theories, techniques or assumption about data. Its simplified representations that contrast real and observed trends help Grupo Santander focus on specific aspects. In particular, we use models for approval (scoring/rating), capital calculation, behaviour, provisions, market risk, operational risk, compliance and liquidity.

Models risk is the risk of loss from inappropriate, inaccurate or misused models in decision-making. Sources of model risk can be:

- incorrect or incomplete data in the model itself or the modelling method used in systems;
- incorrect use or implementation of the model.

Model risk can prompt financial loss, poor commercial and strategic decision-making or damage to Grupo Santander's transactions.

We have been defining, managing and controlling model risk for several years. The Model Risk function has been enhanced and consolidated across corporate and our core subsidiaries.

To ensure adequate model risk management, we have a set of policies and procedures that establish the principles, obligations and procedures for organizing, governing, managing and approving models throughout their life cycle.

We monitor model risk according to each model's level of importance. Through tiering, we synthesize the level of importance of non-regulatory models and determine how intense risk management should be. As regulatory models are particularly important to Grupo Santander, we subject them to more intense monitoring and management.

We implemented our multi-year Model risk management (MRM) 2.0 strategy to manage model risk better according to regulatory standards (e.g. ECB guide to internal models, 2018). Upon concluding in 2021, MRM 2.0 included several initiatives that strengthened our Model risk function, such as:

- Streamlining: It helped us take risk-driven measures to simplify processes involving regulatory model management and other important operations for the Group.
- Regulatory models (IRB and IMA): To fulfil regulatory requirements and the EBA's new guidelines, we scaled back our mapping of regulatory credit risk model portfolios.
- Validation: We continued to reinforce the Single Validation Office, which guarantees consistent and well-coordinated validation of the Group's models.
- Model risk facilitators: We made additional improvements to our infrastructure and tools and helped spread the model culture across the Group. Real-time information from advanced digitalization enhanced decision-making.

In addition to MRM 2.0, we have made further progress on the two regulatory credit risk and market risk model projects under way that focus on the targeted review of internal models (TRIM), internal model inspections (IMIs) and compliance with new regulation.

Our main aim will be to keep building up our IRB and IMA management in line with ECB requirements for 2022, especially the new EBA Repair Programme due to take effect in January. In 2021, we submitted several model changes to the ECB for authorization, which entails a lengthy review that will carry on into 2022 and require the Model risk function's full cooperation. We anticipate sending additional model changes to the ECB in the coming years.

8.2 Model risk management

Model risk management and control are structured processes known as the model life cycle and consist of the following phases in Santander:



Identification

Model risk control must include identified models. For sound management, a complete inventory of models in use is key.

Our centralized inventory system, which has uniform taxonomy and detailed information for all the models that business units use, enables us to monitor them closely according to their level of importance and tiering.

Planning

This is an internal annual exercise, approved by our subsidiaries' governance bodies and validated by the global team. It formulates strategic measures for models managed by the Model risk function and pinpoints needs for any models to be created, revised or used during the year.

Development

Development is the model-building phase. It is based on econometrics and run by methodology experts. Model development considers each unit's needs in line with the annual model plan.

To guarantee model quality and consistency, it must apply the common group-wide methodology formulated by the global team. Models & Data unit aims to make model development a more efficient and more centralized process that builds on shared synergies.

More detail see section 2.5 'Models & Data Unit' of this chapter.

Internal validation

Independent model validation is a regulatory requirement and key feature of our model risk management. A specialist unit that is totally independent from developers and users issues technical assessments of internal model suitability. The validation opinion for each model is expressed through a rating that summarizes the model risk associated to it. Validation intensity and frequency are well-defined and risk-driven.

Validation covers theory, methodology, technological systems and data quality to ensure effectiveness. It also involves a detailed analysis of model performance and other risk management elements (e.g. controls, reporting, uses and senior manager involvement).

One internal validation task is the consistency analysis conducted by validators to review the severity and ratings. It acts as an important point of control to ensure the homogeneity and comparability of validation tasks.

Validation tasks only conclude after the consistency analysis phase. The Single Validation Office also plays an important role to ensure consistent validation of the Group's models.

Approval

Before we can use a model, internal governing bodies must approve it through a governance circuit in place for our model inventory, based on their level of importance.

Deployment and use

In this phase, newly developed models are added to computer systems. Because this creates another source of model risk, technical teams and model owners must run tests that verify proper model integration based on methodology and intended function.

Monitoring and control

We must regularly review models to ensure that they function correctly or, otherwise, adapt and redesign them. Model risk monitoring teams must make sure models are managed according to the general model risk framework and internal rules and principles.

9. Strategic risk

9.1 Introduction

Strategic risk is the threat of loss due to poor strategic decisions or their deficient implementation that affect our core stakeholders' medium-to-long-term interests or to an inability to adapt to a changing environment.

Because Grupo Santander's business model is pivotal to strategic risk, it has to be viable and sustainable and should produce results in accordance with the Group's annual targets (particularly the next three years) and long-term outlook.

Strategic risk has three components:

1. **Business model risk,** which includes the risk that the Group's model will become obsolete or irrelevant; or that it will lose value and not produce desired results.
2. **Strategy design risk,** which relates to the strategy and assumptions set out in Grupo Santander's long-term plan (including the risk that the plan will not be up to par), which could result in a failure to deliver expected results.
3. **Strategy execution risk,** which involves the three-year financial plan; internal and external impacts; the inability to react to changes in the business environment; and risks associated with corporate development transactions.

9.2 Strategic risk management

Grupo Santander views strategic risk as a cross-sectional risk and has a target operating model that our subsidiaries use as a reference. The model covers the governance, procedures and necessary tools for robust monitoring and control according to the board-approved risk appetite statement.

We constantly monitor changes in competition, regulation and market conditions as well as within the bank to determine whether we need to revise our strategy and verify any mitigating factors and resolution plans in place. The strategic risk function engages key first- and second-line teams to make sure measures are primed for immediate implementation in case they are needed.

In 2021, the main strategic focus was to see how economic recovery fared against the uncertainty fuelled by new covid-19 variants and progress of global vaccination campaigns and especially in our markets. We also continued to monitor the progress of our transformation projects, which are key to meeting our objectives. Our proactive and effective response to business challenges meant our strategic risk profile was once again medium-low.

While our long-term strategy remains valid, our success is increasingly dependent on our customer focus (i.e. "think customer"). Boosting our revenue, profitability and value hinge on increasing customer numbers, loyalty and satisfaction.

Our strategic risk model is based on:

- **Challenging strategic plans:** With the support of specialized functions within the Risk division, the Strategic Risk function challenged the three-year financial plan, including a specific chapter in the final plan that identifies potential threats and changes in the environment that could jeopardize strategic objectives. In 2021, we closely monitored the key digital transformation projects that underpin our plan: One Santander (common operating model), PagoNxt and Digital Consumer Bank.
- **Top risks:** Under stressed scenarios, Grupo Santander identifies, measures, monitors and manages risks that could have a significant impact on results, liquidity or capital.

  The first and second line of defence work with our subsidiaries to identify top risks, which are also added to idiosyncratic scenarios in exercises like ICAAP, ILAAP and the Group's viability and recovery plans.

For more details on top risks, see section 1.3 'Santander Top and emerging risks' of this chapter.

- **Analysing business model performance:** To measure and identify the main threats to the bank's business plan and strategic objectives, based on four pillars that bring together retrospective and prospective analyses.
  - Strategy execution (retrospective): Measurement of the risk of deviation from the plans and targets set in the board-approved strategy and strategic and transformation initiatives, which are deemed crucial to addressing strategic priorities.
  - Viability and sustainability (prospective): Measurement of the risk that the business model will fail to create shareholder value or will perform poorly. We also assess the bank's position in relation to competitors.
  - Business plan volatility (retrospective): Measurement of the risk that our income statement planning is unstable and that profits will not be recurrent in the long term.
  - Likelihood of meeting strategic objectives (prospective): Risk of failing to achieve the strategic objectives set in the financial plan, based on the threats uncovered in the top risks exercise.
- The strategic risk and corporate development and strategy functions prepare the strategic risk report to measure and monitor the strategy and its risks. It is presented to senior management and includes an update on strategy execution, strategic projects, corporate development transactions, business model performance, top risks and the risk profile.
- **Commercialization of new products:** The strategic risk function helps assess and validate new product and service proposals before Grupo Santander launches them, ensuring alignment with the approved strategy.
- **Corporate development transactions:** With the support of other functions within the Risk division, the strategic risk function makes sure risk assessments are carried out on the impact of these transactions on our risk profile and risk appetite.

10. Climate and environmental risk

10.1 Introduction

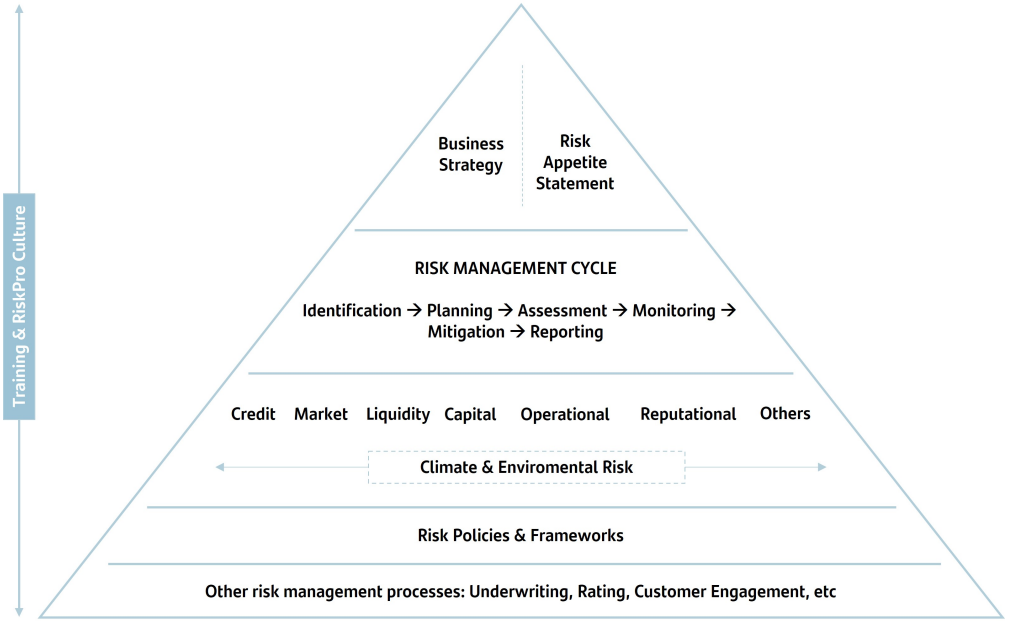
Climate-related and environmental risk management is key to fulfilling our objectives and the commitments in our climate strategy sustainably. Santander takes aiding customers' and households' transition to a low-carbon economy seriously, offering financial products and services to environmentally and socially responsible businesses in keeping with our sustainability commitments and the objectives of the Paris Agreement. For more details, see the Responsible banking chapter.

Santander has an environmental, social and climate change risk policy (available on its corporate website). It dictates the standards for measuring, monitoring and managing risks from oil and gas, power generation, mining and metals, soft commodities and other sectors that require in-depth analysis because of their potential impact on the environment and society. It is consistent, and must be applied, with the Group's policies on sustainability and human rights.

The Risk and Responsible banking functions oversee the annual revision of the policy alongside other business areas to make sure it will conform to international practices and standards and to the Group's sustainability strategy.

10.2 Climate-related and environmental risk management

Climate-related and environmental risk management is a priority of the Risk function. The graph below sums up how we've been integrating it within core processes and risk cycle phases (more details in the sections below).



Identification

Two core processes help Santander spot climate-related risks: top and emerging risk identification (see section 1.3 'Santander Top and emerging risks') and regular risk profile assessment — RPA — (see section 2.4 'Management processes and tools'). Here is how they form part of climate-related risk management.

In identifying emerging and top risks, we pinpoint and measure our most significant internal and external threats to profitability, capital adequacy and strategy. Since 2018, our four top risk event categories have included a climate and environment subcategory. Our analysis covers qualitative as well as quantitative factors (which we've been developing further as more data and new methodologies become available).

As the Group makes progress on its climate-related commitment, it shows us how the importance of climate-related and environmental risks and the mounting pressures from regulators, supervisors and broader society have grown in recent years. The table below shows certain climate matters that could influence the types of risks within our framework over various time horizons. Santander deems climate-related and environmental risk a cross risk, as climate drivers could influence other risks.

Climate Risk Type	Climate Drivers		Main affected Time Horizon
Transition Risk	Market & Customers	→ Change in consumer behaviours including deliberate move to more sustainable products → Potential loss of competitive advantage with our green product proposition or pricing risks → Increased market volatility and cost, sourcing restrictions for carbon heavy raw materials	Short - Medium Term
	Policy-Making	→ More demanding policy environment affecting our customer's business operations → Increased green house gas (GHG) emissions pricing to foster movement to renewable sources	Short - Medium - Long Term
	Technology & Data	→ Investment in technology to reduce emissions or improve energy efficiency ratings → Lack of procedures and systems to obtain and store reliable data for risk assessments and disclosure	Medium Term
	Regulatory Pressure	→ New public disclosure products which increase the risk of misrepresentation, increased regulatory requirements which increases the potential of non-compliance, increased use of external analytics providers which increases the potential for data privacy breaches, all of which could result in fines, payment of damages and the voiding of contracts → Increasingly demanding banking regulation (disclosure, stress testing, taxonomies, etc) → Inefficiencies as consequence of different climate regulations, with special attention in those financial entities with international scope	Short - Medium Term
	Reputational	→ Risk of slow, lack or not sufficient reaction from financial entities impacting its reputation; extreme events that would cause damages to financial entities and employees own sites could challenge, if readiness response plans fail, the ability of the banks to prompt react to restoration of service and customers attention in vulnerable situations due to the damages → Increased scrutiny from different stakeholders (e.g. supervisors, regulators, media, NGO's, shareholders, investors, etc) → Perceived not to be meeting, sufficiently progressing, or providing transparency on climate-related commitments and transitioning → Liability implications as an intermediary in several value chain (e.g. data, products, financial services) → Reputational impact from potential misalignment of emissions reduction commitments with performance in specific portfolios	Short - Medium - Long Term
Physical Risk	Acute	→ More frequent and severe climate events such as flooding, drought, etc, that could affect financed assets and the value of the collaterals	Short - Medium - Long Term
	Chronic	→ Alterations in weather patterns and stability of local ecosystems affecting food production and living environment. → Rising temperatures affecting working conditions, living conditions and local infrastructure. → Rising sea levels affecting local ecosystems, increasing subsidence and flood risks	Long Term

Findings from emerging and top risk identification fuel our internal capital and liquidity adequacy assessment processes (ICAAP and ILAAP). For instance, our 2021 ICAAP included an idiosyncratic event to show climate change's potential impact on measurement.

The risk profile assessment (RPA) is the second topic of this section. Santander regularly conducts an RPA that covers all risk types and reveals any threat to its business plan. In 2021, we added a special module on climate-related risk control to measure the Corporate Centre and the other subsidiaries'' progress. The questionnaire covers strategic planning, implementation, control and monitoring, and governance. Its findings enable us to find gaps and areas for improvement. The questionnaire will continue to change throughout 2022.

Planning

Strategic planning includes annual budgeting, the three-year financial plan (including risk in executing the Group's strategy, internal and external influence, inability to respond to a changing business environment) and the Group's long-term strategic plan (including risk from its own design).

Those core strategic processes enable the Group to plan for risks from the transition to a low-carbon economy and the physical impact of climate change, and introduce them into short-, medium- and long-term strategy, making it easier to spot threats and changing conditions that could influence our ability to deliver objectives. In qualitative and group-wide terms, plans cover priorities and projects for the coming years; in quantitative terms, they include a financial plan for the period that is consistent with the Group's risk appetite.

Assessment

To determine the most significant climate-related and environmentally material loan portfolios, Santander runs a quarterly materiality assessment. It proves fundamental to making decisions about selected industries, customers and regions and to establishing our strategic priorities. It covers climate-related and environmental risks over many time horizons so our management processes (e.g. risk appetite, top risk identification, credit limits and stress testing) can address them.

Our risk taxonomy and heatmaps are the basis for categorizing portfolios by industry and region according to their potential exposure to physical or transition-based climate-related and environmental risk. Santander's materiality assessment follows the guidelines of the Task Force on Climate-related Financial Disclosures (TCFD) and the United Nations Environmental Programme Finance Initiative (UNEP-FI).Because the taxonomy of industries and sub-industries is based on the EU's NACE codes, it enables us to consistently compile exposure data that serve as a starting point (along with the heatmap for physical and transition-based risks) for quantitative and qualitative measurements of the most material climate change-related risks.

It covers practically our entire balance sheet. It also analyses residual value, strategic risk, market risk and liquidity risk in depth. In 2021, we continued making progress with our climate-related risk materiality assessment by raising the level of granularity and including other businesses (namely Santander Consumer Finance and Private Banking). The graph below shows the Group's last materiality assessment at the end of Q3'21.

MATERIALITY ASSESSMENT - CLIMATE RISK ANALYSIS AND HEAT MAPPING OF PORTFOLIOS

September 2021- Billions euros

	TR	PR	SCIB	Other segments
Power (conventional)			25	2
of which, electricity generation customers with more than 10% of incomes from coal			4	
Power (Renewables)			12	
Oil & Gas			19	0.3
Mining y metals			9	2
of which coal mining			4	
Transport			27	94
Real Estate			6	361
Agriculture			3	4
Construction			20	7
Manufacturing			33	14
Water supply			3	1
Climate sectors			**157**	**485**
Other sectors			59	161
Total portfolio			**216**	**646**

Low Moderately low Medium High Very High

TR: transitional risk; PR: physical risk
Credit risk for SCIB is credit equivalent risk (CER: loans on and off the balance sheet + guarantees + structured financial product (SFP) derivatives. For other segments, it is the drawn-down amount.
Other industries: SCIB, Corporates and NACE businesses outside the risk taxonomy perimeter + Individuals and DCB (cards and other consumer credit).
Other segments include Retail and commercial banking (Corporates), Individuals, SCF and WM&I.

For more details about our materiality assessment, see our 2021 Climate Finance Report on our corporate website.

Monitoring

Santander uses risk appetite, scenario analyses and other tools to monitor climate-related and environmental risk. Here we delve deeper into each one.

Risk appetite sets the volume and type of risks we deem prudent for our business strategy. Along with implementing policies, it is a key tool to monitor climate-related risk, our objectives and our commitments, and to mitigate the risk of failing to meet them.

Climate-related matters have been expressly part of our risk appetite since 2019. The board of directors approved a qualitative risk appetite statement on climate. It linked climate change management to our industry-related policies, which prohibit or place restrictions on financing operations with an environmental or social impact in the energy, mining and metals, and soft commodities industries. We review those policies every year to make sure our standards remain consistent with our strategy and best practice.

In line with our ambition and commitment to financing the transition to a low-carbon economy, in November 2020 the Group updated our risk appetite consistently with our support for the Paris Agreement while our industry-based policies were combined into our environmental, social and climate change policy.

In February 2021, the Group made its first decarbonization commitments as part of its goal to reach net zero emissions by 2050. They included commitments on the thermal carbon industry. Accordingly, by 2030 we will end financial services to electricity generating customers if 10% of their revenues rely on thermal coal; and eliminate our exposure to coal mining worldwide.

We continue to enhance our risk appetite statement to complement the Group's strategy with available methodologies and data. To start setting climate-related risk appetite metrics, we determine industry targets according to our strategy and follow this conceptual process:

Design options: metrics, data availability and frequency → **Calibration and definition of limits thresholds** → **Policy and procedure analysis** → **Approval government** → **Monitoring**

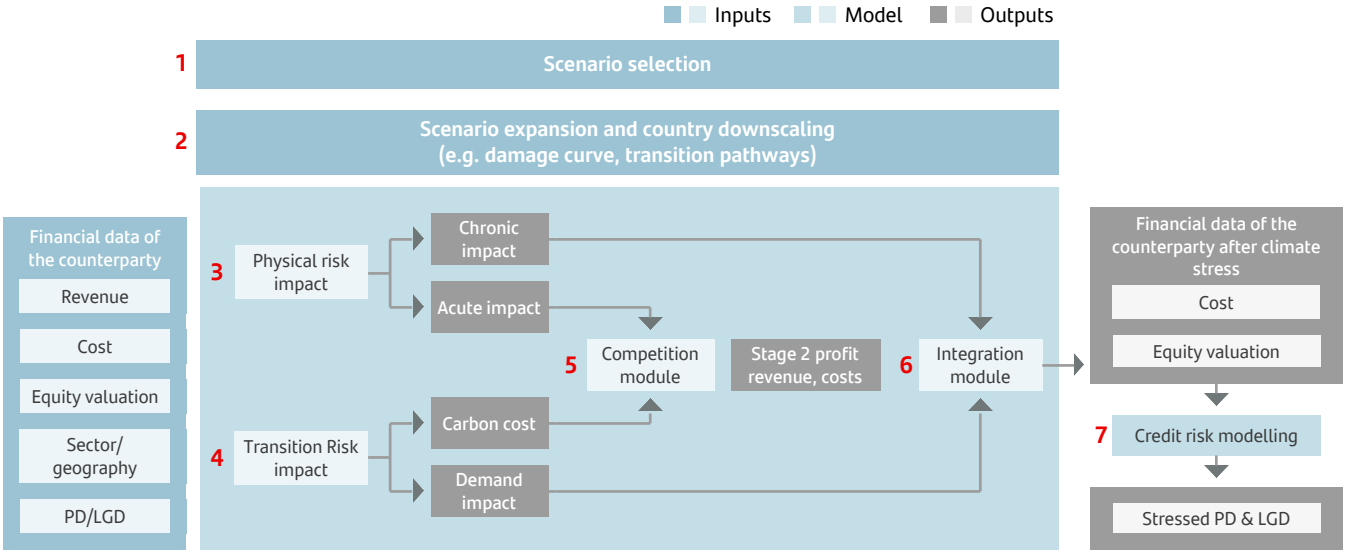
According to our first decarbonization commitments, our current qualitative risk appetite statement added a specific quantitative metric the board had approved in November 2021 in accordance with established governance procedures.

The metric puts limits and thresholds on counterparties from the thermal carbon industry that our commitments concern. It also gives a path to those limits that is conducive to fulfilling the target by 2030. The process involves permanent contact with affected customers to share Santander's strategy and to understand and assess their transition planning.

Santander will also continue to set alignment targets for industries with a material impact on climate as part of the Net Zero Banking Alliance initiative. The Group's risk appetite will gradually introduce metrics and limits for each one of those industries (subject to established governance procedures).

As mentioned earlier, scenario analyses are a management tool to monitor climate-related and environmental risk. Analysis techniques are useful for the Group's internal management and for handling regulatory and supervisory stress testing. We use scenarios determined by the network for greening the financial system (NGFS) and others designed by our Research department to analyse the impact on climate under various circumstances.

In 2022, Santander will undergo the Single Supervisory Mechanism's (SSM) climate and environmental risk stress test. It will have three modules: a qualitative questionnaire; climate risk metrics; and bottom-up stress test projections. Although it may be qualitatively introduced into the Supervisory review and evaluation process (SREP), it is an overall learning exercise without direct quantitative implications about capital. To carry it out, the Group will use a combination of internally developed items and an external provider's platform and databases to quantify the financial impact of each counterparty's physical and transition-based risks. According to the graph below, the platform has seven modules and is based on the United Nations Environmental Programme Finance Initiative's (UNEP FI) methodology and other external information. The exercises we conduct entail both a bottom-up analysis of the customer and a top-down analysis of portfolios by industry and geography.



PD: Probability of default. LGD: Loss given default. SSM: Single supervisory mechanism - European Central Bank Banking supervision

Furthermore, Santander UK took part in the Bank of England's Climate Biennial Exploratory Scenario (CBES) in 2021. The CBES marks the first time Santander UK conducted an analysis of climate scenarios in what became a learning exercise. That enables us to measure the dimension of our portfolios' climate change-related risks and understand the challenges involved.

The CBES required three scenario models exploring many combinations of physical and transition-based risks over 30 years. It also required closer contact with customers to better understand their plans to adapt to climate change and reflect them in final risk models. Focus was on credit risk and, in particular, on detailed analyses of risks to large corporates.

In response to the CBES, Santander UK set out its target operating model, created internal climate-related risk models, engaged with providers specializing in climate modelling, obtained internal and market data to include them within models, and involved hundreds of employees and customers. Its CBES exercise followed a sound governance and control framework. We expect the Bank of England will publish its findings in May 2022.

Mitigation

In mitigation, we updated our environmental, social and climate change policy, which sets out our public commitments and aims to support our strategy for sensitive, special-attention and prohibited industries. Our loan approval policies follow the EBA's guidelines on loan origination and monitoring.

Our internal taxonomy is also considered a mitigating instrument since it helps us inform our customers of the need to have credible plans in place to cease carbon-based activities in the coming years and ensure an orderly transition. The sustainable finance classification system (SFCS) is our internal guide to identify sustainable activities and ensures a blanket approach to monitoring operations, supporting the development of solutions for customers and mitigating the risk of greenwashing. It is also key to designing our sustainable financing proposition and supplements our Global sustainable bond framework and Green finance commitment.

Furthermore, for credit approvals, the first line of defence runs due diligence with several special questionnaires. If the process reveals a reputational issue, it will be escalated to the Reputational risk team as a preventative measure. All project finance transactions with SCIB must be analysed according to the Equator Principles (for more details about Santander's commitment to the Equator Principles, see section 'Environmental and social risk analysis' in the Responsible banking chapter).

For 2022, we have planned several measures to continue including climate and environmental variables in credit approvals:

- **Credit committees:** Subsidiary committees will inquire about environmental, social and climate change factors.
- **Customer ratings**: They aim to ensure all SCIB corporate ratings include environmental, social and climate change factors. We will broaden the scope to retail banking (corporates). Environmental, social and climate change analysis is gradually being introduced into pricing based on companies' ratings. However, pricing for green mortgages and other special products already provides discounts under certain conditions.
- **Collateral**: Collateral valuation includes energy certificates.

A corporate multidisciplinary working group is analysing and monitoring the most significant claims and disputes, including those related to climate change management that could have an impact on Santander's reputation. Its work includes mitigation plans and escalations according to the established governance.

Santander takes part in international regulatory and supervisory forums and working groups to assess climate risks and opportunities, while anticipating and mitigating potential risks to the Group.

Lastly, the Risk function increased the number and capabilities of its resources to manage and monitor climate and environmental risk, for which specialist training proved fundamental. Furthermore, we will gradually give most employees general training in 2022 to raise their awareness. Our Risk pro culture will be essential. In 2022, we also hope to progress our policy on incentives/remuneration tied to climate-related risk management and control.

Reporting

Santander continues to make progress on internal and external disclosures to ensure communications to stakeholders on climate and environmental risk progress are transparent and accurate according to the law and supervisors' expectations.

Our external reports such as the 2021 Climate finance report (that explains Santander's position and strategy on climate change) and this Annual report highlight the progress we made climate and environmental risk. We are also working on areas that are closely related to external disclosures such as the green asset ratio (GAR), transparency requirements of the sustainable finance disclosure regulation (SFRD) and climate disclosure requirements under Pillar III. Because of the increasing interest in, and scrutiny of, climate and environmental risk, information on climate-related and environmental risk is becoming more important to the Group's senior managers.

Glossary

1LoD	First Line of Defence
2019 AGM	Annual general meeting held on 12 April 2019
2020 AGMs	April 2020 AGM and October 2020 AGM
2021 AGM	Annual general meeting held on March 26 2021
2022 AGM	Annual general meeting called for 31 March on first call or on 1April on second call
2Dii	2 Degree Investing Initiative
2LoD	Second Line of Defence
Act 5/2021	Law (Act) 5/2021 of 12 April, amending the revised Spanish Companies Act and other financial regulation in regard to the fostering of long-term shareholder engagement by listed companies
Active customer	Those customers who comply with balance, income and/or transactionality demanded minimums defined according to the business area
ADS	American Depositary Shares
AEAT	Agencia Estatal de Administración Tributaria
AI	Artificial Intelligence
ALCO	Asset-Liability Committee
ALM	Asset and Liability Management
AML	Anti-money laundering
API	Application Programming Interface
APM	Alternative Performance Measure
April 2020 AGM	Annual general meeting held on 3 April 2020
APS	Amherst Pierpont Securities
ASF	Available Stable Funding
ASR	Recovered write-off assets (Activos en suspenso recuperados)
AT1	Additional Tier 1
ATM	Automated teller machine
ATOMIC	Advanced Target Operating Models in Collaboration
Available capital	The volume of own funds Grupo Santander deems eligible under management criteria to meet its capital needs
B2B2C	Business to business to customer
B2C	Business to customer
Banco Popular/Popular	Banco Popular Español, S.A., a bank whose share capital was acquired by Banco Santander, S.A. on 7 June 2017 and was merged into Santander in September 2018
Basel or Basel Committee	The Basel Committee on Banking Supervision
BAU	Business as usual
BBLS	Bounce Back Loans
BCBS	Basel III leverage ratio framework
BCMS	Business Continuity Management System
BCP	Business continuity plans
BIS	Bank for International Settlements
BMR	EU Benchmark Regulation
Bn	Billion (1,000,000,000)
BNDES	*Banco Nacional de Desenvolvimiento Económico y Social*
BOE	Official State Bulletin
BoE	Bank of England
bps	basis points
BRRD	Directive 2014/59/EU establishing a framework for the recovery and resolution of credit institutions and investment firms, as amended from time to time

BSI	Banco Santander Internacional
CAE	Chief audit executive
CAF	Development Bank of Latin America
CAO	Chief accounting officer
CaR	Capital at Risk
Capital requirements	The minimum volume of own funds required by the regulator to ensure solvency based on credit, market and operational risks
CARF	Conselho Administrativo de Recursos Fiscais
CBES	Climate Biennial Exploratory Scenario
CCCA	Collective Commitment to Climate Action
CCM	Capability Maturity Model
CCMV	Code of conduct in the stock markets
CCO	Chief compliance officer
CCP	Central Counterparties
CCPS	Contingent convertible preferred securities
CCR	Counterparty credit risk
CCSM	Code of conduct in security markets
CDI	Crest Depositary Interests
CDS	Credit Default Swaps
CEB	Council of Europe Development Bank
CEO	Chief executive officer
CER	Credit equivalent risk
CET1	Common equity tier 1
CFO	Chief financial officer
CHF	Swiss currency
CIB	Corporate & Investment Banking
CIO	Chief information officer
CNMV	Spanish stock market authority (Comisión Nacional del Mercado de Valores)
COFINS	Contribuiçao para Financiamento da Seguridade Social
COMEX	Commodity Exchange
COP26	UN Climate change conference
Corporate Centre	Our headquarters in Boadilla and business segment as described in section 4.1 'Description of segments' in the Economic and financial review chapter.
Corporation	All the governing bodies, organizational structures and employees entrusted by Banco Santander, S.A. to exercise oversight and control across the entire Group, including those functions typically associated with the relationship between a parent company and its subsidiaries.
COSO	Committee of Sponsoring Organizations of the Tradeway Commission
Cost of capital	The minimum return investors (shareholders) require as compensation for the opportunity cost and risk of investing in Santander. It represents a 'cut-off rate' or 'minimum return', which allows analysts to compare business units' performance and analyse efficiency
CPGF	Corporate Products Governance Forum
CRD IV	The prudential framework established by the CRD and CRR currently in force
CRD V	Amendment to the CRD IV package
CRE	Credit Risk Equivalent
CRM	Customer Relationship Management
CRO	Chief risk officer
CRR	Regulation (EU) 575/2013 on prudential requirements for credit institutions and investment firms, as amended from time to time
CRS	The Common Reporting Standard approved by the OECD Council on 15 July 2014
CSA	Credit Support Annex
CSLL	Social Contribution on Net Income
CTO	Chief technology officer
CVA	Credit Valuation Adjustment

DCB	Digital Consumer Bank
D&I	Diversity & inclusion
DI	Debt to Income
Digital customers	Every consumer of a commercial bank's services who has logged on to their personal online banking and/or mobile banking in the last 30 days.
DLP	Data Leakage Protection
Dodd-Frank Act	The US Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010
DTA	Deferred Tax Asset
DVA	Debt Valuation Adjustment
E&S	Environmental and social
EAD	Exposure at Default
EBA	European Banking Authority
EBRD	European Bank for Reconstruction and Development
ECB	European Central Bank
ECB Recommendation III	Recommendation that the ECB issued on 15 December 2020 to repeal ECB Recommendations I and II and ask the European credit institutions it supervises to exercise extreme prudence when deciding on, or paying out, dividends; or performing share buybacks to remunerate shareholders
ECL	Expected credit loss
EIB	European Investment Bank
EISM	Global Systematic Important Bank
Eligible capital	The amount of own funds considered eligible by the regulator to meet capital requirements, principally accounting capital and reserves
EMIR	Regulation (EU) 648/2012 on OTC derivatives, central counterparties and trade repositories, as amended from time to time
EONIA	Euro Overnight Index Average
EPS	Earnings Per Share
ERC	Executive risk committee
ES	Expected Shortfall
ESG	Environmental, Social and Governance
ESMA	European Securities and Markets Authority
ESRM	Environmental and social risk management
ETF	Exchange Traded Funds
EU	European Union
EVA	Economic value added. It is measured by profit generated in excess of the cost of economic capital. Grupo Santander adds economic value when the RoRAC exceeds its cost of capital; otherwise, value is destroyed. EVA measures absolute risk-adjusted returns (in monetary units), which complements the RoRAC approach
EVE	Economic Value of Equity
EWIs	Early Warning Indicators
Expected loss	Loss due to insolvency that an entity may suffer on average over an economic cycle. It considers insolvency a cost that can be reduced by proper loan approval
FATCA	Foreign Account Tax Compliance Act
FATF	Financial Action Task Force
FCA	Financial Conduct Authority
FCA Group	Fiat Chrysler Automobiles
FCC	Financial Crime Compliance
FEBEF	Fundación Española de Banca para Estudios Financieros
FED	Federal Reserve
Final Cash Dividend	The final cash dividend of 0.10 euros per share put to a vote by the board in February 2020 at the April 2020 AGM
First Buyback Programme	On September 2021 the board resolved to execute a shares buyback programme worth up to 841 million euros as part of shareholder remuneration charged against 2021
FROB	*Fondo de Reestructuración Ordenada Bancaria*
FRTB	Fundamental Review of the Trading Book

FSB	Financial Stability Board
FV	Fair value
FX	Foreign Exchange
GAR	Green Asset Ratio
G-SIB	Global Systematic Important Bank
GBP	Pound sterling
GCC	General Code of Conduct
GCCO	Group chief compliance officer
GCRO	Group chief risk officer
GDP	Gross Domestic Product
GDPR	General Data Protection Regulation
GloBe	Global Anti-Base Erosion
GMRA	Global master repurchase agreement
GMS	Global Merchant Services
GPPC	Global Public Policy Committee
GPTW	Great Place to Work
GRC	Governance, risk and compliance
GRI	Global Reporting Initiative
GSGM	Group-Subsidiary Governance Model
GTS	Global Trade Services
HQLA	High Quality Liquid Assets
HR	Human Resources
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IBORs	Interbank offered rates
ICAAP	Internal Capital Adequacy Assessment Process
ICAC	Accounting and Audit Institute (Instituto de Contabilidad y Auditoría de Cuentas)
ICFR	Internal control over financial reporting
ICO	Instituto de Crédito Oficial
ICT	Information and Communication Technology
ID	Identification
Identified Staff	Other executives whose activities may have a significant impact on the Group's risk profile
IFC	International Finance Corporation
IFI	Instituciones financieras internacionales
IFRS	International Financial Reporting Standards (IFRS) as adopted in the EU pursuant to Regulation (EC) 1606/2002 on the application of international accounting standards, as amended from time to time
ILAAP	Internal Liquidity Adequacy Assessment Process
IMA	Internal Model Approach
IMF	International Monetary Fund
IMIs	Internal Model Inspections
IOSCO	Principles for financial benchmarks
IPCC	Intergovernmental Panel on Climate Change
IPO	Initial Public Offering
IRB	Internal Rating Based
IRC	Incremental Risk Charge
IRCS	Internal Risk Control System
IRPJ	Imposto de Renda Pessoa Jurídica
IRR	Internal rate of return
IRRBB	Interest rate risk of the banking book
IRS	Internal Revenue Service
ISDA	International Swaps and Derivatives Association
ISMA	International Securities Market Association

IT	Information technology
ITS	Internal technical standards
JPY	Japanese currency
KPI	Key performance indicator
KRI	Key Risk Indicators
LCR	Liquidity Coverage Ratio
LDA	Loss Distribution Approach
Leverage ratio	This regulatory metric compares a bank's size to its capital to measure how sound and robust it is, dividing Tier1 capital by the leverage exposure. This takes into account balance sheet size with some adjustments for derivatives, funding of securities operations and off-balance sheet items
LGD	Loss Given Default
LIBOR	London Interbank Offer Rate
Loyal customers	Active customers who receive most of their financial services from the Group according to the commercial segment to which they belong. Various engaged customer levels have been defined taking profitability into account.
LTD	Loan to Deposit ratio
LTV	Loan to Value
M/LT	Medium and long-term
MiFID II	Markets in Financial Instruments Directive.
Mn	Million
MRAP	Market Risk Advanced Platform
MREL	Minimum requirement for own funds and eligible liabilities which is required to be met under the BRRD
MRM	Model Risk Management
MtM	Mark-to-Market
MXN	Mexican peso
NACE	Statistical classification of economic activities in the European Community
NCAs	National competent authority
NDoD	New definition of default
NFRD	Non-financial reporting directive
NGFS	Network for Greening the Financial System
NGO	Non-governmental organization
NII	Net Interest Income
Nominal cap	Maximum nominal amount of a risk operation, excluding market transactions
NPLs	Non-performing loans
NPS	Net promoter score
NSFR	Net stable funding ratio
NYSE	New York Stock Exchange
o/w	Of which
OCI	Originated Credit Impairment
October 2020 AGM	Annual meeting held on 27 October 2020
OECD	Organization for Economic Co-operation and Development
OM	Organised Markets
ONP	Ordinary net profit
OP	Operational risk
OR	Operational risk
OSLA	Overseas Securities Lender's Agreement
OSSG	Official Sector Steering Group
OTC	Over the counter
PB	Private Banking
P&L	Profit and Loss
PACTA	Paris Agreement Capital Transition Assessment
PCAOB	Public Company Accounting Oversight Board

PD	Probability of Default
People supported in our communities	The Bank has devised a corporate methodology tailored to Santander's requirements and specific model for contributing to society. This methodology identifies a series of principles, definitions and criteria to allow the Bank to consistently keep track of those people who have benefited from the programmes, services and products with a social and/or environmental component promoted by the Bank. This methodology has been reviewed by an external auditor.
PFE	Potential Future Exposure (posible exposición futura)
PIS	Programa de Integraçao Social
PIT	Point in time
PIT	Point-in-time
PLN	Polish Zloty
POCI	Purchased or Originated Credit Impaired
POS	Point of sale
pp	percentage point
PPI	Payment protection insurance
PPNR	Pre-provision net revenues
PPP	Paycheck Protection Program
PRA	UK Prudential Regulatory Authority
PRI	Principles for responsible Investment
PSD2	Payment Services Directive II
PwC	PricewaterhouseCoopers Auditores, S.L.
R&D&i	Research, development and innovation
RAF	Risk appetite framework
RAS	Risk appetite statement
RCC	Risk control committee
RCSA	Risk control self-assessment
RDA	Risk Data Aggregation
REC	Equivalent risk of credit
RIA	Risk Identification and Assessment
RoA	Return on assets. Ratio between net income and total average assets, or the amount of financial and operational income a company receives in a financial year as compared to the average of the company's total assets. The ratio is considered to be an indicator of how effectively a company is using its assets to generate earnings
RoE	Return on equity
RoRAC	Return (net of tax) on economic capital required internally
RoRWA	Return (net of tax) on risk weighted assets for a particular business. Grupo Santander uses RoRWA to establish strategies to allocate regulatory capital for maximums returns
RoTE	Return on tangible equity
RPA	Risk profile assessment
RRS	Risk Reporting Structure
RSF	Required Stable Funding
Rules and regulations of the board	Rules and regulations of the board of directors of Banco Santander, S.A.
Rules and regulations of the general meeting	Rules and regulations of the general meeting of Banco Santander, S.A.
RWAs	Risk weighted assets
S&P 500	The S&P 500 index maintained by S&P Dow Jones Indices LLC
SAM	Santander Asset Management
Santander Consumer US	Santander Consumer USA Holdings Inc.
SBNA	Santander Bank N.A.
SC USA	Santander Consumer US
SCAN	Santander Customer Assessment Note
SCF	Santander Consumer Finance
SCIB	Santander Corporate & Investment Banking

SCPs	Strategic commercial plans
SCS	Success case studies
SDE	Santander Dividendo Elección
SDG	Sustainable Development Goals
SEA	Securities Exchange Act
SEC	Securities and Exchange Commission
Second Buyback Programme	On 24 February 2022 the board resolved to execute a shares repurchase programme for an amount of 865 million euros as part of shareholder remuneration charged against 2021
Self-imposed capital requirement	The minimum volume of own funds Grupo Santander requires, for a given level of probability, to absorb unexpected losses resulting from its current exposure to risks, including risks not considered in regulatory capital
SELIC	*Sistema Especial de Liquidaçâo e Custodia (Brasil)*
SHUSA	Santander Holdings USA, Inc.
SICR	Significant increase of credit risk
SIS	Santander Investment Securities
SLA	Service Level Agreement
SMEs	Small and medium enterprises
SOX	Sarbanes-Oxley Act of 2002
Spanish Companies Act	Consolidated text of the Spanish Companies Act approved by Royal Legislative Decree 1/2010, of 2 July
Spanish Corporate Governance Code	CNMV's Good Governance Code for Listed Companies
Spanish Securities Markets Act	Consolidated text of the Spanish Securities Markets Act approved by Royal Legislative Decree 4/2015, of 23 October
SPF	Simple, Personal and Fair
SRB	European Single Resolution Board
SREP	Supervisory Review and Evaluation Process
SRF	Single Resolution Fund
SRI	Socially Responsible Investment
SRT	Significant Risk Transfer
SSM	Single Supervisory Mechanism, the system of banking supervision in Europe. It comprises the ECB and the national supervisory authorities of the participating countries.
ST	Short-term
STEM	Science, Technology, Engineering and Mathematics
STF	Supreme Federal Court of Brazil
STR	Short-term interest rate
SVaR	Stressed value at risk
T&O	Technology and operations
T2	Tier 2
TCFD	Task Force on Climate-related Financial Disclosures
TLAC	The total loss-absorbing capacity requirement which is required to be met under the CRD V package
TLTRO	Targeted longer-term refinancing operations
TOM	Target Operational Model
TRIM	Targeted Review of Internal Models
TSR	Total Shareholder Return
UAI	Real Estate Unit in Spain
UK	United Kingdom
UN SDG	United Nations Sustainable Development Goals
UNEP FI	United Nations Environmental Program Financial Initiative
US	United States of America
USD	United States dollar
VaE	Value at Earnings
VaR	Value at Risk

VAT	Value Added Tax
Volcker Rule	Section 619 of the Dodd-Frank Act
VPN	Virtual Private Network
WBCSD	World Business Council for Sustainable Development
WFH	Working From Home
WM&I	Wealth Management and Insurance
Wolfsberg group	Association of thirteen global banks which aims to develop frameworks and guidance for the management of financial crime risks
YoY	Year over year

Auditor's report and consolidated financial statements



Auditor's report 514

Consolidated financial statements 525

Consolidated balance sheets as of 31 December 2020, 2019 and 2018 525
Consolidated income statements for the years ended 31 December 2020, 2019 and 2018 529
Consolidated statements of recognised income and expense for the years ended 31 December 2020, 2019 and 2018 531
Consolidated statements of changes in total equity for the years ended 31 December 2020, 2019 and 2018 532
Consolidated statements of cash flows for the years ended 31 December 2020, 2019 and 2018 538

Notes to the consolidated financial statements 540

1. Introduction, basis of presentation of the consolidated financial statements (consolidated annual accounts) and other information 541
2. Accounting policies 547
3. Santander Group 588
4. Distribution of the Bank's profit, shareholder remuneration scheme and earnings per share 591
5. Remuneration and other benefits paid to the Bank's directors and senior managers 593
6. Loans and advances to central banks and credit institutions 607
7. Debt instruments 608
8. Equity instruments 610
9. Trading Derivatives (assets and liabilities) and short positions 611
10. Loans and advances to customers 611
11. Trading derivatives 617
12. Non-current assets 617
13. Investments 617
14. Insurance contracts linked to pensions 619
15. Liabilities and assets under insurance contracts and reinsurance assets 619
16. Tangible assets 621
17. Intangible assets – Goodwill 624
18. Intangible assets - Other intangible assets 627
19. Other assets 628
20. Deposits from central banks and credit institutions 629
21. Customer deposits 629
22. Marketable debt securities 630
23. Subordinated liabilities 635
24. Other financial liabilities 637
25. Provisions 638
26. Other liabilities 652
27. Tax matters 652
28. Non-controlling interests 659
29. Other comprehensive income 660
30. Shareholders' equity 666
31. Issued capital 666
32. Share premium 667
33. Accumulated retained earnings 667
34. Other equity instruments and own shares 668
35. Memorandum items 668
36. Hedging derivatives 669
37. Discontinued operations 692
38. Interest income 692
39. Interest expense 692
40. Dividend income 693
41. Commission income 693
42. Commission expense 693
43. Gains or losses on financial assets and liabilities 693
44. Exchange differences, net 694
45. Other operating income and expenses 695
46. Staff costs 695
47. Other general administrative expenses 701
48. Gains or losses on non financial assets, net 701
49. Gains or losses on non-current assets held for sale not classified as discontinued operations 701
50. Other disclosures 702
51. Main and secondary segments reporting 713
52. Related parties 727
53. Risk management 754
54. Explanation added for translation to English 766

Appendix 767

Appendix I. Subsidiaries of Banco Santander, S.A. 768
Appendix II. Societies of which the Group owns more than 5%, entities associated with Grupo Santander and jointly controlled entities 790
Appendix III. Issuing subsidiaries of shares and preference shares 796
Appendix IV. Notifications of acquisitions and disposals of investments in 2019 797
Appendix V. Other information on the Group's banks 798
Appendix VI. Annual banking report 804

Auditor's report



This version of our report is a free translation of the original, which was prepared in Spanish. All possible care has been taken to ensure that the translation is an accurate representation of the original. However, in all matters of interpretation of information, views or opinions, the original language version of our report takes precedence over this translation.

Independent auditor's report on the consolidated annual accounts

To the shareholders of Banco Santander, S.A.:

Report on the consolidated annual accounts

Opinion

We have audited the consolidated annual accounts of Banco Santander, S.A. (the Parent company) and its subsidiaries (the Group or Santander Group), which comprise the balance sheet as at December 31, 2021, and the income statement, statement of recognised income and expense, statement of changes in total equity, statement of cash flows and related notes, all consolidated, for the year then ended.

In our opinion, the accompanying consolidated annual accounts present fairly, in all material respects, the equity and financial position of the Group as at December 31, 2021, as well as its financial performance and cash flows, all consolidated, for the year then ended, in accordance with International Financial Reporting Standards as adopted by the European Union (IFRS-EU) and other provisions of the financial reporting framework applicable in Spain.

Basis for opinion

We conducted our audit in accordance with legislation governing the audit practice in Spain. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated annual accounts* section of our report.

We are independent of the Group in accordance with the ethical requirements, including those relating to independence, that are relevant to our audit of the consolidated annual accounts in Spain, in accordance with legislation governing the audit practice. In this regard, we have not rendered services other than those relating to the audit of the accounts, and situations or circumstances have not arisen that, in accordance with the provisions of the aforementioned legislation, have affected our necessary independence such that it has been compromised.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated annual accounts of the current period. These matters were addressed in the context of our audit of the consolidated annual accounts as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

R. M. Madrid, hoja 87.250-1, folio 75, tomo 9.267, libro 8.054, sección 3ª
Inscrita en el R.O.A.C. con el número S0242 - CIF: B-79 031290



Key audit matters	How our audit addressed the key audit matters

Estimation of impairment of financial assets at amortised cost - loans and advances to customers – for credit risk

The models used to estimate the expected credit losses along with the adaptations made in the context of the current environment, imply a high complexity by incorporating new estimates and judgments, especially those related to the updates and adjustments made to the models to determine the expected credit loss. These estimates require an elevated component of judgment by management and are one of the most significant and complex estimates in the preparation of the consolidated annual accounts as at December 31, 2021 included herein, therefore they have been considered one of the key audit matters.

The main judgements and assumptions used by management are the following:

- The estimation of the Probability of Default (PD) and Loss Given Default (LGD) parameters.
- Identification and classification of the staging criteria of loans and advances to customers.
- The definition and evaluation of updates and adjustments to adapt the parameters estimated by the models to the conditions and current environment.
- The main assumptions used in the determination of provisions for risks estimated individually.

The Group's business is focused primarily on commercial banking products and is concentrated in nine key markets (Brazil, Chile, Spain, United States, Mexico, Poland, Portugal, United Kingdom and the consumer finance business in Europe).

As a result, during fiscal year 2021 the Group has recognised an amount of EUR 7,388 million of impairment of financial assets at amortised cost.

Please refer to Notes 2, 10 and 53 of the consolidated annual accounts as at December 31, 2021.

We have obtained, in collaboration with our credit risk experts, an understanding of management's process to estimate the impairment of financial assets at amortised cost - loans and advances to customers - over the estimation of impairment of financial assets assessed collectively and individually. In addition, and as a part of our audit procedures, we have made inquiries to management to understand the extent of the potential impact of climate change on credit risk.

In regards with the internal control, we have focused on testing the design and operating effectiveness of key controls over the following processes:

- Calculation methodologies, calibrations, monitoring and back-testing performed by management.
- Compliance with internal policies and functionality of the internal models approved by management.
- Reliability of the data sources used in the calculations and the suitability of the models taking into account the circumstances.
- Periodic review process of borrower to determine proper staging criteria.
- Review process over the calculation of the principal models and portfolios.
- Review process of the updates and adjustments to the expected credit loss models made by management due to the conditions and current environment.
- Loan collateral assignment and valuation process associated with mortgage collateral operations, including collateral recovery process.

In addition, we performed the following tests of details:



Key audit matters	How our audit addressed the key audit matters
	• Tests of principal models with respect to: i) calculation and segmentation methods; ii) methodology used for the estimation of the expected loss parameters; iii) data and main assumptions used, iv) staging criteria and v) scenario information and assumptions. • For a sample of loans, covered by government guarantees, evaluation of both documentation and payment behaviour presented since the moment of their concession. • Reperformance of collective impairment losses based on the expected credit loss models parameters. • Evaluation of the updates and adjustments to the expected credit loss models made by management due to the conditions and current environment, if applicable. • Verification of the correct assignment of the loan collaterals, especially those that are classified as doubtful. • On a sample basis, evaluating individual credit files to determine the adequacy of their accounting and classification, discounted cash flows and, where appropriate, corresponding impairment. We have not identified exceptions outside of a reasonable range in the procedures outlined above.
Goodwill impairment assessment	
Goodwill impairment assessment is an exercise that requires a high degree of judgment and estimation especially in the current context of the covid-19, therefore it has been considered one of the key audit matters. Due to their relevance to Santander Group, management monitors goodwill, with special focus on the following Cash Generating Units (CGUs): Santander Bank Polska and Santander UK, and assesses goodwill for impairment at the end of each annual reporting period or whenever there is any indication of impairment.	We have obtained, in collaboration with our valuation experts, an understanding of the process performed by management to assess the recoverable amount. In regards with the internal control, we have focused on testing the design and operating effectiveness of key controls over the following processes: • Definition of the Group's CGUs.



Key audit matters	How our audit addressed the key audit matters
The assumptions used by management to estimate the value in use of the Cash-Generating Units (CGUs) includes financial projections, discount rates and perpetual growth rates. Such valuations, and some of these assumptions, are performed by management's experts. The amount of the Group's consolidated goodwill balance as at December 31, 2021 is EUR 12,713 million. Please refer to Notes 2 and 17 of the consolidated annual accounts as at December 31, 2021.	• Methodology used by management for the goodwill impairment assessment, including the controls in place to supervise the process and the related approvals. • Budgeting process on which the projections used in the discounted cash flow projections are based on. • Management's capability of reliable prediction through the comparison of previous years' estimations and impairment assessments with the actual results. • Review of the reasonableness of the discount rates and perpetual growth rates used by management's experts. • Review of the mathematical accuracy of the valuation models used by management experts. We also conducted tests of details to evaluate the discounted cash flow projections used by management in their estimation, considering market practices and specific sector expectations, including the verification of the assumptions, such as discount rates and perpetual growth rates. In addition, we have performed, among other, the following tests of details: • Verifying the mathematical accuracy of the goodwill impairment test, including the discounted cash flow projections. • Comparing the fair value of the listed CGUs to their recoverable amount. • Inspecting the valuation reports regarding the goodwill impairment test performed by management's internal and external experts. • Verifying the adequacy of the information disclosed in the consolidated annual accounts in accordance with applicable regulations. We have not identified exceptions outside of a reasonable range in the procedures outlined above.



Key audit matters	How our audit addressed the key audit matters
Litigation provisions and contingencies	
The Group is party to a range of tax, labour and legal proceedings - administrative and judicial - which primarily arose in the ordinary course of its operations. Also, there are other situations not yet subject to any judicial process that, however, have required the recognition of provisions, such as aspects of conduct with clients and the possible compensations that could be derived. These procedures generally take a long period of time to run their course, giving rise to complex processes in accordance with the applicable legislation, therefore it has been considered one of the key audit matters. Management decides when to recognize a provision for these contingent liabilities, based on an amount estimated using certain procedures consistent with the nature of the uncertainty of the obligations. Among these provisions, the most significant are those that cover the tax and labour proceedings in Brazil and those that cover the legal proceedings in Brazil, Spain and Poland. The amount of the litigation provisions and contingencies as at December 31, 2021 is EUR 3,674 million. Please refer to Notes 2 and 25 of the consolidated annual accounts as at December 31, 2021.	We have obtained, in collaboration with our experts, an understanding of the estimation process performed by management for litigation provisions and contingencies. In regards with the internal control, we have focused on testing the design and operating effectiveness of key controls over the following processes: • Additions, logs and updates over the completeness of the legal matters in the systems. • Accuracy of the key data, maintained in the systems, used in the calculation of the litigations provisions and contingencies. • Assessment of the criteria used to estimate the expected losses from litigation provisions and contingencies and evaluation of the adequacy over the calculation of the provisions for regulatory, legal or tax procedures and their recognition. • Reconciliation between the minutes of the inspections and the amounts accounted for. In addition, we have performed the following tests of details: • Analysis for reasonableness of the expected outcomes of the most significant tax and legal proceedings. • Assessment of possible contingencies relating to compliance with the tax obligations for all the years open to inspection, of the communications with the regulatory bodies and analysis of the ongoing regulatory inspections. • Obtaining confirmation letters from external and internal lawyers and external tax advisors who work with the Group and performing alternative procedures. • Analysis of the recognition and reasonableness of the provisions recorded.



Key audit matters	How our audit addressed the key audit matters
	In the procedures described above, no exceptions were identified outside of a reasonable range.

Information systems

The Group's financial information is highly dependent on information technology (IT) systems and the geographies where it operates, therefore an adequate control of these systems is crucial to ensuring correct data processing.

In this context, it is vital to evaluate aspects such as the organization of the Group's Technology and Operations department, controls over software maintenance and development, physical and logical security controls, and controls over computer operations, therefore it has been considered one of the key audit matters.

In this respect, management continues monitoring the internal controls over IT systems, including the access controls that support the Group's technology processes.

We have evaluated, in collaboration with our IT system specialists, the internal controls over the IT systems, databases and applications that support the Group's financial reporting.

For this purpose, we have performed procedures over internal control and test of details related to:

- The function of the IT governance framework.
- Access and logical security controls over the applications, operating systems and databases that support the relevant financial information.
- Application development and change management.
- Maintenance of computer operations.

In addition, considering the monitoring carried out by management over its internal controls over IT systems, our approach and audit plan focused on the following aspects:

- Evaluation of the monitoring made by management as part of its internal control environment of the Group.
- Testing of the design and operating effectiveness of the controls implemented by management, including access controls.

In the procedures described above, no relevant exceptions were identified related to this matter.

Other information: Consolidated Directors' report

Other information comprises only the consolidated Directors' report for the 2021 financial year, the formulation of which is the responsibility of the Parent company's directors and does not form an integral part of the consolidated annual accounts.



Our audit opinion on the consolidated annual accounts does not cover the consolidated Directors' report. Our responsibility regarding the consolidated Directors' report, in accordance with legislation governing the audit practice, is to:

a) Verify only that the consolidated statement of non-financial information, certain information included in the Annual Corporate Governance Report and the Annual Report on Directors' Remuneration, as referred to in the Auditing Act, has been provided in the manner required by applicable legislation and, if not, we are obliged to disclose that fact.

b) Evaluate and report on the consistency between the rest of the information included in the consolidated Directors' report and the consolidated annual accounts as a result of our knowledge of the Group obtained during the audit of the aforementioned financial statements, as well as to evaluate and report on whether the content and presentation of this part of the consolidated Directors' report is in accordance with applicable regulations. If, based on the work we have performed, we conclude that material misstatements exist, we are required to report that fact.

On the basis of the work performed, as described above, we have verified that the information mentioned in section a) above has been provided in the manner required by applicable legislation and that the rest of the information contained in the consolidated Directors' report is consistent with that contained in the consolidated annual accounts for the 2021 financial year, and its content and presentation are in accordance with applicable regulations.

Responsibility of the directors and the audit committee for the consolidated annual accounts

The Parent company's directors are responsible for the preparation of the accompanying consolidated annual accounts, such that they fairly present the consolidated equity, financial position and financial performance of the Group, in accordance with IFRS-EU and other provisions of the financial reporting framework applicable to the Group in Spain, and for such internal control as the aforementioned directors determine is necessary to enable the preparation of consolidated annual accounts that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated annual accounts, the Parent company's directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the aforementioned directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

The Parent company's audit committee is responsible for overseeing the process of preparation and presentation of the consolidated annual accounts.

Auditor's responsibilities for the audit of the consolidated annual accounts

Our objectives are to obtain reasonable assurance about whether the consolidated annual accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with legislation governing the audit practice in Spain will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated annual accounts.



As part of an audit in accordance with legislation governing the audit practice in Spain, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated annual accounts, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Parent company's directors.

- Conclude on the appropriateness of the Parent company's directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated annual accounts or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated annual accounts, including the disclosures, and whether the consolidated annual accounts represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient and appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated annual accounts. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Parent company's audit committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Parent company's audit committee with a statement that we have complied with relevant ethical requirements, including those relating to independence, and we communicate with the aforementioned those matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Parent company's audit committee, we determine those matters that were of most significance in the audit of the consolidated annual accounts of the current period and are therefore the key audit matters.

We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.



Report on other legal and regulatory requirements

European single electronic format

We have examined the digital files of the European single electronic format (ESEF) of Banco Santander, S.A. and its subsidiaries for the 2021 financial year that comprise an XHTML file which includes the consolidated annual accounts for the financial year and XBRL files with tagging performed by the entity, which will form part of the annual financial report.

The directors of Banco Santander, S.A. are responsible for presenting the annual financial report for 2021 financial year in accordance with the formatting and markup requirements established in the Delegated Regulation (EU) 2019/815 of December 17, 2018 of the European Commission (hereinafter the ESEF Regulation).

Our responsibility is to examine the digital files prepared by the Parent company's directors, in accordance with legislation governing the audit practice in Spain. This legislation requires that we plan and execute our audit procedures in order to verify whether the content of the consolidated annual accounts included in the aforementioned digital files completely agrees with that of the consolidated annual accounts that we have audited, and whether the format and markup of these accounts and of the aforementioned files has been affected, in all material respects, in accordance with the requirements established in the ESEF Regulation.

In our opinion, the digital files examined completely agree with the audited consolidated annual accounts, and these are presented and have been marked up, in all material respects, in accordance with the requirements established in the ESEF Regulation.

Report to the audit committee of the Parent company

The opinion expressed in this report is consistent with the content of our additional report to the audit committee of the Parent company dated February 25, 2022.

Appointment period

The General Ordinary Shareholders' Meeting held on March 26, 2021 appointed us as auditors of the Group for a period of one year, for the year ended December 31, 2021.

Previously, we were appointed by resolution of the General Ordinary Shareholders' Meeting for a period of three years and we have audited the accounts continuously since the year ended December 31, 2016.

Services provided

Services, different to the audit, provided to the Group are detailed in Note 47 of the consolidated annual accounts.

PricewaterhouseCoopers Auditores, S.L. (S0242)

Julián González Gómez (20179)

February 25, 2022

Consolidated financial statements



Translation of the consolidated annual accounts originally issued in Spanish and prepared in accordance with the regulatory financial reporting framework applicable to the Group in Spain (see Notes 1 and 54). In the event of a discrepancy, the Spanish- version prevails.

Grupo Santander

CONSOLIDATED BALANCE SHEETS AS OF 31 DECEMBER 2021, 2020 AND 2019

EUR million

ASSETS	Note	2021	2020*	2019*
CASH, CASH BALANCES AT CENTRAL BANKS AND OTHER DEPOSITS ON DEMAND	**20**	**210,689**	**153,839**	**101,067**
FINANCIAL ASSETS HELD FOR TRADING		**116,953**	**114,945**	**108,230**
Derivatives	9 and 11	54,292	67,137	63,397
Equity instruments	8	15,077	9,615	12,437
Debt instruments	7	26,750	37,894	32,041
Loans and advances		20,834	299	355
Central banks	6	3,608	—	—
Credit institutions	6	10,397	3	—
Customers	10	6,829	296	355
NON-TRADING FINANCIAL ASSETS MANDATORILY AT FAIR VALUE THROUGH PROFIT OR LOSS		**5,536**	**4,486**	**4,911**
Equity instruments	8	4,042	3,234	3,350
Debt instruments	7	957	700	1,175
Loans and advances		537	552	386
Central banks	6	—	—	—
Credit institutions	6	—	—	—
Customers	10	537	552	386
FINANCIAL ASSETS DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS		**15,957**	**48,717**	**62,069**
Debt instruments	7	2,516	2,979	3,186
Loans and advances		13,441	45,738	58,883
Central banks	6	—	9,481	6,473
Credit institutions	6	3,152	12,136	21,649
Customers	10	10,289	24,121	30,761
FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME		**108,038**	**120,953**	**125,708**
Equity instruments	8	2,453	2,783	2,863
Debt instruments	7	97,922	108,903	118,405
Loans and advances		7,663	9,267	4,440
Central banks	6	—	—	—
Credit institutions	6	—	—	—
Customers	10	7,663	9,267	4,440
FINANCIAL ASSETS AT AMORTIZED COST		**1,037,898**	**958,378**	**995,482**
Debt instruments	7	35,708	26,078	29,789
Loans and advances		1,002,190	932,300	965,693
Central banks	6	15,657	12,499	18,474
Credit institutions	6	39,169	37,838	40,943
Customers	10	947,364	881,963	906,276
HEDGING DERIVATIVES	**36**	**4,761**	**8,325**	**7,216**
CHANGES IN THE FAIR VALUE OF HEDGED ITEMS IN PORTFOLIO HEDGES OF INTEREST RATE RISK	**36**	**410**	**1,980**	**1,702**

CONSOLIDATED BALANCE SHEETS AS OF 31 DECEMBER 2021, 2020 AND 2019

EUR million

ASSETS	Note	2021	2020*	2019*
INVESTMENTS	**13**	**7,525**	**7,622**	**8,772**
Joint venture entities		1,692	1,492	1,325
Associated entities		5,833	6,130	7,447
ASSETS UNDER INSURANCE OR REINSURANCE CONTRACTS	**15**	**283**	**261**	**292**
TANGIBLE ASSETS		**33,321**	**32,735**	**35,235**
Property, plant and equipment	16	32,342	31,772	34,262
For own-use		13,259	13,213	15,041
Leased out under an operating lease		19,083	18,559	19,221
Investment properties	16	979	963	973
Of which leased out under an operating lease		*839*	*793*	*823*
INTANGIBLE ASSETS		**16,584**	**15,908**	**27,687**
Goodwill	17	12,713	12,471	24,246
Other intangible assets	18	3,871	3,437	3,441
TAX ASSETS		**25,196**	**24,586**	**29,585**
Current tax assets		5,756	5,340	6,827
Deferred tax assets	27	19,440	19,246	22,758
OTHER ASSETS		**8,595**	**11,070**	**10,138**
Insurance contracts linked to pensions	14	149	174	192
Inventories		6	5	5
Other	19	8,440	10,891	9,941
NON-CURRENT ASSETS HELD FOR SALE	**12**	**4,089**	**4,445**	**4,601**
TOTAL ASSETS		**1,595,835**	**1,508,250**	**1,522,695**

* Presented for comparison purposes only (note 1.d).

The accompanying notes 1 to 54 and appendices are an integral part of the consolidated balance sheet as of 31 December 2021.

CONSOLIDATED BALANCE SHEETS AS OF 31 DECEMBER 2021, 2020 AND 2019

EUR million

LIABILITIES	Note	2021	2020*	2019*
FINANCIAL LIABILITIES HELD FOR TRADING		**79,469**	**81,167**	**77,139**
Derivatives	9 and 11	53,566	64,469	63,016
Short positions	9	12,236	16,698	14,123
Deposits		13,667	—	—
Central banks	20	1,038	—	—
Credit institutions	20	6,488	—	—
Customers	21	6,141	—	—
Marketable debt securities	22	—	—	—
Other financial liabilities	24	—	—	—
FINANCIAL LIABILITIES DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS		**32,733**	**48,038**	**60,995**
Deposits		27,279	43,598	57,111
Central banks	20	607	2,490	12,854
Credit institutions	20	1,064	6,765	9,340
Customers	21	25,608	34,343	34,917
Marketable debt securities	22	5,454	4,440	3,758
Other financial liabilities	24	—	—	126
Memorandum items: subordinated liabilities	*23*	—	—	—
FINANCIAL LIABILITIES AT AMORTIZED COST		**1,349,169**	**1,248,188**	**1,230,745**
Deposits		1,078,587	990,391	942,417
Central banks	20	139,757	112,804	62,468
Credit institutions	20	52,235	62,620	90,501
Customers	21	886,595	814,967	789,448
Marketable debt securities	22	240,709	230,829	258,219
Other financial liabilities	24	29,873	26,968	30,109
Memorandum items: subordinated liabilities	*23*	*26,196*	*21,880*	*21,062*
HEDGING DERIVATIVES	**36**	**5,463**	**6,869**	**6,048**
CHANGES IN THE FAIR VALUE OF HEDGED ITEMS IN PORTFOLIO HEDGES OF INTEREST RATE RISK	**36**	**248**	**286**	**269**
LIABILITIES UNDER INSURANCE OR REINSURANCE CONTRACTS	**15**	**770**	**910**	**739**
PROVISIONS	**25**	**9,583**	**10,852**	**13,987**
Pensions and other post-retirement obligations		3,185	3,976	6,358
Other long term employee benefits		1,242	1,751	1,382
Taxes and other legal contingencies		1,996	2,200	3,057
Contingent liabilities and commitments		733	700	739
Other provisions		2,427	2,225	2,451
TAX LIABILITIES		**8,649**	**8,282**	**9,322**
Current tax liabilities		2,187	2,349	2,800
Deferred tax liabilities	27	6,462	5,933	6,522
OTHER LIABILITIES	**26**	**12,698**	**12,336**	**12,792**
LIABILITIES ASSOCIATED WITH NON-CURRENT ASSETS HELD FOR SALE		**—**	**—**	**—**
TOTAL LIABILITIES		**1,498,782**	**1,416,928**	**1,412,036**

CONSOLIDATED BALANCE SHEETS AS OF 31 DECEMBER 2021, 2020 AND 2019

EUR million

EQUITY	Note	2021	2020*	2019*
SHAREHOLDERS´ EQUITY	30	119,649	114,620	124,239
CAPITAL	31	8,670	8,670	8,309
Called up paid capital		8,670	8,670	8,309
Unpaid capital which has been called up		—	—	—
SHARE PREMIUM	32	47,979	52,013	52,446
EQUITY INSTRUMENTS ISSUED OTHER THAN CAPITAL	34	658	627	598
Equity component of the compound financial instrument		—	—	—
Other equity instruments issued		658	627	598
OTHER EQUITY	34	152	163	146
ACCUMULATED RETAINED EARNINGS	33	60,273	65,583	61,028
REVALUATION RESERVES	33	—	—	—
OTHER RESERVES	33	(4,477)	(3,596)	(3,110)
Reserves or accumulated losses in joint venture investments		1,572	1,504	1,210
Others		(6,049)	(5,100)	(4,320)
(-) OWN SHARES	34	(894)	(69)	(31)
PROFIT OR LOSS ATTRIBUTABLE TO SHAREHOLDERS OF THE PARENT		8,124	(8,771)	6,515
(-) INTERIM DIVIDENDS	4	(836)	—	(1,662)
OTHER COMPREHENSIVE INCOME OR LOSS	29	(32,719)	(33,144)	(24,168)
Items that will not be reclassified to profit or loss		(4,241)	(5,328)	(4,288)
Items that may be reclassified to profit or loss		(28,478)	(27,816)	(19,880)
NON-CONTROLLING INTEREST	28	10,123	9,846	10,588
Other comprehensive income or loss		(2,104)	(1,800)	(982)
Other items		12,227	11,646	11,570
TOTAL EQUITY		97,053	91,322	110,659
TOTAL LIABILITIES AND EQUITY		1,595,835	1,508,250	1,522,695
MEMORANDUM ITEMS: OFF BALANCE SHEET AMOUNTS	35			
Loan commitments granted		262,737	241,230	241,179
Financial guarantees granted		10,758	12,377	13,650
Other commitments granted		75,733	64,538	68,895

* Presented for comparison purposes only (note 1.d).
The accompanying notes 1 to 54 and appendices are an integral part of the consolidated balance sheet as of 31 December 2021.

CONSOLIDATED INCOME STATEMENTS FOR THE YEARS ENDED 31 DECEMBER 2021, 2020 AND 2019

EUR million

		(Debit) Credit		
	Note	2021	2020*	2019*
Interest income	38	46,463	45,741	56,785
Financial assets at fair value through other comprehensive income		*2,582*	*2,840*	*3,571*
Financial assets at amortized cost		*40,471*	*40,365*	*48,552*
Other interest income		*3,410*	*2,536*	*4,662*
Interest expense	39	(13,093)	(13,747)	(21,502)
Interest income/(charges)		**33,370**	**31,994**	**35,283**
Dividend income	40	513	391	533
Income from companies accounted for using the equity method	13	432	(96)	324
Commission income	41	13,812	13,024	15,349
Commission expense	42	(3,310)	(3,009)	(3,570)
Gain or losses on financial assets and liabilities not measured at fair value through profit or loss, net	43	628	1,107	1,136
Financial assets at amortized cost		*89*	*(31)*	*308*
Other financial assets and liabilities		*539*	*1,138*	*828*
Gain or losses on financial assets and liabilities held for trading, net	43	1,141	3,211	1,349
Reclassification of financial assets at fair value through other comprehensive income		—	—	—
Reclassification of financial assets at amortized cost		—	—	—
Other gains (losses)		*1,141*	*3,211*	*1,349*
Gains or losses on non-trading financial assets and liabilities mandatorily at fair value through profit or loss	43	132	82	292
Reclassification of financial assets at fair value through other comprehensive income		—	—	—
Reclassification of financial assets at amortized cost		—	—	—
Other gains (losses)		*132*	*82*	*292*
Gain or losses on financial assets and liabilities measured at fair value through profit or loss, net	43	270	(171)	(286)
Gain or losses from hedge accounting, net	43	(46)	51	(28)
Exchange differences, net	44	(562)	(2,093)	(932)
Other operating income	45	2,255	1,920	1,797
Other operating expenses	45	(2,442)	(2,342)	(2,138)
Income from assets under insurance and reinsurance contracts	45	1,516	1,452	2,534
Expenses from liabilities under insurance and reinsurance contracts	45	(1,305)	(1,242)	(2,414)
Total income		**46,404**	**44,279**	**49,229**
Administrative expenses		(18,659)	(18,320)	(20,279)
Staff costs	*46*	*(11,216)*	*(10,783)*	*(12,141)*
Other general administrative expenses	*47*	*(7,443)*	*(7,537)*	*(8,138)*
Depreciation and amortisation cost	16 and 18	(2,756)	(2,810)	(3,001)
Provisions or reversal of provisions, net	25	(2,814)	(2,378)	(3,490)

CONSOLIDATED INCOME STATEMENTS FOR THE YEARS ENDED 31 DECEMBER 2021, 2020 AND 2019

EUR million

		(Debit) Credit		
	Note	2021	2020*	2019*
Impairment or reversal of impairment at financial assets not measured at fair value through profit or loss and net gains and losses from changes		(7,407)	(12,382)	(9,352)
Financial assets at fair value through other comprehensive income		*(19)*	*(19)*	*(12)*
Financial assets at amortized cost	*10*	*(7,388)*	*(12,363)*	*(9,340)*
Impairment or reversal of impairment of investments in subsidiaries, joint ventures and associates, net	17 and 18	—	—	—
Impairment or reversal of impairment on non-financial assets, net		(231)	(10,416)	(1,623)
Tangible assets	*16*	*(150)*	*(174)*	*(45)*
Intangible assets	*17 and 18*	*(71)*	*(10,242)*	*(1,564)*
Others		*(10)*	—	*(14)*
Gain or losses on non-financial assets and investments, net	48	53	114	1,291
Negative goodwill recognized in results		—	8	—
Gains or losses on non-current assets held for sale not classified as discontinued operations	49	(43)	(171)	(232)
Operating profit/(loss) before tax		**14,547**	**(2,076)**	**12,543**
Tax expense or income from continuing operations	27	(4,894)	(5,632)	(4,427)
Profit/(loss) from continuing operations		**9,653**	**(7,708)**	**8,116**
Profit/(loss) after tax from discontinued operations	37	—	—	—
Profit/(loss) for the year		**9,653**	**(7,708)**	**8,116**
Profit/(loss) attributable to non-controlling interests	28	1,529	1,063	1,601
Profit/(loss) attributable to the parent		8,124	(8,771)	6,515
Earnings/(losses) per share				
Basic	4	0.438	(0.538)	0.347
Diluted	4	0.436	(0.538)	0.346

* Presented for comparison purposes only (note 1.d).
The accompanying notes 1 to 54 and appendices are an integral part of the consolidated income statement for the year ended 31 December 2021.

CONSOLIDATED STATEMENTS OF RECOGNISED INCOME AND EXPENSE FOR THE YEARS ENDED 31 DECEMBER 2021, 2020 AND 2019

EUR million

	Note	2021	2020*	2019*
CONSOLIDATED PROFIT/(LOSS) FOR THE YEAR		**9,653**	**(7,708)**	**8,116**
OTHER RECOGNISED INCOME AND EXPENSE		**(220)**	**(9,794)**	**267**
Items that will not be reclassified to profit or loss	**29**	**754**	**(1,018)**	**(1,351)**
Actuarial gains and losses on defined benefit pension plans		1,567	(25)	(1,677)
Non-current assets held for sale		—	—	—
Other recognised income and expense of investments in subsidiaries, joint ventures and associates		(1)	(4)	1
Changes in the fair value of equity instruments measured at fair value through other comprehensive income		(171)	(917)	(29)
Gains or losses resulting from the accounting for hedges of equity instruments measured at fair value through other comprehensive income, net	36	—	—	—
Changes in the fair value of equity instruments measured at fair value through other comprehensive income (hedged item)		*117*	*4*	*44*
Changes in the fair value of equity instruments measured at fair value through other comprehensive income (hedging instrument)		*(117)*	*(4)*	*(44)*
Changes in the fair value of financial liabilities at fair value through profit or loss attributable to changes in credit risk		(99)	31	(156)
Income tax relating to items that will not be reclassified		(542)	(103)	510
Items that may be reclassified to profit or loss	**29**	**(974)**	**(8,776)**	**1,618**
Hedges of net investments in foreign operations (effective portion)	36	(1,159)	2,340	(1,151)
Revaluation gains (losses)		*(1,159)*	*2,340*	*(1,151)*
Amounts transferred to income statement		—	—	—
Other reclassifications		—	—	—
Exchanges differences		3,082	(11,040)	1,232
Revaluation gains (losses)		*3,082*	*(11,040)*	*1,232*
Amounts transferred to income statement		—	—	—
Other reclassifications		—	—	—
Cash flow hedges (effective portion)	36	(938)	(53)	8
Revaluation gains (losses)		*(1,739)*	*799*	*(1,104)*
Amounts transferred to income statement		*801*	*(852)*	*1,112*
Transferred to initial carrying amount of hedged items		—	—	—
Other reclassifications		—	—	—
Hedging instruments (items not designated)	36	—	—	—
Revaluation gains (losses)		—	—	—
Amounts transferred to income statement		—	—	—
Other reclassifications		—	—	—
Debt instruments at fair value with changes in other comprehensive income		(3,250)	(100)	2,414
Revaluation gains (losses)	*29*	*(3,063)*	*692*	*2,588*
Amounts transferred to income statement		*(545)*	*(1,165)*	*(792)*
Other reclassifications		*358*	*373*	*618*
Non-current assets held for sale		—	—	—
Revaluation gains (losses)		—	—	—
Amounts transferred to income statement		—	—	—
Other reclassifications		—	—	—
Share of other recognised income and expense of investments		19	(151)	(15)
Income tax relating to items that may be reclassified to profit or loss		1,272	228	(870)
Total recognised income and expenses for the year		**9,433**	**(17,502)**	**8,383**
Attributable to non-controlling interests		1,255	245	1,911
Attributable to the parent		8,178	(17,747)	6,472

* Presented for comparison purposes only (note 1.d).

The accompanying notes 1 to 54 and appendices are an integral part of the consolidated statement of recognised income and expense for the year ended 31 December 2021.

CONSOLIDATED STATEMENTS OF CHANGES IN TOTAL EQUITY FOR THE YEARS ENDED 31 DECEMBER 2021, 2020 AND 2019

EUR million

	Capital	Share premium	Equity instruments issued (not capital)	Other equity instruments	Accumulated retained earnings
Balance at 31 December 2020*	**8,670**	**52,013**	**627**	**163**	**65,583**
Adjustments due to errors	—	—	—	—	—
Adjustments due to changes in accounting policies	—	—	—	—	—
Opening balance at 1 January 2021*	**8,670**	**52,013**	**627**	**163**	**65,583**
Total recognised income and expense	**—**	**—**	**—**	**—**	**—**
Other changes in equity	**—**	**(4,034)**	**31**	**(11)**	**(5,310)**
Issuance of ordinary shares	—	—	—	—	—
Issuance of preferred shares	—	—	—	—	—
Issuance of other financial instruments	—	—	—	—	—
Maturity of other financial instruments	—	—	—	—	—
Conversion of financial liabilities into equity	—	—	—	—	—
Capital reduction	—	—	—	—	—
Dividends	—	(477)	—	—	—
Purchase of equity instruments	—	—	—	—	—
Disposal of equity instruments	—	—	—	—	—
Transfer from equity to liabilities	—	—	—	—	—
Transfer from liabilities to equity	—	—	—	—	—
Transfers between equity items	—	(3,557)	—	—	(5,310)
Increases (decreases) due to business combinations	—	—	—	—	—
Share-based payment	—	—	—	(62)	—
Others increases or (-) decreases in equity	—	—	31	51	—
Balance at 31 December 2021	**8,670**	**47,979**	**658**	**152**	**60,273**

* Presented for comparison purposes only (note 1.d).

The accompanying notes 1 to 54 and appendices are an integral part of the consolidated statement of changes in total equity for the year ended 31 December 2021.

						Non-controlling interest		
Revaluation reserves	Other reserves	(-) Own shares	Profit attributable to shareholders of the parent	(-) Interim dividends	Other comprehensive income	Other comprehensive income	Other items	Total
—	**(3,596)**	**(69)**	**(8,771)**	**—**	**(33,144)**	**(1,800)**	**11,646**	**91,322**
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	**(3,596)**	**(69)**	**(8,771)**	**—**	**(33,144)**	**(1,800)**	**11,646**	**91,322**
—	**—**	**—**	**8,124**	**—**	**54**	**(274)**	**1,529**	**9,433**
—	**(881)**	**(825)**	**8,771**	**(836)**	**371**	**(30)**	**(948)**	**(3,702)**
—	—	—	—	—	—	—	17	17
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	(836)	—	—	(648)	(1,961)
—	—	(1,645)	—	—	—	—	—	(1,645)
—	23	820	—	—	—	—	—	843
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	(275)	—	8,771	—	371	(30)	30	—
—	—	—	—	—	—	—	(5)	(5)
—	—	—	—	—	—	—	—	(62)
—	(629)	—	—	—	—	—	(342)	(889)
—	**(4,477)**	**(894)**	**8,124**	**(836)**	**(32,719)**	**(2,104)**	**12,227**	**97,053**

CONSOLIDATED STATEMENTS OF CHANGES IN TOTAL EQUITY FOR THE YEARS ENDED 31 DECEMBER 2021, 2020 AND 2019

EUR million

	Capital	Share premium	Equity instruments issued (not capital)	Other equity instruments	Accumulated retained earnings
Balance at 31 December 2019*	**8,309**	**52,446**	**598**	**146**	**61,028**
Adjustments due to errors	—	—	—	—	—
Adjustments due to changes in accounting policies	—	—	—	—	—
Opening balance at 1 January 2020*	**8,309**	**52,446**	**598**	**146**	**61,028**
Total recognised income and expense	**—**	**—**	**—**	**—**	**—**
Other changes in equity	**361**	**(433)**	**29**	**17**	**4,555**
Issuance of ordinary shares	361	(72)	—	—	—
Issuance of preferred shares	—	—	—	—	—
Issuance of other financial instruments	—	—	—	—	—
Maturity of other financial instruments	—	—	—	—	—
Conversion of financial liabilities into equity	—	—	—	—	—
Capital reduction	—	—	—	—	—
Dividends	—	(361)	—	—	—
Purchase of equity instruments	—	—	—	—	—
Disposal of equity instruments	—	—	—	—	—
Transfer from equity to liabilities	—	—	—	—	—
Transfer from liabilities to equity	—	—	—	—	—
Transfers between equity items	—	—	—	—	4,555
Increases (decreases) due to business combinations	—	—	—	—	—
Share-based payment	—	—	—	(53)	—
Others increases or (-) decreases in equity	—	—	29	70	—
Balance at 31 December 2020*	**8,670**	**52,013**	**627**	**163**	**65,583**

* Presented for comparison purposes only (note 1.d).
The accompanying notes 1 to 54 and appendices are an integral part of the consolidated statement of changes in total equity for the year ended 31 December 2021.

						Non-controlling interest		
Revaluation reserves	Other reserves	(-) Own shares	Profit attributable to shareholders of the parent	(-) Interim dividends	Other comprehensive income	Other comprehensive income	Other items	Total
—	**(3,110)**	**(31)**	**6,515**	**(1,662)**	**(24,168)**	**(982)**	**11,570**	**110,659**
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	**(3,110)**	**(31)**	**6,515**	**(1,662)**	**(24,168)**	**(982)**	**11,570**	**110,659**
—	**—**	**—**	**(8,771)**	**—**	**(8,976)**	**(818)**	**1,063**	**(17,502)**
—	**(486)**	**(38)**	**(6,515)**	**1,662**	**—**	**—**	**(987)**	**(1,835)**
—	70	—	—	—	—	—	5	364
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	(465)	(826)
—	—	(758)	—	—	—	—	—	(758)
—	1	720	—	—	—	—	—	721
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	298	—	(6,515)	1,662	—	—	—	—
—	—	—	—	—	—	—	(54)	(54)
—	—	—	—	—	—	—	—	(53)
—	(855)	—	—	—	—	—	(473)	(1,229)
—	**(3,596)**	**(69)**	**(8,771)**	**—**	**(33,144)**	**(1,800)**	**11,646**	**91,322**

CONSOLIDATED STATEMENTS OF CHANGES IN TOTAL EQUITY FOR THE YEARS ENDED 31 DECEMBER 2021, 2020 AND 2019

EUR million

	Capital	Share premium	Equity instruments issued (not capital)	Other equity instruments	Accumulated retained earnings
Balance at 31 December 2018*	**8,118**	**50,993**	**565**	**234**	**56,756**
Adjustments due to errors	—	—	—	—	—
Adjustments due to changes in accounting policies	—	—	—	—	—
Opening balance at 1 January 2019*	**8,118**	**50,993**	**565**	**234**	**56,756**
Total recognised income and expense	**—**	**—**	**—**	**—**	**—**
Other changes in equity	**191**	**1,453**	**33**	**(88)**	**4,272**
Issuance of ordinary shares	191	1,453	—	—	—
Issuance of preferred shares	—	—	—	—	—
Issuance of other financial instruments	—	—	—	—	—
Maturity of other financial instruments	—	—	—	—	—
Conversion of financial liabilities into equity	—	—	—	—	—
Capital reduction	—	—	—	—	—
Dividends	—	—	—	—	(1,055)
Purchase of equity instruments	—	—	—	—	—
Disposal of equity instruments	—	—	—	—	—
Transfer from equity to liabilities	—	—	—	—	—
Transfer from liabilities to equity	—	—	—	—	—
Transfers between equity items	—	—	—	—	5,327
Increases (decreases) due to business combinations	—	—	—	—	—
Share-based payment	—	—	—	(88)	—
Others increases or (-) decreases in equity	—	—	33	—	—
Balance at 31 December 2019*	**8,309**	**52,446**	**598**	**146**	**61,028**

* Presented for comparison purposes only (note 1.d).

The accompanying notes 1 to 54 and appendices are an integral part of the consolidated statement of changes in total equity for the year ended 31 December 2021.

						Non-controlling interest		
Revaluation reserves	Other reserves	(-) Own shares	Profit attributable to shareholders of the parent	(-) Interim dividends	Other comprehensive income	Other comprehensive income	Other items	Total
—	**(1,583)**	**(59)**	**7,810**	**(2,237)**	**(24,125)**	**(1,292)**	**12,181**	**107,361**
—	—	—	—	—	—	—	—	—
—	(391)	—	—	—	—	—	—	(391)
—	**(1,974)**	**(59)**	**7,810**	**(2,237)**	**(24,125)**	**(1,292)**	**12,181**	**106,970**
—	**—**	**—**	**6,515**	**—**	**(43)**	**310**	**1,601**	**8,383**
—	**(1,136)**	**28**	**(7,810)**	**575**	**—**	**—**	**(2,212)**	**(4,694)**
—	28	—	—	—	—	—	1	1,673
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	(2)	(2)
—	—	—	—	(1,662)	—	—	(895)	(3,612)
—	—	(928)	—	—	—	—	—	(928)
—	(6)	956	—	—	—	—	—	950
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	246	—	(7,810)	2,237	—	—	—	—
—	—	—	—	—	—	—	110	110
—	—	—	—	—	—	—	—	(88)
—	(1,404)	—	—	—	—	—	(1,426)	(2,797)
—	**(3,110)**	**(31)**	**6,515**	**(1,662)**	**(24,168)**	**(982)**	**11,570**	**110,659**

CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED 2021, 2020 AND 2019

EUR million

	Note	2021	2020*	2019*
A. CASH FLOWS FROM OPERATING ACTIVITIES		**56,691**	**66,153**	**3,389**
Profit or loss for the year		**9,653**	**(7,708)**	**8,116**
Adjustments made to obtain the cash flows from operating activities		**21,363**	**37,836**	**23,990**
Depreciation and amortisation cost		*2,756*	*2,810*	*3,001*
Other adjustments		*18,607*	*35,026*	*20,989*
Net increase/(decrease) in operating assets		**27,258**	**51,385**	**64,593**
Financial assets held-for-trading		*2,064*	*12,390*	*15,450*
Non-trading financial assets mandatorily at fair value through profit or loss		*969*	*(275)*	*(6,098)*
Financial assets at fair value through profit or loss		*(32,746)*	*(10,314)*	*4,464*
Financial assets at fair value through other comprehensive income		*(9,152)*	*6,549*	*1,693*
Financial assets at amortized cost		*73,181*	*43,541*	*49,541*
Other operating assets		*(7,058)*	*(506)*	*(457)*
Net increase/(decrease) in operating liabilities		**56,945**	**90,356**	**38,469**
Financial liabilities held-for-trading		*(1,386)*	*7,880*	*6,968*
Financial liabilities designated at fair value through profit or loss		*(14,316)*	*(10,907)*	*(8,858)*
Financial liabilities at amortized cost		*79,114*	*96,561*	*47,622*
Other operating liabilities		*(6,467)*	*(3,178)*	*(7,263)*
Income tax recovered/(paid)		**(4,012)**	**(2,946)**	**(2,593)**
B. CASH FLOWS FROM INVESTING ACTIVITIES		**(3,715)**	**(7,220)**	**(7,229)**
Payments		**11,669**	**11,976**	**14,289**
Tangible assets	*16*	*10,015*	*7,386*	*12,766*
Intangible assets	*18*	*1,388*	*1,134*	*1,377*
Investments	*13*	*126*	*525*	*63*
Subsidiaries and other business units		*140*	*2,931*	*83*
Non-current assets held for sale and associated liabilities		*—*	*—*	*—*
Other payments related to investing activities		*—*	*—*	*—*
Proceeds		**7,954**	**4,756**	**7,060**
Tangible assets	*16*	*6,382*	*2,014*	*4,091*
Intangible assets	*18*	*—*	*—*	*—*
Investments	*13*	*672*	*182*	*686*
Subsidiaries and other business units		*6*	*1,775*	*218*
Non-current assets held for sale and associated liabilities	*12*	*894*	*785*	*2,065*
Other proceeds related to investing activities		*—*	*—*	*—*
C. CASH FLOW FROM FINANCING ACTIVITIES		**(1,322)**	**(1,909)**	**(10,122)**
Payments		**7,741**	**6,978**	**12,159**
Dividends	*4*	*1,313*	*—*	*3,773*
Subordinated liabilities	*23*	*2,684*	*3,780*	*5,123*
Redemption of own equity instruments		*—*	*—*	*—*
Acquisition of own equity instruments		*1,645*	*758*	*928*
Other payments related to financing activities		*2,099*	*2,440*	*2,335*
Proceeds		**6,419**	**5,069**	**2,037**
Subordinated liabilities	*23*	*5,340*	*4,095*	*1,090*
Issuance of own equity instruments		*—*	*—*	*—*
Disposal of own equity instruments		*854*	*721*	*947*
Other proceeds related to financing activities		*225*	*253*	*—*

CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED 2021, 2020 AND 2019

EUR million

	Note	2021	2020*	2019*
D. EFFECT OF FOREIGN EXCHANGE RATE DIFFERENCES		5,196	(4,252)	1,366
E. NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS		56,850	52,772	(12,596)
F. CASH AND CASH EQUIVALENTS AT BEGINNING OF THE YEAR		153,839	101,067	113,663
G. CASH AND CASH EQUIVALENTS AT END OF THE YEAR		210,689	153,839	101,067
COMPONENTS OF CASH AND CASH EQUIVALENTS AT END OF THE YEAR				
Cash		*8,142*	*7,817*	*8,764*
Cash equivalents at central banks		*193,102*	*137,047*	*75,353*
Other financial assets		*9,445*	*8,975*	*16,950*
Less, bank overdrafts refundable on demand		—	—	—
TOTAL CASH AND CASH EQUIVALENTS AT END OF THE YEAR		210,689	153,839	101,067
In which, restricted cash		—	—	—

* Presented for comparison purposes only (note 1.d).

The accompanying notes 1 to 54 and appendices are an integral part of the consolidated statement of cash flows for the year ended 31 December 2021.

Notes to the consolidated financial statements



Banco Santander, S.A., and Companies composing Grupo Santander

Notes to the consolidated financial statements (consolidated annual accounts) for the year ended 31 December 2021

1. Introduction, basis of presentation of the consolidated financial statements (consolidated annual accounts) and other information

a) Introduction

Banco Santander, S.A. ('the parent' or 'Banco Santander'), is a private-law entity subject to the rules and regulations applicable to banks operating in Spain, where it was constituted and currently maintains its legal domicile, which is paseo de Pereda, numbers 9 to 12 (39004, Santander, Spain).

The principal headquarters of Banco Santander are located in Ciudad Grupo Santander, Avenida Cantabria s/n (28660, Boadilla del Monte, Madrid, Spain).

The corporate purpose of Banco Santander, S.A., mainly entails carrying out all kinds of activities, operations and services inherent to the banking business in general and permitted by current legislation, and the acquisition, holding, enjoyment and disposal of all kinds of securities.

In addition to the operations carried on directly by it, Banco Santander is the head of a group of subsidiaries that engage in various business activities and which compose, together with it, Grupo Santander ('Santander' or 'the Group'). Therefore, Banco Santander is obliged to prepare, in addition to its own separate financial statements, the Group's consolidated financial statements, which also include the interests in joint ventures and investments in associates.

At 31 December 2021, Grupo Santander consisted of 721 subsidiaries of Banco Santander, S.A. In addition, other 172 companies are associates of the Group, joint ventures or companies of which the Group holds more than 5% (excluding the Group companies of negligible interest with respect to the fair presentation that the annual accounts must express).

Grupo Santander consolidated financial statements for 2019 were approved by the shareholders at the group´s annual general meeting on 3 April 2020. Grupo Santander consolidated financial statements for 2020 were approved by the shareholders at the group´s annual general meeting on 26 March 2021. The Group's 2021 consolidated financial statements, the financial statements of the parent and of substantially all the Group companies have not been approved yet by their shareholders at the respective annual general meetings. However, Banco Santander board of directors considers that the aforementioned financial statements will be approved without any significant changes.

b) Basis of presentation of the consolidated financial statements

Under Regulation (EC) n.º 1606/2002 of the European Parliament and of the Council of 19 July 2002 all companies governed by the law of an EU Member State and whose securities are admitted to trading on a regulated market of any Member State must prepare their consolidated financial statements for the years beginning on or after 1 January, 2005 in conformity with the International Financial Reporting Standards ('IFRS') previously adopted by the European Union ('EU-IFRS').

In order to adapt the accounting system of Spanish credit institutions with the principles and criteria established by the IFRS adopted by the European Union ('EU-IFRS'), the Bank of Spain published circular 4/2017, dated 27 November 2017, on Public and Confidential Financial Reporting Standards and Financial Statement Formats.

During 2021 and 2020, the Bank of Spain published Circulars 6/2021 of 22 December, 2/2020 and 3/2020 of 11 June, amending Circular 4/2017 of 27 November to credit institutions on Public and Confidential Financial Reporting Standards and Financial Statement Formats.

Grupo Santander consolidated financial statements for 2021 were authorised by the Bank's directors (at the board meeting on 24 February 2022) in accordance with International Financial Reporting Standards as adopted by the European Union and with Bank of Spain circular 4/2017 and subsequent modifications, and Spanish corporate and commercial law applicable to the Group, using the basis of consolidation, accounting policies and measurement bases set forth in note 2, accordingly, they present fairly the Group's equity and financial position at 31 December 2021, 2020 and 2019 and the consolidated results of its operations and the consolidated cash flows in 2021, 2020 and 2019. These consolidated financial statements were prepared from the accounting records kept by the Bank and by the other Group entities, and include the adjustments and reclassifications required to unify the accounting policies and measurement bases applied by the Group. These consolidated annual accounts have been prepared on the basis of the accounting records held by the Bank and by each of the other companies of the Group, and include the adjustments and reclassifications required to standardise the accounting policies and valuation criteria applied by Grupo Santander.

The notes to the consolidated financial statements contain additional information to that presented in the consolidated balance sheet, consolidated income statement, consolidated statement of recognised income and expense, consolidated statement of changes in total equity and consolidated statement of cash flows. The notes provide, in a clear, relevant, reliable and comparable manner, narrative descriptions and breakdowns of these statements.

Adoption of new standards and interpretations issued

The following modifications came into force and were adopted by the European Union in 2021:

- Amendments to IFRS 9 Financial Instruments, IAS 39 Financial Instruments: Recognition and Measurement, IFRS 7 Financial Instruments: Disclosures, IFRS 4 Insurance Contracts and IFRS 16 Leases, on Reference Interest Rates - Phase 2: The amendments allow for the temporary application of certain exceptions to the requirements of (i) assessment of derecognition of financial assets, financial liabilities and lease liabilities in the event of changes in the financial assets, financial liabilities and lease liabilities, and (ii) exemptions from hedge accounting requirements directly affected by the IBOR reform, requiring additional disclosures, (iii) exemptions for lease modifications that allow the liability to be measured using the reformed interest rate curves against the right-of-use. These new exemptions require additional disclosures. The amendments became effective as of 1 January 2021, with the possibility of early application and will cease to be applicable when the uncertainties about the hedged risks, cash flows of the financial instruments affected or the hedging relationship is terminated. In this regard, the Group chose to apply the amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 in the preparation of the financial statements for the year ending 31 December 2020.

  The additional breakdowns required by the amendments to IFRS 7 relating to hedging relationships are included in note 36. A description of the Grupo Santander's management of the transition to alternative reference rates, as well as the changes in risk management strategy is included in note 53.

  Following is a detail of the carrying amount at 31 December 2021 of financial assets, financial liabilities, derivatives and loan commitments that continue to be referenced to the indices subject to the IBOR Reform:

EUR million

Gross Carrying amount	Loans and advances	Debt securities acquired (Assets)	Deposits	Debt securities issued (Liabilities)	Derivatives (Assets)	Derivatives (Liabilities)	Loan Commitments
Referenced to EONIA	**15**	**68**	**949**	**284**	**101**	**242**	**—**
Referenced to LIBOR	**45,713**	**4,325**	**9,358**	**8,408**	**11,806**	**17,551**	**24,533**
of which USD	*39,806*	*2,749*	*8,634*	*6,667*	*8,387*	*11,163*	*24,034*
of which GBP	*2,957*	*1,570*	*253*	*1,700*	*3,386*	*4,899*	*418*
TOTAL	**45,728**	**4,393**	**10,307**	**8,692**	**11,907**	**17,793**	**24,533**

- Covid-19-Related Rent Concessions - Amendments to IFRS 16 Leases: As a result of the covid-19 pandemic, IFRS 16 is amended to allow the lessee to apply a practical alternative and not to consider rental concessions as a modification of the lease agreement when the following requirements are met: the revised consideration is the same or less than the consideration before the change, the affected payments are prior to 30 June 2021, and there are no substantial changes to the remaining lease terms. On 31 March 2021, the IASB published an additional amendment to extend the scope of the practical expedient to 30 June 2022. It is applicable from 1 April 2021.

- Amendment to IFRS 4 Insurance Contracts, which is aimed at extending the expiry date of the temporary exemption from applying IFRS 9 by two years (from 1 January 2021 to 1 January 2023) for entities whose activities are predominantly insurance-related. This achieves alignment with the effective date of IFRS 17 Insurance Contracts (1 January 2023). It is applicable from 1 January 2021.

  The application of the aforementioned amendments to accounting standards and interpretations did not have any material effects on Grupo Santander consolidated financial statements.

Likewise, at the date of approval of these consolidated annual accounts, the following standards which effectively came into force have effective dates after 31 December 2021:

- Amendment to IFRS 3 Business Combinations: to update the references to the Conceptual Framework for Financial Reporting and add an exception for the recognition of liabilities and contingent liabilities within the scope of IAS 37 Provisions, Contingent Liabilities and Contingent Assets and IFRIC 21 Levies. The amendments also confirm that an acquirer should not recognize contingent assets acquired in a business combination. It will apply from 1 January 2022.

- Amendment to IAS 16 Property, Plant and Equipment: prevents an entity from deducting from the cost of an item of property, plant and equipment any revenue from the sale of finished goods while the entity is preparing the item for its intended use. It is also clear that an entity is "testing whether the asset is functioning properly" when evaluating the technical and physical performance of the asset. The financial performance of the asset should not be taken into account for this evaluation.

  Additionally, entities should disclose separately the amounts of income and expenses related to finished goods that are not the product of the entity's ordinary activities. It will apply from 1 January 2022.

- Amendment to IAS 37 Provisions, Contingent Liabilities and Contingent Assets: clarifies that the direct costs of fulfilling a contract include both the incremental costs of fulfilling the contract and an allocation of other costs directly related to fulfilling contracts. Before recognising a separate provision for an onerous contract, the entity recognises any impairment loss that has occurred on assets used in fulfilling the contract. It will apply from 1 January 2022.

- Amendment to IFRS Cycle (2018-2020): introduces minor amendments, to be applied from 1 January 2022, with early application permitted, to the following standards:

  - IFRS 9 Financial Instruments: clarifies which rates must be included in the 10% test for derecognition of financial liabilities.

  - IFRS 16 Leases: amendment to remove possible confusion regarding the treatment of leasing incentives in the application of IFRS 16 Leases.

  - IFRS 1, in relation to the first-time adoption of International Financial Reporting Standards, allows entities that have measured their assets and liabilities at the carrying amounts recorded in their parent's books to also measure any cumulative translation differences using the amounts reported by the parent. This amendment also applies to associates and joint ventures that have adopted the same exemption from IFRS 1.

- IFRS 17 Insurance Contracts: new general accounting standard for insurance contracts, which includes the recognition, measurement, presentation and disclosure of information. Insurance contracts combine financial and service provision features that, in many cases, generate variable long-term cash flows. To properly reflect these characteristics, IFRS 17 combines the measurement of future cash flows with the recording of the result of the contract during the period in which the service is provided, presents separately the financial results from the results for the provision of the service and allows entities, through the choice of an accounting policy option, to recognize the financial results in the income statement or in other comprehensive income. It will apply from 1 January 2023.

  In addition, during 2021, although it is still pending adoption by the European Union a transitional option relating to comparative information presented on financial assets in the initial application of IFRS 17, which is intended to help entities avoid temporary accounting mismatches between the financial assets and liabilities of insurance contracts, has been included during 2021 but is still pending adoption by the European Union. It will apply from 1 January 2023.

  Grupo Santander is still analysing the possible effects of this new standard, however, it should be noted that no material impacts on the consolidated financial statements of Grupo Santander have been identified as a result of its application, except for certain balance sheet reclassifications arising from the different treatment that this new standard establishes for the components of an insurance contract.

Finally, at the date of approval of these consolidated annual accounts, the following standards which effectively come into force after 31 December 2021 had not yet been adopted by the European Union:

- Classification of Liabilities, amendments to IAS 1 Presentation of Financial Statements, considering non-current liabilities those in which the entity has the possibility of deferring payment for more than 12 months from the closing date of the reporting period.

  They must be applied retrospectively in accordance with the normal requirements in IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors. It will apply from 1 January 2023.

- The amendments to IAS 1 Presentation of Financial Statements require companies to disclose material information about their accounting policies rather than their significant accounting policies. It will be applicable from 1 January 2023.

- The amendments to IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors clarifies how to distinguish changes in accounting policies, which are generally applied retrospectively, from changes in accounting estimates, which are generally applied prospectively. It will be applicable from 1 January 2023.

- The amendments to IAS 12 Income Taxes require companies to recognise deferred tax on transactions that, on initial recognition, give rise to equal amounts of taxable and deductible temporary differences. In addition, entities should recognise deferred tax assets (to the extent that it is probable that they can be utilised) and deferred tax liabilities at the beginning of the earliest comparative period for all deductible and taxable temporary differences associated with:
- Right-of-use assets and lease liabilities, and
- Decommissioning, restoration and similar liabilities, and the corresponding amounts recognised as part of the cost of the related assets.

  The cumulative effect of recognising these adjustments is recognised in retained earnings, or another component of equity, as appropriate. It will be applicable from 1 January 2023.

Grupo Santander is currently analysing the possible effects of these new standards and interpretations.

All accounting policies and measurement bases with a material effect on the consolidated financial statements for 2021 were applied in the preparation of these consolidated annual accounts.

c) Use of critical estimates

The consolidated results and the determination of consolidated equity are sensitive to the accounting policies, measurement bases and estimates used by the directors of the Bank in preparing the consolidated financial statements.

The main accounting policies and measurement bases are set forth in note 2.

In the consolidated financial statements estimates were occasionally made by the senior management of Grupo Santander in order to quantify certain of the assets, liabilities, income, expenses and obligations reported herein. These estimates, which were made on the basis of the best information available, relate basically to the following:

- The impairment losses on certain assets: it applies to financial assets at fair value through other comprehensive income, financial assets at amortised cost, non-current assets held for sale, investments, tangible assets and intangible assets (see notes 6, 7, 10, 12, 13, 16, 17, 18 and 53).
- The assumptions used in the actuarial calculation of the post-employment benefit liabilities and commitments and other obligations (see note 25).
- The useful life of the tangible and intangible assets (see notes 16 and 18).
- The measurement of goodwill arising on consolidation (see note 17).
- The calculation of provisions and the consideration of contingent liabilities (see note 25).
- The fair value of certain unquoted assets and liabilities (see notes 6, 7, 8, 9, 10, 11, 20, 21 and 22).
- The recoverability of deferred tax assets and the income tax expense (see note 27).
- The fair value of the identifiable assets acquired and the liabilities assumed in business combinations (see note 3).

To update the estimates described above, the Group's Management has taken into account the current situation as a result of covid-19, classified as a pandemic by the World Health Organization, which significantly is affecting the economic activity worldwide and, as a result, the Group's operations and financial results, and which generates uncertainty in the Group's estimates. Therefore, the Group's Management has made an assessment of the current situation according to the best information available to date, disclosing in the notes the main estimates made and the potential impacts of covid-19 on them for the period ended 31 December 2021 (see notes 17, 27 and 53).

Although these estimates have been made on the basis of the best information available at the end of the year 2021, and considering information updated at the date of preparation of these consolidated annual accounts, it is possible that events that may take place in the future may make it necessary to modify them (upwards or downwards) in the coming years, which would be done, if appropriate, in a prospective manner, recognising the effects of the change in estimate in the corresponding consolidated income statement.

d) Information relating to 2020 and 2019

In July 2016, the IASB published IFRS 16, Leases, which was adopted by the Group in accordance with the standard on 1 January 2019. IFRS 16 establishes the principles for the recognition, measurement, presentation and breakdown of lease contracts, with the objective of ensuring reporting information that faithfully represents the lease transactions.

The adoption of IFRS 16 led to changes in the Group's accounting policies for the recognition, measurement, presentation and breakdown of lease contracts. As a result of its adoption , the impact of the first application recorded by Grupo Santander corresponds, mainly, to the recognition of right-of-use for an amount of EUR 6,693 million, financial liabilities for an amount of EUR 7,084 million and a negative impact on the Group's equity of EUR 391 million. The impact of the first application of IFRS 16 on the ordinary capital ratio (Common Equity Tier 1 - CET 1) was -20 bp.

Secondly, Grupo Santander chose to apply in advance for the financial statements for the year ended 31 December 2019 the amendment to IFRS 9, IAS 39 and IFRS 7 on Reference Interest Rates (IBOR Reform - Phase 1). Grupo Santander applies IAS 39 for hedge accounting, detailed below are the main assumptions or judgments made by Grupo Santander when applying the amendments to that standard.

- For cash flow hedges, the Group has assumed that the cash flows covered (which are based on the benchmark index) are not modified as a result of the aforementioned reform, and therefore continue to comply with the highly probable future transaction requirement.
- To determine the prospective effectiveness of hedges, the Group has assessed that the economic relationship between the hedged item and the hedging instrument continues to exist since the interest rate benchmark on which the hedged item and the hedging instrument are based is not changed as a result of the IBOR reform.

See information regarding Phase 2 of that Reform in section b of this note and in note 53.

Additionally, the segment information corresponding to the year ended 31 December 2020 and 2019 were restated for comparative purposes in accordance with the Group's new organizational structure, as required by IFRS 8 (see note 51).

In addition to the above, the information in note 4.b relating to the shares outstanding in 2019 has been restated due to the capital increase done in 2020 described in note 31.a in accordance with IAS 33 Earnings per Share.

Finally, based on the meeting held on 3 March 2020 by the International Financial Reporting Standards Committee (IFRIC), the Group has changed its accounting policy in relation to the presentation of exchange differences and the effects of hyperinflation of the operations generated in Argentina with retroactive effect (see note 2.a.iv).

Therefore, the information contained in these consolidated financial statements for the financial years 2020 and 2019 is presented solely and exclusively for comparative purposes with the information relating to the year ended 31 December 2021 (see note 2.a.iv).

In order to interpret the changes in the balances with respect to 31 December 2021, it is necessary to take into consideration the exchange rate effect arising from the volume of foreign currency balances held by Grupo Santander in view of its geographic diversity (see note 51.b) and the impact of the appreciation/depreciation of the various currencies against the euro in 2021, based on the exchange rates at the end of 2021: Mexican peso (5.55%), US dollar (8.34%) , Brazilian real (0.85%) , Argentine peso (-11.30%), Sterling pound (6.91%), Chilean peso (-9.61%), and Polish zloty (-0.82%); as well as the evolution of the comparable average rates: Mexican peso (1.60%), US dollar (-3.52%), Brazilian real (-8.75%), Argentine peso (-8.21%), Sterling pound (3.43%), Chilean peso (0.55%) and Polish zloty (-2.70%).

e) Capital management

i. Regulatory and economic capital

Credit institutions must meet a number of minimum capital and liquidity requirements. These minimum requirements are governed by the European Capital Requirements Regulation, better known as CRR, and the Capital Requirements Directive, CRD. In June 2019, these regulations were significantly amended. The applicable regulations are now CRR II and CRD V.

As the Directives need to be transposed into the legal systems of the different Member States in order to be applicable, in the case of Spain, Royal Legislative Decree 7/2021 and Royal Decree 970/2021 were published for this purpose in 2021.

In June 2019, CRR II introduced the minimum TLAC (Total Loss Absorbing Capacity) requirement, which only applies to global systemically important banks (G-SIBs). This requirement introduces two metrics: i) a minimum requirement for own funds and eligible liabilities as a percentage of the Total Risk Exposure Amount (TREA) set at 16% during the transition period and 18% from 1 January 2022 after the end of the transition period; and ii) a metric to set a minimum requirement for own funds and eligible liabilities as a percentage of the Total Risk Exposure Amount of 6% during the transition period and 6.75% from 1 January 2022 after the end of the transition period.

This year saw the implementation of the EBA Guidelines on the Definition of New Default, which were prepared in accordance with CRR II, on 1 January 2021. The changes to CRR II that are applicable from June 2021 include the introduction of a minimum leverage ratio of 3%, the new standardised EAD calculation for counterparty risk, known as SA-CCR, the long-term liquidity ratio (NSFR), the new limits for large exposures and the requirement to report under the standardised approach for market risk.

The CRD V introduces important modifications such as the regulation of Pillar 2G ('guidance', orientation of requirements by Pillar 2).

On 27 October 2021, the European Commission published the draft review of European banking legislation: CRR III and CRD VI.

The banking package consists of the following elements: 1) Implementation of the final Basel III reforms, 2) Contribution to sustainability and green transition and 3) Stronger supervision: ensuring sound management of EU banks and better protection of financial stability.

In general, the Commission proposes to start applying the new rules from 1.1.2025, but the amendments to the regulation that concern resolution issues could come into force in the first months of 2022.

With regard to the resolution rules, institutions must have an adequate funding structure to ensure that, in the event of financial distress, the institution has sufficient liabilities to absorb losses in order to recover its position or be resolved, while ensuring the protection of depositors and financial stability.

The directive that governs the resolution framework mentioned above is the Bank Recovery and Resolution Directive (BRRD). Like the CRR and the CRD, the BRRD was amended in June 2019, so BRRD II refers to all of these amendments. The transposition of this directive into the Spanish legal system took place in 2021 through a Royal Decree.

BRRDII has introduced important changes to the Minimum Requirement for Own Funds and Eligible Liabilities (MREL). For example, the TLAC requirement is now considered a Pillar 1 resolution requirement for G-SIBs. For large banks (defined as banks with total assets of more than EUR 100 billion) or banks deemed systemically important by the resolution authority, BRRDII sets a minimum subordination requirement of 13.5% of risk-weighted assets or 5% of the leverage ratio, whichever is higher. For all other institutions, the subordination requirement is set by the resolution authority on a case-by-case basis.

Finally, Deposit Guarantee Schemes (DGS) are regulated by Directive 2014/49 or DSGD, which has not undergone any significant changes since its publication in 2014. It aims to harmonise the deposit guarantee schemes of the Member States, thus ensuring stability and balance in the different countries. It creates an appropriate framework for depositors to have better access to DGSs than was the case before the publication of this Directive through clear coverage, shorter repayment periods, better information and robust funding requirements. This Directive is transposed into Spanish law by Law 11/2015, Royal Decree 1012/2015 and Royal Decree 1041/2021.

In 2020, the national governments took measures to address the economic and social impact of the vine population, in particular legislative moratoria that were aimed at containing NPLs and helping the population to meet liquidity needs. Throughout 2020, the EBA adopted a series of guidelines, including the Guidelines on legislative and non-legislative moratoria applied in the context of the Cov19 crisis on 2 April 2020 (EBA/GL/2020/08). These guidelines clarified the requirements for public and private moratoria to avoid classification of exposures affected by moratoria as forborne exposures.

Although these guidelines were initially going to apply to moratoria granted before 30 June 2020, the EBA decided on 2 December 2020 to reactivate the application of these guidelines (EBA/GL/2020/02) for moratoria requested before 31 March 2021 and for a period not exceeding 9 months.

Another measure adopted in 2020 to provide flexibility in meeting the requirements was the approval and entry into force of the CRR "Quick Fix" amending CRR II (urgent and extraordinary amendments to bring about a more flexible regulatory framework in response to COVID-19). The Quick Fix introduces a number of new features, including the extension of the transitional period granted before the pandemic for the entry into force of IFRS 9, due to the sudden and significant increase in expected credit loss provisions to be recognised. The implementation of certain provisions of CRR II has also been delayed, such as those relating to the leverage ratio buffer (postponed until 1 January 2023); the possibility of excluding exposures to central banks from the calculation of the leverage ratio, which should have been applied from June 2021 on, has been brought forward. Other provisions beneficial to institutions have also been brought forward. These include the support factors for SMEs and infrastructure, and the new treatment for software (applicable from the day following the publication date of the Delegated Regulation that implements it).

At 31 December 2021 Grupo Santander met the minimum capital requirements established by current legislation (see note 53d).

ii. Plan for the roll-out of advanced approaches and authorisation from the supervisory authorities

Grupo Santander continues adopting, over the next few years, the advanced internal ratings-based (AIRB) approach under Basel II for substantially all its banks. The commitment assumed before the supervisor still implies the adoption of advanced models within the ten key markets where Santander Group operates.

This objective of covering IRB models in the group should be seen in the context of the current supervisory focus on the robustness and adequacy of existing models, as well as the simplification strategy recently agreed with the ECB.

Grupo Santander has obtained authorisation from the supervisory authorities to use the AIRB approach for the calculation of regulatory capital requirements for credit risk for the Parent and the main subsidiaries in Spain, the United Kingdom and Portugal, as well as for certain portfolios in Germany, Mexico, Brazil, Chile, the Nordic countries (Norway, Sweden and Finland), France and the United States.

As regards the other risks explicitly addressed under Basel Pillar I, the Group is authorised to use its internal model for market risk for its treasury trading activities in Spain, Chile and Mexico.

For the purpose of calculating regulatory capital for operational risk, the Group uses the standardised approach provided for the CRR. In 2017 the European Central Bank authorised the use of the Alternative Standardised Approach to calculate the capital requirements at consolidated level in Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México, in addition to the approval obtained in 2016 in Brazil.

f) Environmental impact

In view of the business activities carried on by the Group entities, the Group does not have any environmental liability, expenses, assets, provisions or contingencies that might be material with respect to its consolidated equity, financial position or results.

Grupo Santander considers the aspects related to climate change in the preparation of the ratings of its wholesale clients if they are relevant. These ratings influence the subsequent assignment of credit parameters for the calculation of the expected loss' estimate.

With the reasonable and supportable information available at the date of approval of these consolidated annual accounts, the potential additional impacts of expected losses on the time horizons of the Group's portfolios, taking into account as well the mitigation measures, are not considered material.

Grupo Santander, together with the rest of the financial industry, is working on developing the appropriate methodologies to improve the measurement of these losses, when the necessary regulatory developments are more advanced and information is available to carry out a more precise measurement.

See additional information in note 53.a.

g) Events after the reporting period

No significant events occurred from 1 January 2022 to the date on which these consolidated financial statements were authorised for issue, other than those described in these consolidated annual accounts.

2. Accounting policies

The accounting policies applied in preparing the consolidated financial statements were as follows:

a) Foreign currency transactions

i. Presentation currency

Banco Santander's functional and presentation currency is the euro. Also, the presentation currency of the Group is the euro.

ii. Translation of foreign currency balances

Foreign currency balances are translated to euros in two consecutive stages:

- Translation of foreign currency to the functional currency (currency of the main economic environment in which the entity operates).
- Translation to euros of the balances held in the functional currencies of entities whose functional currency is not the euro.

Translation of foreign currency to the functional currency

Foreign currency transactions performed by consolidated entities (or entities accounted for using the equity method) not located in European Monetary Union ("EMU") countries are initially recognised in their respective currencies. Monetary items in foreign currency are subsequently translated to their functional currencies using the closing rate.

Furthermore:

- Non-monetary items measured at historical cost are translated to the functional currency at the exchange rate at the date of acquisition.
- Non-monetary items measured at fair value are translated at the exchange rate at the date when the fair value was determined.
- Income and expenses are translated at the average exchange rates for the year for all the transactions performed during the year. When applying this criterion, the Group considers whether there have been significant changes in the exchange rates in the year which, in view of their materiality with respect to the consolidated financial statements taken as a whole, would make it necessary to use the exchange rates at the transaction date rather than the aforementioned average exchange rates.
- The balances arising from non-hedging forward foreign currency/foreign currency and foreign currency/euro purchase and sale transactions are translated at the closing rates prevailing in the forward foreign currency market for the related maturity.

Translation of functional currencies to euros

The balances in the financial statements of consolidated entities (or entities accounted for using the equity method) whose functional currency is not the euro are translated to euros as follows:

- Assets and liabilities, at the closing rates.
- Income and expenses, at the average exchange rates for the year.
- Equity items, at the historical exchange rates.

iii. Recognition of exchange differences

The exchange differences arising on the translation of foreign currency balances to the functional currency are generally recognised at their net amount under 'Exchange differences, net' in the consolidated income statement, except for exchange differences arising on financial instruments at fair value through profit or loss, which are recognised in the consolidated income statement without distinguishing them from other changes in fair value, and for exchange differences arising on non-monetary items measured at fair value through equity, which are recognised under 'Other comprehensive income–Items that may be reclassified to profit or loss–Exchange differences' (except for exchange differences on equity instruments, where the option to irrevocably elect to be measured at fair value through changes in accumulated other comprehensive income, which are recognised in accumulated 'Other Comprehensive Income - Items not to be reclassified to profit or loss - Changes in fair value of equity instruments measured at fair value' through other comprehensive income (see note 29).

The exchange differences arising on the translation to euros of the financial statements denominated in functional currencies other than the euro are recognised in 'Other comprehensive income–Items that may be reclassified to profit or loss–Exchange differences' in the consolidated balance sheet, whereas those arising on the translation to euros of the financial statements of entities accounted for using the equity method are recognised in equity under 'Other comprehensive income–Items that may be reclassified to profit or loss and Items not reclassified to profit or loss–Other recognised income and expense' of investments in subsidiaries, joint ventures and associates (see note 29), until the related item is derecognised, at which time they are recognised in profit or loss.

Exchange differences arising on actuarial gains or losses when converting to euros the financial statements denominated in the functional currencies of entities whose functional currency is different from the euro are recognised under equity 'Other comprehensive income–Items not reclassified to profit or loss–Actuarial gains or (-) losses' on defined benefit pension plans (see note 29).

iv. Entities located in hyperinflationary economies

When a subsidiary operates in a country with hyperinflationary economy, IAS 29 Financial Information in Hyperinflationary Economies is applied, which means that:

- Historical cost of non-monetary assets and liabilities and of the various items of equity have to be adjusted to reflect the changes in the purchasing power of the currency due to inflation from their date of acquisition or incorporation into the consolidated balance sheet.
- The different items of the income statement are adjusted by the inflationary index since their generation, with a balancing entry in 'Other comprehensive income'.
- The loss on the net monetary position is recorded in the income for the year against 'Accumulated Other comprehensive income'.
- All components of the financial statements of the subsidiary are translated at the closing exchange rate.

The deterioration of the economic situation in Argentina over the last years caused, among other impacts, a significant increase in inflation, which by the end of 2018 had reached 48% per year (147% accumulated in three years). This led the Group to conclude that it was necessary to apply IAS 29 Financial Information in Hyperinflationary Economies to its activities in the country in question in its consolidated financial statements from that year on.

At that moment, according with Group's accounting policies, exchange differences arising on the translation to the Group´s presentation currency of financial statements denominated in functional currencies other than euro for subsidiaries located in countries with high inflation rates were recorded in the consolidated statement of changes in total 'Equity-Other reserves'.

However, on the basis of the meeting held on 3 March 2020 by the International Financial Reporting Standards Committee (IFRIC), in 2020 Grupo Santander changed its accounting policy with regard to the presentation of exchange differences and the effects of hyperinflation in the operations generated in Argentina, which resulted in a reclassification of EUR -2,136 million at 31 December 2019 for comparability purposes, from the heading "Other reserves" to "Accumulated other comprehensive income", from "Other reserves" to "Accumulated other comprehensive income", corresponding to the accumulated amount of exchange differences related to foreign operations in a hyperinflationary economy and the amount corresponding to the adjustment of the historical cost of the Argentine companies reflecting the changes in the purchasing power of the currency derived from inflation. This change in accounting policy and its consequent restatement between different equity items has no impact on the total equity of Grupo Santander.

In accordance with the provisions of the Argentine Federation of Professional Councils in Economic Sciences (Fcpce), which is the organization that issues the professional accounting standards in said country, the inflation indexes applied are the wholesale internal price index (WPI) until 30 November 2016 and the National Consumer Price Index published by the National Institute of Statistics and Censues (Indec) from 1 December 2016 on. Inflation during 2021 was 50.9%% for the year (36.1% at 31 December 2020). The exchange rate at 31 December 2021 has been of Argentine pesos 116.30 per euro (Argentine pesos 103.16 Argentine pesos per euro at 31 December 2020).

The net impact on Other Comprehensive Income in 2021 of the effects derived from the exchange differences arising on the translation to the Group´s presentation currency of financial statements of the subsidiaries located in Argentina and the application of IAS 29 was a profit of EUR 177 million (loss of EUR 202 million in 2020).

At 31 December 2020, no other country in which the consolidated and associated entities of Grupo Santander are located is considered to have a hyperinflationary economy in accordance with the criteria established in this regard by the International Financial Reporting Standards adopted by the European Union.

v. Exposure to foreign currency risk

Grupo Santander hedges a portion of its long-term foreign currency positions using foreign exchange derivative financial instruments (see note 36). Also, the Group manages foreign exchange risk dynamically by hedging its short-term position (with a potential impact on profit or loss) in order to limit the impact of currency depreciations while optimising the cost of financing the hedges.

The following tables show the sensitivity of the consolidated income statement and consolidated equity to percentage changes of ± 1% in the foreign exchange rate positions arising from investments in Grupo Santander companies with currencies other than the euro (with its hedges) and in their results (with its hedges), in which the Group maintains significant balances.

The estimated effect on the consolidated equity attributable to Grupo Santander and on consolidated profit of a 1% appreciation of the euro against the corresponding currency is as follows:

EUR million

	Effect on consolidated equity			Effect on consolidated profit		
Currency	2021	2020	2019	2021	2020	2019
US dollar	(133.3)	(123.6)	(161.3)	(8.6)	(4.1)	(3.5)
Chilean peso	(11.4)	(20.4)	(21.8)	(2.4)	(4.4)	(2.3)
Pound sterling	(105.9)	(107.9)	(189.2)	(2.3)	(1.2)	(3.9)
Mexican peso	(23.1)	(21.7)	(22.6)	(0.9)	(2.0)	(3.3)
Brazilian real	(80.8)	(75.0)	(71.6)	(15.4)	(12.6)	(10.4)
Polish zloty	(27.5)	(26.7)	(38.3)	(1.1)	(2.2)	(1.2)
Argentine peso	(10.7)	(7.9)	(6.9)	(2.5)	(1.8)	(1.2)

Similarly, the estimated effect on the Group's consolidated equity and on consolidated profit of a 1% depreciation of the euro against the corresponding currency is as follows:

EUR million

	Effect on consolidated equity			Effect on consolidated profit		
Currency	2021	2020	2019	2021	2020	2019
US dollar	136.0	126.1	164.6	8.8	4.2	3.5
Chilean peso	11.6	20.8	22.2	2.4	4.5	2.4
Pound sterling	108.0	110.1	193.0	2.3	1.2	4.0
Mexican peso	23.6	22.1	23.1	0.9	2.0	3.4
Brazilian real	82.4	76.5	73.1	15.7	12.8	10.6
Polish *zloty*	28.0	27.2	39.0	1.1	2.2	1.2
Argentine peso	11.0	8.0	7.0	2.6	1.8	1.3

The above data were obtained as follows:

a) Effect on consolidated equity: in accordance with the accounting policy detailed in note 2.a.iii, foreign exchange rate impact arising on the translation to euros of the financial statements in the functional currencies of the Group entities whose functional currency is not the euro are recognised in consolidated equity. The potential effect that a change in the exchange rates of the related currency would have on the Group's consolidated equity was therefore determined by applying the aforementioned change to the net value of each unit's assets and liabilities -including, where appropriate, the related goodwill- and by taking into consideration the offsetting effect of the hedges of net investments in foreign operations.

b) Effect on consolidated profit: the effect was determined by applying the up and down movements in the average exchange rates of the year, as indicated in note 2.a.ii (except in the case of Argentina, which is a hyperinflationary economy and has applied the closing exchange rate), to translate to euros the income and expenses of the consolidated entities whose functional currency is not the euro, taking into consideration, where appropriate, the offsetting effect of the various hedging transactions in place.

The estimates used to obtain the foregoing data were performed considering the effects of the changes in the exchange rate in standalone basis not considering the effect of the performance of other variables whose changes would affect equity and profit or loss, such as variations in the interest rates of the reference currencies or other market factors. Accordingly, all variables other than the exchange rate variations were kept constant with respect to their positions at 31 December 2021, 2020 and 2019.

b) Basis of consolidation

i. Subsidiaries

Subsidiaries are defined as entities over which the Bank has the capacity to exercise control. The Bank controls an entity when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

The financial statements of the subsidiaries are fully consolidated with those of the Bank. Accordingly, all balances and effects of the transactions between consolidated companies are eliminated on consolidation.

On acquisition of control of a subsidiary, its assets, liabilities and contingent liabilities are recognised at their acquisition-date fair values. Any positive differences between the acquisition cost and the fair values of the identifiable net assets acquired are recognised as goodwill (see note 17). Negative differences are recognised in profit or loss on the date of acquisition.

Additionally, the share of third parties of Grupo Santander equity is presented under 'Non-controlling interests' in the consolidated balance sheet (see note 28). Their share of the profit for the year is presented under 'Profit attributable to non-controlling interests' in the consolidated income statement.

The results of subsidiaries acquired during the year are included in the consolidated income statement from the date of acquisition to year-end. Similarly, the results of subsidiaries for which control is lost during the year are included in the consolidated income statement from the beginning of the year to the date of disposal.

At 31 December 2021 Grupo Santander controls a company in which it holds an ownership interest of less than 50% of the share capital, Luri 1, S.A., in liquidation, apart from the structured consolidated entities. The percentage ownership interest in the aforementioned company is 46% (see appendix I). Although Grupo Santander holds less than half the voting power, it manages and, as a result, exercises control over this entity. The company´s corporate purpose for the entity is the acquisition of real estate and other general operations relating thereto, including rental, and the purchase and sale of properties; the company object of the latter entity is the provision of payment services. The impact of the consolidation of this company on the Group's consolidated financial statements is immaterial.

The appendices contain significant information on the subsidiaries.

ii. Interests in joint ventures

Joint ventures are deemed to be entities that are not subsidiaries but which are jointly controlled by two or more unrelated entities. This is evidenced by contractual arrangements whereby two or more parties have interests in entities so that decisions about the relevant activities require the unanimous consent of all the parties sharing control.

In the consolidated financial statements, investments in joint ventures are accounted for using the equity method, i.e. at the Group's share of net assets of the investee, after taking into account the dividends received therefrom and other equity eliminations. The profits and losses resulting from transactions with a joint venture are eliminated to the extent of the Group's interest therein.

The appendices contain relevant information on the joint ventures.

iii. Associates

Associates are entities over which Banco Santander is in a position to exercise significant influence, but not control or joint control. It is presumed that Banco Santander exercises significant influence if it holds 20% or more of the voting power of the investee.

In the consolidated financial statements, investments in associates are accounted for using the equity method, i.e. at the Group's share of net assets of the investee, after taking into account the dividends received therefrom and other equity eliminations. The profits and losses resulting from transactions with an associate are eliminated to the extent of the Group's interest in the associate.

There are certain investments in entities which, although Grupo Santander owns 20% or more of their voting power, are not considered to be associates because the Group is not in a position to exercise significant influence over them. At 31 December 2021 and 2020, this was the situation of the investment in Project Quasar Investments 2017, S.L., despite maintaining a 49% interest in its share capital (see appendix II). The remaining investments are not significant for the Group.

There are also certain investments in associates where the Group owns less than 20% of the voting rights, as it is determined that it has the capacity to exercise significant influence over them. The impact of these companies is immaterial in the Group's consolidated financial statements.

The appendices contain significant information on the associates.

iv. Structured entities

When Grupo Santander incorporates entities, or holds ownership interests therein, to enable its customers to access certain investments, or for the transfer of risks or other purposes (also called structured entities since the voting or similar power is not a key factor in deciding who controls the entity), the Group determines, using internal criteria and procedures and taking into consideration the applicable legislation, when control (as defined above) exists and, therefore, whether these entities should be consolidated. Specifically, for those entities to which this policy applies (mainly investment funds and pension funds), the Group analyses the following factors:

- Percentage of ownership held by Grupo Santander; 20% is established as the general threshold.

- Identification of the fund manager, and verification as to whether it is a company controlled by the Group since this could affect Grupo Santander ability to direct the relevant activities.
- Existence of agreements between investors that might require decisions to be taken jointly by the investors, rather than by the fund manager.
- Existence of currently exercisable removal rights (possibility of removing the manager from his position), since the existence of such rights might limit the manager's power over the fund, and it may be concluded that the manager is acting as an agent of the investors.
- Analysis of the fund manager's remuneration regime, taking into consideration that a remuneration regime that is proportionate to the service rendered does not, generally, create exposure of such importance as to indicate that the manager is acting as the principal. Conversely, if the remuneration regime is not proportionate to the service rendered, this might give rise to an exposure that would lead the Group to a different conclusion.

These structured entities also include the securitisation special purpose vehicles, which are consolidated in the case of the Special Purpose Vehicles (SPVs) over which, being exposed to variable yield, it is considered that the Group continues to exercise control.

The exposure associated with unconsolidated structured entities are not material with respect to the Group's consolidated financial statements.

v. Business combinations

A business combination is the bringing together of two or more separate entities or economic units into one single entity or group of entities.

Business combinations whereby Grupo Santander obtains control over an entity or a business are recognised for accounting purposes as follows:

- Grupo Santander measures the cost of the business combination, which is normally the consideration transferred, defined as the acquisition-date fair values of the assets transferred, the liabilities incurred to the former owners of the acquiree and the equity instruments issued, if any, by the acquirer. In cases where the amount of the consideration to be transferred has not been definitively established at the acquisition date, but rather depends on future events, any contingent consideration is recognised as part of the consideration transferred and measured at its acquisition-date fair value. Moreover, acquisition-related costs do not for these purposes form part of the cost of the business combination.
- The fair values of the assets, liabilities and contingent liabilities of the acquired entity or business, including any intangible assets identified in the business combination which might not have been recognised by the acquiree, are estimated and recognised in the consolidated balance sheet; the Group also estimates the amount of any non-controlling interests and the fair value of the previously held equity interest in the acquiree.
- Any positive difference between the aforementioned items is recognised as discussed in note 2.m. Any negative difference is recognised under 'Negative Goodwill' recognised in the consolidated income statement.

Goodwill is only calculated and recognised once, when control of a business or an entity is obtained.

vi. Changes in the levels of ownership interests in subsidiaries

Acquisitions and disposals not giving rise to a change in control are recognised as equity transactions, and no gain or loss is recognised in the income statement and the initially recognised goodwill is not remeasured. The difference between the consideration transferred or received and the decrease or increase in non-controlling interests, respectively, is recognised in reserves.

Similarly, when control over a subsidiary is lost, the assets, liabilities and non-controlling interests and any other items recognised in 'Other Comprehensive income' of that company are derecognised from the consolidated balance sheet, and the fair value of the consideration received and of any remaining equity interest is recognised. The difference between these amounts is recognised in profit or loss.

vii. Acquisitions and sales

Note 3 provides information on the most significant acquisitions and sales in the last three years.

c) Definitions and classification of financial instruments

i. Definitions

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

An equity instrument is a contract that evidences a residual interest in the assets of the issuing entity after deducting all of its liabilities.

A financial derivative is a financial instrument whose value changes in response to the change in an observable market variable (such as an interest rate, foreign exchange rate, financial instrument price, market index or credit rating), whose initial investment is very small compared with other financial instruments with a similar response to changes in market factors, and which is generally settled at a future date.

Hybrid financial instruments are contracts that simultaneously include a non-derivative host contract together with a derivative, known as an embedded derivative, that is not separately transferable and has the effect that some of the cash flows of the hybrid contract vary in a way similar to a stand-alone derivative.

Compound financial instruments are contracts that simultaneously create for their issuer a financial liability and an own equity instrument (such as convertible bonds, which entitle their holders to convert them into equity instruments of the issuer).

The preference shares contingently convertible into ordinary shares eligible as Additional Tier 1 capital (CCPSs) -perpetual shares, which may be repurchased by the issuer in certain circumstances, the interest on which is discretionary, and would convert into variable number of newly issued ordinary shares if the capital ratio of the Bank or its consolidated group falls below a given percentage (trigger event), as those two terms are defined in the related issue prospectuses- are recognised for accounting purposes by the Group as compound instruments. The liability component reflects the issuer's obligation to deliver a variable number of shares and the equity component reflects the issuer's discretion in relation to the payment of the related coupons. In order to effect the initial allocation, the Group estimates the fair value of the liability as the amount that would have to be delivered if the trigger event were to occur immediately and, accordingly, the equity component, calculated as the residual amount, is zero. In view of the aforementioned discretionary nature of the payment of the coupons, they are deducted directly from equity.

Capital perpetual preference shares (CPPS), with the possibility of purchase by the issuer in certain circumstances, whose remuneration is discretionary, and which will be amortised permanently, totally or partially, in the event that the bank or its consolidated group submits a capital ratio lesser than a certain percentage (trigger event), as defined in the corresponding prospectuses, are accounted for by the Group as equity instruments. The following transactions are not treated for accounting purposes as financial instruments:

- Investments in associates and joint ventures (see note 13).
- Rights and obligations under employee benefit plans (see note 25).
- Rights and obligations under insurance contracts (see note 15).
- Contracts and obligations relating to employee remuneration based on own equity instruments (see note 34).

ii. Classification of financial assets for measurement purposes

Financial assets are initially classified into the various categories used for management and measurement purposes, unless they have to be presented as 'Non-current assets held for sale' or they relate to 'Cash, cash balances at central banks and other deposits on demand', 'Changes in the fair value of hedged items in portfolio hedges of interest rate risk (asset side)', 'Hedging derivatives and Investments', which are reported separately.

Classification of financial instruments: the classification criteria for financial assets depends on the business model for their management and the characteristics of their contractual flows.

Grupo Santander business models refer to the way in which it manages its financial assets to generate cash flows. In defining these models, the Group takes into account the following factors:

- How key management staff are assessed and reported on the performance of the business model and the financial assets held in the business model.
- The risks that affect the performance of the business model (and the financial assets held in the business model) and, specifically, the way in which these risks are managed.
- How business managers are remunerated.
- The frequency and volume of sales in previous years, as well as expectations of future sales.

The analysis of the characteristics of the contractual flows of financial assets requires an assessment of the congruence of these flows with a basic loan agreement. The Group determines if the contractual cash flows of its financial assets that are only principal and interest payments on the outstanding principal amount at the beginning of the transaction. This analysis takes into consideration four factors (performance, clauses, contractually linked products and currencies). Furthermore, among the most significant judgements used by the Group in carrying out this analysis, the following ones are included:

- The return on the financial asset, in particular in cases of periodic interest rate adjustments where the term of the reference rate does not coincide with the frequency of the adjustment. In these cases, an assessment is made to determine whether or not the contractual cash flows differ significantly from the flows without this change in the time value of money, establishing a tolerance level of 2%.
- The contractual clauses that may modify the cash flows of the financial asset, for which the structure of the cash flows before and after the activation of such clauses is analysed.
- Financial assets whose cash flows have different priority for payment due to a contractual link to underlying assets (e.g. securitisations) require a look-through analysis by the Group so as to review that both the financial asset and the underlying assets are only principal and interest payments and that the exposure to credit risk of the set of underlying assets belonging to the tranche analysed is less than or equal to the exposure to credit risk of the set of underlying assets of the instrument.

Depending on these factors, the asset can be measured at amortised cost, at fair value with changes in other comprehensive income, or at fair value with changes through profit and loss. IFRS 9 also establishes an option to designate an instrument at fair value with changes in profit or loss, when doing so eliminates or significantly reduces a measurement or recognition inconsistency (sometimes referred to as 'accounting asymmetry') that would otherwise arise from measuring assets or liabilities or recognising gains and losses on different bases.

Grupo Santander uses the following criteria for the classification of financial debt instruments:

- Amortised cost: financial instruments under a business model whose objective is to collect principal and interest flows, over which there is no significant unjustified sales and fair value is not a key element in the management of these assets and contractual conditions they give rise to cash flows on specific dates, which are only payments of principal and interest on the outstanding principal amount. In this sense, unjustified sales are considered to be those other than those related to an increase in the credit risk of the asset, unanticipated funding needs (stress case scenarios). Additionally, the characteristics of its contractual flows represent substantially a "basic financing agreement".

- Fair value with changes in other comprehensive income: financial instruments held in a business model whose objective is to collect principal and interest cash flows and the sale of these assets, where fair value is a key factor in their management. Additionally, the contractual cash flow characteristics substantially represent a 'basic financing agreement'.

- Fair value with changes in profit or loss: financial instruments included in a business model whose objective is not obtained through the above mentioned models, where fair value is a key factor in managing of these assets, and financial instruments whose contractual cash flow characteristics do not substantially represent a 'basic financing agreement'. In this section it can be enclosed the portfolios classified under 'Financial assets held for trading', 'Non-trading financial assets mandatorily at fair value through profit or loss' and 'Financial assets at fair value through profit or loss'. In this regard, most of the financial assets presented in the category of 'Financial assets designated at value reasonable with change in results' are instruments financial services that, not being part of the portfolio of negotiation, are contracted jointly with other financial instruments that are recorded in the category of 'held for trading', and that by both are recorded at fair value with changes in results, so your record in any other category would produce accounting asymmetries.

Equity instruments will be classified at fair value under IFRS 9, with changes in profit or loss, unless the Group decides, for non-trading assets, to classify them at fair value with changes in other comprehensive income (irrevocably) at initial recognition.

iii. Classification of financial assets for presentation purposes

Financial assets are classified by nature into the following items in the consolidated balance sheet:

- Cash, cash balances at Central Banks and other deposits on demand: cash balances and balances receivable on demand relating to deposits with central banks and credit institutions.

- Loans and advances: includes the debit balances of all credit and loans granted by the Group, other than those represented by securities, as well as finance lease receivables and other debit balances of a financial nature in favour of the Group such as cheques drawn on credit institutions, balances receivable from clearing houses and settlement agencies for transactions on the stock exchange and organised markets, bonds given in cash, capital calls, fees and commissions receivable for financial guarantees and debit balances arising from transactions not originating in banking transactions and services, such as the collection of rentals and similar items. They are classified, on the basis of the institutional sector to which the debtor belongs, into:

  - Central banks: credit of any nature, including deposits and money market transactions received from the Bank of Spain or other central banks.

  - Credit institutions: credit of any nature, including deposits and money market transactions, in the name of credit institutions.

  - Customers: includes the remaining credit, including money market transactions through central counterparties.

- Debt instruments: bonds and other securities that represent a debt for their issuer, that generate an interest return, and that are in the form of certificates or book entries.

- Equity instruments: financial instruments issued by other entities, such as shares, which have the nature of equity instruments for the issuer, other than investments in subsidiaries, joint ventures or associates. Investment fund units are included in this item.

- Derivatives: includes the fair value in favour of the Group of derivatives which do not form part of hedge accounting, including embedded derivatives separated from hybrid financial instruments.

- Changes in the fair value of hedged items in portfolio hedges of interest rate risk: this item is the balancing entry for the amounts credited to the consolidated income statement in respect of the measurement of the portfolios of financial instruments which are effectively hedged against interest rate risk through fair value hedging derivatives.

- Hedging derivatives: Includes the fair value in favour of the Group of derivatives, including embedded derivatives separated from hybrid financial instruments, designated as hedging instruments in hedge accounting.

iv. Classification of financial liabilities for measurement purposes

Financial liabilities are initially classified into the various categories used for management and measurement purposes, unless they have to be presented as 'Liabilities associated with non-current assets held for sale' or they relate to 'Hedging derivatives' or changes in the fair value of hedged items in portfolio hedges of interest rate risk (liability side), which are reported separately.

In most cases, changes in the fair value of financial liabilities designated at fair value through profit or loss, caused by the entity's credit risk, are recognized in other comprehensive income.

Financial liabilities are included for measurement purposes in one of the following categories:

- Financial liabilities held for trading (at fair value through profit or loss): this category includes financial liabilities incurred for the purpose of generating a profit in the near term from fluctuations in their prices, financial derivatives not designated as hedging instruments, and financial liabilities arising from the outright sale of financial assets acquired under reverse repurchase agreements ("reverse repos") or borrowed (short positions).

- Financial liabilities designated at fair value through profit or loss: financial liabilities are included in this category when they provide more relevant information, either because this eliminates or significantly reduces recognition or measurement inconsistencies (accounting mismatches) that would otherwise arise from measuring assets or liabilities or recognising the gains or losses on them on different bases, or because a group of financial liabilities or financial assets and liabilities is managed and its performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy, and information about the group is provided on that basis to the Group's key management personnel. Liabilities may only be included in this category on the date when they are incurred or originated.

  Liabilities may only be included in this portfolio at the date of issue or origination.

- Financial liabilities at amortised cost: financial liabilities, irrespective of their instrumentation and maturity, not included in any of the above-mentioned categories which arise from the ordinary borrowing activities carried on by financial institutions.

v. Classification of financial liabilities for presentation purposes

Financial liabilities are classified by nature into the following items in the consolidated balance sheet:

- Deposits: includes all repayable balances received in cash by Grupo Santander, other than those instrumented as marketable securities and those having the substance of subordinated liabilities (amount of the loans received, which for credit priority purposes are after common creditors), except for the debt instruments. This item also includes cash bonds and cash consignments received the amount of which may be invested without restriction. Deposits are classified on the basis of the creditor's institutional sector into:

  – Central banks: deposits of any nature, including credit received and money market transactions received from the Bank of Spain or other central banks.

  – Credit institutions: deposits of any nature, including credit received and money market transactions in the name of credit institutions.

  – Customer: includes the remaining deposits, including money market transactions through central counterparties.

  On 6 June 2019, the European Central Bank announced a new program of targeted longer-term refinancing operations (TLTRO III); additionally, the conditions of the initial program were successively modified in the months of March and April 2020, reducing the interest rate by 25 bps to -0.5% from June 2020 to June 2021 and providing that, for banks meeting a certain volume of eligible loans, the interest rate could be -1% for that period. These conditions were extended on December 10, 2020 for the period from June 2021 to June 2022, including the option to cancel or reduce the amount of financing before maturity in windows coinciding with the interest rate review and adjustment periods.

  The accounting standards indicate that for the recording of amortized cost the entity 'shall use a shorter period when the fees, basis points paid or received, transaction costs, premiums or discounts relate to it, this being the case when the variable to which the fees, basis points paid or received, transaction costs, and discounts or premiums relate is adjusted to market rates prior to the expected maturity of the financial instrument. In this case, the appropriate amortization period is the period until the next adjustment date'.

  In this case, the applicable interest rate of -1% from June 2020 to June 2021 and from June 2021 to June 2022 corresponds to a specific period after which the funding is adjusted to market rates (specifically, the average rate applied in the Eurosystem's main refinancing operations) and must therefore be accrued until the next adjustment date. The early repayment windows of this funding program are substantive terms, given that at that time of adjustment of the funding cost to market, the entity may opt for renewal or cancellation and obtain new funding at more favorable terms.

  Grupo Santander has opted to accrue interest in accordance with the specific periods of adjustment to market rates, so that the interest corresponding to that period (-1%) will be recorded in the income statement from June 2020 to June 2022, assuming compliance with the threshold of eligible loans that gives rise to the extra rate.

  Compliance with the qualifying loan thresholds is assessed at each reporting date and is based on the financial budgets approved by the Group's directors, as well as on the evolution of macroeconomic variables (GDP, unemployment rate, inflation, etc.). If, subsequent to the initial recording of the financial liability, there is a change in the expectations of meeting this threshold of eligible loans, the Group would adjust the carrying amount of the financial liability to the amount resulting from discounting the new estimated flows at the original Effective Interest Rate (EIR), recognizing this difference in profit or loss, without modifying the original EIR.

  At the end of both periods, the Group has met the financing objective established in the program, although the data relating to the second reference period (October 2020 to December 2021), will not be sent until next May, after validation by the external auditor, as established in the program conditions.

- Marketable debt securities: includes the amount of bonds and other debt represented by marketable securities, other than those having the substance of subordinated liabilities (amount of the loans received, which for credit priority purposes are after common creditors, and includes the amount of the financial instruments issued by the Group which, having the legal nature of capital, do not meet the requirements to qualify as equity, such as certain preferred shares issued). This item includes the component that has the consideration of financial liability of the securities issued that are compound financial instruments.

- Derivatives: includes the fair value, with a negative balance for the Group, of derivatives, including embedded derivatives separated from the host contract, which do not form part of hedge accounting.

- Short positions: includes the amount of financial liabilities arising from the outright sale of financial assets acquired under reverse repurchase agreements or borrowed.

- Other financial liabilities: includes the amount of payment obligations having the nature of financial liabilities not included in other items (includes, among others, the balance of lease liabilities that started to be recorded in 2019 as a result of the application of IFRS 16), and liabilities under financial guarantee contracts, unless they have been classified as non-performing.

- Changes in the fair value of hedged items in portfolio hedges of interest rate risk: this item is the balancing entry for the amounts charged to the consolidated income statement in respect of the measurement of the portfolios of financial instruments which are effectively hedged against interest rate risk through fair value hedging derivatives.

- Hedging derivatives: includes the fair value of the Group's liability in respect of derivatives, including embedded derivatives separated from hybrid financial instruments, designated as hedging instruments in hedge accounting.

d) Measurement of financial assets and liabilities and recognition of fair value changes

In general, financial assets and liabilities are initially recognised at fair value which, in the absence of evidence to the contrary, is deemed to be the transaction price.

In this regard, IFRS 9 states that regular way purchases or sales of financial assets shall be recognised and derecognised on the trade date or on the settlement date. Grupo Santander has opted to make such recognition on the trading date or settlement date, depending on the convention of each of the markets in which the transactions are carried out. For example, in relation to the purchase or sale of debt securities or equity instruments traded in the Spanish market, securities market regulations stipulate their effective transfer at the time of settlement and, therefore, the same time has been established for the accounting record to be made.

The fair value of instruments not measured at fair value through profit and loss is adjusted by transaction costs. Subsequently, and on the occasion of each accounting close, they are valued in accordance with the following criteria:

i. Measurement of financial assets

Financial assets are measured at fair value are valued mainly at their fair value without deducting any transaction cost for their sale.

The fair value of a financial instrument on a given date is taken to be the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. The most objective and common reference for the fair value of a financial instrument is the price that would be paid for it on an active, transparent and deep market (quoted price or market price). At 31 December 2021, there were no significant investments in quoted financial instruments that had ceased to be recognised at their quoted price because their market could not be deemed to be active.

If there is no market price for a given financial instrument, its fair value is estimated on the basis of the price established in recent transactions involving similar instruments and, in the absence thereof, of valuation techniques commonly used by the international financial community, taking into account the specific features of the instrument to be measured and, particularly, the various types of risk associated with it.

All derivatives are recognised in the balance sheet at fair value from the trade date. If the fair value is positive, they are recognised as an asset and if the fair value is negative, they are recognised as a liability. The fair value on the trade date is deemed, in the absence of evidence to the contrary, to be the transaction price. The changes in the fair value of derivatives from the trade date are recognised in 'Gains/losses on financial assets and liabilities held for trading (net)' in the consolidated income statement. Specifically, the fair value of financial derivatives traded in organised markets included in the portfolios of financial assets or liabilities held for trading is deemed to be their daily quoted price and if, for exceptional reasons, the quoted price cannot be determined on a given date, these financial derivatives are measured using methods similar to those used to measure derivatives.

The fair value of derivatives is taken to be the sum of the future cash flows arising from the instrument, discounted to present value at the date of measurement (present value or theoretical close) using valuation techniques commonly used by the financial markets: net present value, option pricing models and other methods.

The amount of debt securities and loans and advances under a business model whose objective is to collect the principal and interest flows are valued at their amortised cost, as long as they comply with the 'SPPI' (Solely Payments of Principal and Interest) test, using the effective interest rate method in their determination. Amortised cost refers to the acquisition cost of a corrected financial asset or liability (more or less, as the case may be) for repayments of principal and the part systematically charged to the consolidated income statement of the difference between the initial cost and the corresponding reimbursement value at expiration. In the case of financial assets, the amortised cost includes, in addition, the corrections to their value due to the impairment. In the loans and advances covered in fair value hedging transactions, the changes that occur in their fair value related to the risk or the risks covered in these hedging transactions are recorded.

The effective interest rate is the discount rate that exactly matches the carrying amount of a financial instrument to all its estimated cash flows of all kinds over its remaining life. For fixed rate financial instruments, the effective interest rate coincides with the contractual interest rate established on the acquisition date plus, where applicable, the fees and transaction costs that, because of their nature, form part of their financial return. In the case of floating rate financial instruments, the effective interest rate coincides with the rate of return prevailing in all connections until the next benchmark interest reset date.

Equity instruments and contracts related with these instruments are measured at fair value. However, in certain circumstances the Group estimates cost value as a suitable estimate of the fair value. This can happen if the recent event available information is not enough to measure the fair value or if there is a broad range of possible measures and the cost value represents the best estimates of fair value within this range.

The amounts at which the financial assets are recognised represent, in all material respects, the Group's maximum exposure to credit risk at each reporting date. Also, Grupo Santander has received collateral and other credit enhancements to mitigate its exposure to credit risk, which consist mainly of mortgage guarantees, cash collateral, equity instruments and personal security, assets leased out under finance lease and full-service lease agreements, assets acquired under repurchase agreements, securities loans and credit derivatives.

ii. Measurement of financial liabilities

In general, financial liabilities are measured at amortised cost, as defined above, except for those included under 'Financial liabilities held for trading' and 'Financial liabilities designated at fair value through profit or loss' and financial liabilities designated as hedged items (or hedging instruments) in fair value hedges, which are measured at fair value. The changes in credit risk arising from financial liabilities designated at fair value through profit or loss are recognised in accumulated other comprehensive income, unless they generate or increase an accounting mismatch, in which case changes in the fair value of the financial liability in all respects are recognised in the income statement.

iii. Valuation techniques

The following table summarises the fair values, at the end of each of the years indicated, of the financial assets and liabilities listed below, classified according to the different valuation methodologies used by the Group to determine their fair value:

EUR million

	2021			2020			2019		
	Published price quotations in active markets (level 1)	Internal Models (level 2 and 3)	Total	Published price quotations in active markets (level 1)	Internal Models (level 2 and 3)	Total	Published price quotations in active markets (level 1)	Internal Models (level 2 and 3)	Total
Financial assets held for trading	39,678	77,275	116,953	46,379	68,566	114,945	44,581	63,649	108,230
Non-trading financial assets mandatorily at fair value through profit or loss	2,398	3,138	5,536	1,756	2,730	4,486	1,530	3,381	4,911
Financial assets designated at fair value through profit or loss	2,113	13,844	15,957	2,509	46,208	48,717	2,572	59,497	62,069
Financial assets at fair value through other comprehensive income	77,749	30,289	108,038	91,771	29,182	120,953	103,089	22,619	125,708
Hedging derivatives (assets)	—	4,761	4,761	—	8,325	8,325	—	7,216	7,216
Financial liabilities held for trading	10,379	69,090	79,469	9,863	71,304	81,167	9,781	67,358	77,139
Financial liabilities designated at fair value through profit or loss	3,620	29,113	32,733	2,118	45,920	48,038	1,484	59,511	60,995
Hedging derivatives (liabilities)	—	5,463	5,463	—	6,869	6,869	—	6,048	6,048
Liabilities under insurance or reinsurance contracts	—	770	770	—	910	910	—	739	739

The financial instruments at fair value determined on the basis of published price quotations in active markets (level 1) include government debt securities, private-sector debt securities, derivatives traded in organised markets, securitised assets, shares, short positions and fixed-income securities issued.

In cases where price quotations cannot be observed, management makes its best estimate of the price that the market would set, using its own internal models. In most cases, these internal models use data based on observable market parameters as significant inputs (level 2) and, in cases, they use significant inputs not observable in market data (level 3). In order to make these estimates, various techniques are employed, including the extrapolation of observable market data. The best evidence of the fair value of a financial instrument on initial recognition is the transaction price, unless the fair value of the instrument can be obtained from other market transactions performed with the same or similar instruments or can be measured by using a valuation technique in which the variables used include only observable market data, mainly interest rates.

Grupo Santander has developed a formal process for the systematic valuation and management of financial instruments, which has been implemented worldwide across all the Group's units. The governance scheme for this process distributes responsibilities between two independent divisions: Treasury (development, marketing and daily management of financial products and market data) and Risk (on a periodic basis, validation of pricing models and market data, computation of risk metrics, new transaction approval policies, management of market risk and implementation of fair value adjustment policies).

The approval of new products follows a sequence of steps (request, development, validation, integration in corporate systems and quality assurance) before the product is brought into production. This process ensures that pricing systems have been properly reviewed and are stable before they are used.

The following subsections set forth the most important products and families of derivatives, and the related valuation techniques and inputs, by asset class:

Fixed income and inflation

The fixed income asset class includes basic instruments such as interest rate forwards, interest rate swaps and cross currency swaps, which are valued using the net present value of the estimated future cash flows discounted taking into account basis swap and cross currency spreads determined on the basis of the payment frequency and currency of each leg of the derivative. Vanilla options, including caps, floors and swaptions, are priced using the Black-Scholes model, which is one of the benchmark industry models. More exotic derivatives are priced using more complex models which are generally accepted as standard across institutions.

These pricing models are fed with observable market data such as deposit interest rates, futures rates, cross currency swap and constant maturity swap rates, and basis spreads, on the basis of which different yield curves, depending on the payment frequency, and discounting curves are calculated for each currency. In the case of options, implied volatilities are also used as model inputs. These volatilities are observable in the market for cap and floor options and swaptions, and interpolation and extrapolation of volatilities from the quoted ranges are carried out using generally accepted industry models. The pricing of more exotic derivatives may require the use of non-observable data or parameters, such as correlation (among interest rates and cross-asset), mean reversion rates and prepayment rates, which are usually defined from historical data or through calibration.

Inflation-related assets include zero-coupon or year-on-year inflation-linked bonds and swaps, valued with the present value method using forward estimation and discounting. Derivatives on inflation indices are priced using standard or more complex bespoke models, as appropriate. Valuation inputs of these models consider inflation-linked swap spreads observable in the market and estimations of inflation seasonality, on the basis of which a forward inflation curve is calculated. Also, implied volatilities taken from zero-coupon and year-on-year inflation options are also inputs for the pricing of more complex derivatives.

Equity and foreign exchange

The most important products in these asset classes are forward and futures contracts; they also include vanilla, listed and OTC (Over-The-Counter) derivatives on single underlying assets and baskets of assets. Vanilla options are priced using the standard Black-Scholes model and more exotic derivatives involving forward returns, average performance, or digital, barrier or callable features are priced using generally accepted industry models or bespoke models, as appropriate. For derivatives on illiquid stocks, hedging takes into account the liquidity constraints in models.

The inputs of equity models consider yield curves, spot prices, dividends, asset funding costs (repo margin spreads), implied volatilities, correlation among equity stocks and indices, and cross-asset correlation. Implied volatilities are obtained from market quotes of European and American-style vanilla call and put options. Various interpolation and extrapolation techniques are used to obtain continuous volatility for illiquid stocks. Dividends are usually estimated for the mid and long term. Correlations are implied, when possible, from market quotes of correlation-dependent products. In all other cases, proxies are used for correlations between benchmark underlyings or correlations are obtained from historical data.

The inputs of foreign exchange models include the yield curve for each currency, the spot foreign exchange rate, the implied volatilities and the correlation among assets of this class. Volatilities are obtained from European call and put options which are quoted in markets as of-the-money, risk reversal or butterfly options. Illiquid currency pairs are usually handled by using the data of the liquid pairs from which the illiquid currency can be derived. For more exotic products, unobservable model parameters may be estimated by fitting to reference prices provided by other non-quoted market sources.

Credit

The most common instrument in this asset class is the credit default swap (CDS), which is used to hedge credit exposure to third parties. In addition, models for first-to-default (FTD), n-to-default (NTD) and single-tranche collateralised debt obligation (CDO) products are also available. These products are valued with standard industry models, which estimate the probability of default of a single issuer (for CDS) or the joint probability of default of more than one issuer for FTD, NTD and CDO.

Valuation inputs are the yield curve, the CDS spread curve and the recovery rate. For indices and important individual issuers, the CDS spread curve is obtained in the market. For less liquid issuers, this spread curve is estimated using proxies or other credit-dependent instruments. Recovery rates are usually set to standard values. For listed single-tranche CDO, the correlation of joint default of several issuers is implied from the market. For FTD, NTD and bespoke CDO, the correlation is estimated from proxies or historical data when no other option is available.

Valuation adjustment for counterparty risk or default risk

The Credit valuation adjustment (CVA) is a valuation adjustment to over the counter (OTC) derivatives as a result of the risk associated with the credit exposure assumed to each counterparty.

The CVA is calculated taking into account potential exposure to each counterparty in each future period. The CVA for a specific counterparty is equal to the sum of the CVA for all the periods. The following inputs are used to calculate the CVA:

- Expected exposure: including for each transaction the mark-to-market (MtM) value plus an add-on for the potential future exposure for each period. Mitigating factors such as collateral and netting agreements are taken into account, as well as a temporary impairment factor for derivatives with interim payments.
- Severity: percentage of final loss assumed in a counterparty credit event/default.
- Probability of default: for cases where there is no market information (the CDS quoted spread curve, etc.), proxies based on companies holding exchange-listed CDS, in the same industry and with the same external rating as the counterparty, are used.
- Discount factor curve.

The Debit Valuation Adjustment (DVA) is a valuation adjustment similar to the CVA but, in this case, it arises as a result of the Group's own risk assumed by its counterparties in OTC derivatives.

The CVA at 31 December 2021 amounted to EUR 237 million (resulting in a decrease of 41.9% compared to 31 December 2020) and DVA amounted to EUR 162 million (resulting in a decrease of 30.4% compared to 31 December 2020). These impacts are mainly due to the continuous improvement in credit markets, the creation of particular credit curves for certain counterparties and the introduction of methodological improvements in the calculation of exposures.

The CVA at 31 December 2020 amounted to EUR 408 million (resulting in an increase of 49.8% compared to 31 December 2019) and DVA amounted to EUR 233 million (resulting in an increase of 36.0% compared to 31 December 2019). These impacts were due to the fact that credit spread levels were at levels above 25% compared to 2019 due to the covid-19 pandemic.

The CVA at 31 December 2019 amounted to EUR 272 million (decrease of 22.5% compared to 31 December 2018) and DVA amounted EUR 171 million (decrease of 34.6% compared to 31 December 2018). The decrease was mainly due to improvements in the credit quality of counterparties, which led to reductions in credit spreads in percentages of around 40% in the most liquid maturities.

In addition, the Group amounts the funding fair value adjustment (FFVA) is calculated by applying future market funding spreads to the expected future funding exposure of any uncollateralised component of the OTC derivative portfolio. This includes the uncollateralised component of collateralised derivatives in addition to derivatives that are fully uncollateralised. The expected future funding exposure is calculated by a simulation methodology, where available. The FFVA impact is not material for the consolidated financial statements as of 31 December 2021, 2020 and 2019.

Grupo Santander has not carried out significant reclassifications of financial instruments between levels other than those disclosed in level 3 movement table during 2021 continuing the trend observed in 2020. The main variations over the last few years in the Level 3 volume have been due to purchases/sales of these instruments. There have been no significant variations in the market observability conditions, nor relevant changes in the criteria used for the classification of instruments within the fair value hierarchy.

In 2019, the Group reclassified between levels 2 and 3 financial instruments for a net amount of EUR 708 million (mainly due to reclassifications to level 2 of positions, both derivatives as debt instruments, with maturities for that there were already observable assessment inputs or on which new sources of information have been recurring prices, and at level 3 certain bonds in Brazil that, based on the criteria of observability of the Group, did not meet the requirements to be considered as observable inputs).

Valuation adjustments due to model risk

The valuation models described above do not involve a significant level of subjectivity, since they can be adjusted and recalibrated, where appropriate, through internal calculation of the fair value and subsequent comparison with the related actively traded price. However, valuation adjustments may be necessary when market quoted prices are not available for comparison purposes.

The sources of risk are associated with uncertain model parameters, illiquid underlying issuers, and poor quality market data or missing risk factors (sometimes the best available option is to use limited models with controllable risk). In these situations, the Group calculates and applies valuation adjustments in accordance with common industry practice. The main sources of model risk are described below:

- In the fixed income markets, the sources of model risk include bond index correlations, basis spread modelling, the risk of calibrating model parameters and the treatment of near-zero or negative interest rates. Other sources of risk arise from the estimation of market data, such as volatilities or yield curves, whether used for estimation or cash flow discounting purposes.
- In the stock markets, the sources of model risk include forward skew modelling, the impact of stochastic interest rates, correlation and multi-curve modelling. Other sources of risk arise from managing hedges of digital callable and barrier option payments. Also worthy of consideration as sources of risk are the estimation of market data such as dividends and correlation for quanto and composite basket options.
- For specific financial instruments relating to home mortgage loans secured by financial institutions in the UK (which are regulated and partially financed by the Government) and property asset derivatives, the main input is the Halifax House Price Index (HPI). In these cases, risk assumptions include estimations of the future growth and the volatility of the HPI, the mortality rate and the implied credit spreads.
- Inflation markets are exposed to model risk resulting from uncertainty around modelling the correlation structure among various Consumer Price Index (CPI) rates. Another source of risk may arise from the bid-offer spread of inflation-linked swaps.
- The currency markets are exposed to model risk resulting from forward skew modelling and the impact of stochastic interest rate and correlation modelling for multi-asset instruments. Risk may also arise from market data, due to the existence of specific illiquid foreign exchange pairs.
- The most important source of model risk for credit derivatives relates to the estimation of the correlation between the probabilities of default of different underlying issuers. For illiquid underlying issuers, the CDS spread may not be well defined.

Set forth below are the financial instruments at fair value whose measurement was based on internal models (levels 2 and 3) at 31 December 2021, 2020 and 2019:

EUR million

	Fair values calculated using internal models at 2021*			
	Level 2	Level 3	Valuation techniques	Main assumptions
ASSETS	**121,640**	**7,667**		
Financial assets held for trading	**76,738**	**537**		
Central banks**	3,608	—	Present value method	Yield curves, FX market prices
Credit institutions**	10,397	—	Present value method	Yield curves, FX market prices
Customers**	6,829	—	Present value method	Yield curves, FX market prices
Debt and equity instruments	2,312	24	Present value method	Yield curves, FX market prices
Derivatives	53,592	513		
Swaps	*43,700*	*224*	Present value method, Gaussian Copula	Yield curves, FX market prices, HPI, Basis, Liquidity
Exchange rate options	*539*	*12*	Black-Scholes Model	Yield curves, Volatility surfaces, FX market prices, Liquidity
Interest rate options	*2,112*	*182*	Black's Model, multifactorial advanced models interest rate	Yield curves, Volatility surfaces, FX market prices, Liquidity
Interest rate futures	*409*	—	Present value method	Yield curves, FX market prices
Index and securities options	*439*	*41*	Black's Model, multifactorial advanced models interest rate	Yield curves, Volatility surfaces, FX & EQ market prices, Dividends, Liquidity
Other	*6,393*	*54*	Present value method, Advanced stochastic volatility models and other	Yield curves, Volatility surfaces, FX and EQ market prices, Dividends, Correlation, HPI, Credit, Others
Hedging derivatives	**4,761**	**—**		
Swaps	*4,204*	—	Present value method	Yield curves, FX market prices, Basis
Interest rate options	*9*	—	Black's Model	Yield curves, FX market prices, Volatility surfaces
Other	*548*	—	Present value method, Advanced stochastic volatility models and other	Yield curves, Volatility surfaces, FX market prices, Credit, Liquidity, Others
Non-trading financial assets mandatorily at fair value through profit or loss	**1,273**	**1,865**		
Equity instruments	415	1,231	Present value method	Market price, Interest rates curves, Dividends and Others
Debt instruments	589	366	Present value method	Yield curves
Loans and receivables	269	268	Present value method, swap asset model & CDS	Yield curves and Credit curves
Financial assets designated at fair value through profit or loss	**13,426**	**418**		
Credit institutions	3,152	—	Present value method	Yield curves, FX market prices
Customers***	10,270	18	Present value method	Yield curves, FX market prices, HPI
Debt instruments	4	400	Present value method	Yield curves, FX market prices
Financial assets at fair value through other comprehensive income	**25,442**	**4,847**		
Equity instruments	74	821	Present value method	Market price, Yield curves, Dividends and Others
Debt instruments	21,585	146	Present value method	Yield curves, FX market prices
Loans and receivables	3,783	3,880	Present value method	Yield curves, FX market prices and Credit curves

EUR million

	Fair values calculated using internal models at 2021*			
	Level 2	Level 3	Valuation techniques	Main assumptions
LIABILITIES	**103,807**	**629**		
Financial liabilities held for trading	**68,930**	**160**		
Central banks**	1,038	—	Present value method	Market price, Yield curves, Dividends and Others
Credit institutions**	6,488	—	Present value method	Yield curves, FX market prices
Customers	6,141	—	Present value method	Yield curves, FX market prices and Credit curves
Derivatives	53,234	160		
Swaps	*42,438*	*44*	Present value method, Gaussian Copula	Yield curves, FX market prices, Basis, Liquidity, HPI
Exchange rate options	*658*	*7*	Black-Scholes Model	Yield curves, Volatility surfaces, FX market prices, Liquidity
Index and securities options	*446*	*67*	Black-Scholes Model	Yield curves, FX market prices
Interest rate options	*2,720*	*26*	Black's Model, multifactorial advanced models interest rate	Yield curves, Volatility surfaces, FX market prices, Liquidity
Futures on interest rate and variable income	*184*	—	Present value method	Yield curves, Volatility surfaces, FX & EQ market prices, Dividends, Correlation, Liquidity, HPI
Other	*6,788*	*16*	Present value method, Advanced stochastic volatility models	Yield curves, Volatility surfaces, FX & EQ market prices, Dividends, Correlation, Liquidity, HPI, Credit, Others
Short positions	*2,029*	—	Present value method	Yield curves ,FX & EQ market prices, Equity
Hedging derivatives	**5,463**	**—**		
Swaps	*4,149*	—	Present value method	Yield curves ,FX & EQ market prices, Basis
Other	*1,314*	—	Present value method, Advanced stochastic volatility models and other	Yield curves , Volatility surfaces, FX market prices, Credit, Liquidity, Other
Financial liabilities designated at fair value through profit or loss	**28,644**	**469**	Present value method	Yield curves, FX market prices
Liabilities under insurance contracts	**770**	**—**	Present Value Method with actuarial techniques	Mortality tables and interest rate curves

* Level 2 internal models use data based on observable market parameters, while level 3 internal models use significant non-observable inputs in market data.
** Includes mainly short-term loans and reverse repurchase agreements with corporate customers (mainly brokerage and investment companies).
*** Includes, mainly, structured loans to corporate clients.

EUR million

	Fair values calculated using internal models at 2020*		Fair values calculated using internal models at 2019*		
	Level 2	Level 3	Level 2	Level 3	Valuation techniques
ASSETS	**146,468**	**8,543**	**149,711**	**6,651**	
Financial assets held for trading	**67,826**	**740**	**63,051**	**598**	
Credit institutions	3	—	—	—	Present Value method
Customers**	296	—	355	—	Present Value method
Debt and equity instruments	1,453	10	760	65	Present Value method
Derivatives	66,074	730	61,936	533	
Swaps	*54,488*	*272*	*51,594*	*182*	Present Value method, Gaussian Copula
Exchange rate options	*696*	*22*	*469*	*8*	Black-Scholes Model
Interest rate options	*3,129*	*241*	*3,073*	*177*	Black's Model, advanced multifactor interest rate models
Interest rate futures	*1,069*	—	*190*	—	Present Value method
Index and securities options	*554*	*94*	*1,164*	*95*	Black's Model, advanced multifactor interest rate models
Other	*6,138*	*101*	*5,446*	*71*	Present Value method, Advanced stochastic volatility models and other
Hedging derivatives	**8,325**	**—**	**7,216**	**—**	
Swaps	*6,998*	—	*6,485*	—	Present Value method
Interest rate options	*25*	—	*25*	—	Black's Model
Other	*1,302*	—	*706*	—	Present Value method, Advanced stochastic volatility models and other
Non-trading financial assets mandatorily at fair value through profit or loss	**1,796**	**934**	**1,780**	**1,601**	
Equity instruments	*984*	*505*	*1,272*	*550*	Present Value method
Debt securities issued	*555*	*134*	*498*	*675*	Present Value method
Loans and receivables	*257*	*295*	*10*	*376*	Present Value method, swap asset model & CDS
Financial assets designated at fair value through profit or loss	**45,559**	**649**	**58,833**	**664**	
Central banks	9,481	—	6,474	—	Present Value method
Credit institutions	11,973	163	21,598	50	Present Value method
Customers	24,102	19	30,729	32	Present Value method
Debt instruments	3	467	32	582	Present Value method
Equity instruments	—	—	—	—	Present Value method
Financial assets at fair value through other comprehensive income	**22,962**	**6,220**	**18,831**	**3,788**	
Equity instruments	75	1,223	98	407	Present Value method
Debt instruments	18,410	206	17,486	188	Present Value method
Loans and receivables	4,477	4,791	1,247	3,193	Present Value method

EUR million

	Fair values calculated using internal models at 2020*		Fair values calculated using internal models at 2019*		
	Level 2	Level 3	Level 2	Level 3	Valuation techniques
LIABILITIES	**124,098**	**905**	**132,582**	**1,074**	
Financial liabilities held for trading	**71,009**	**295**	**67,068**	**290**	
Derivatives	63,920	295	*61,789*	290	
Swaps	*51,584*	*81*	*49,927*	*115*	Present Value method, Gaussian Copula***
Interest rate options	*4,226*	*49*	*4,291*	*34*	Black's Model, advanced multifactor interest rate models
Exchange rate options	*724*	*1*	*658*	*1*	Black-Scholes Model
Index and securities options	*456*	*97*	*1,309*	*88*	Black-Scholes Model
Interest rate and equity futures	*1,054*	*2*	*20*	*2*	Present Value method
Other	*5,876*	*65*	*5,584*	*50*	Present Value method, Advanced stochastic volatility models and other
Short positions	7,089	—	*5,279*	—	Present Value method
Hedging derivatives	**6,869**	**—**	**6,048**	**—**	
Swaps	*5,821*	—	*4,737*	*0*	Present Value method
Interest rate options	*13*	—	*10*	—	Black's Model
Other	*1,035*	—	*1,301*	—	Present Value method, Advanced stochastic volatility models and other
Financial liabilities designated at fair value through profit or loss	**45,310**	**610**	**58,727**	**784**	Present Value method
Liabilities under insurance contracts	**910**	**—**	**739**	**—**	Present Value method with actuarial techniques

* Level 2 internal models use data based on observable market parameters, while level 3 internal models use significant non-observable inputs in market data.
** Includes mainly short-term loans and reverse repurchase agreements with corporate customers (mainly brokerage and investment companies).

Financial Instruments (level 3)

Set forth below are the Group's main financial instruments measured using unobservable market data as significant inputs of the internal models (level 3):

- HTC&S (Hold to collect and sale) syndicated loans classified in the fair value category with changes in other comprehensive income, where the cost of liquidity is not directly observable in the market, as well as the prepayment option in favour of the borrower.
- Illiquid equity in non-trading portfolios, classified at fair value through profit or loss and at fair value through equity.
- Instruments in Santander UK's portfolio (loans, debt instruments and derivatives) linked to the House Price Index (HPI). Even if the valuation techniques used for these instruments may be the same as those used to value similar products (present value in the case of loans and debt instruments, and the Black-Scholes model for derivatives), the main factors used in the valuation of these instruments are the HPI spot rate, the growth and volatility thereof, and the mortality rates, which are not always observable in the market and, accordingly, these instruments are considered illiquid.
- Callable interest rate derivatives (Bermudan-style options) where the main unobservable input is mean reversion of interest rates.
- Trading derivatives on interest rates, taking as an underlying asset titling and with the amortization rate (CPR, Conditional prepayment rate) as unobservable main entry.
- Derivatives from trading on inflation in Spain, where volatility is not observable in the market.
- Equity volatility derivatives, specifically indices and equities, where volatility is not observable in the long term.
- Derivatives on long-term interest rate and FX in some units (mainly South America)where for certain underlyings it is not possible to demonstrate observability to these terms.
- Debt instruments referenced to certain illiquid interest rates, for which there is no reasonable market observability.

The measurements obtained using the internal models might have been different if other methods or assumptions had been used with respect to interest rate risk, to credit risk, market risk and foreign currency risk spreads, or to their related correlations and volatilities. Nevertheless, the Bank's directors consider that the fair value of the financial assets and liabilities recognised in the consolidated balance sheet and the gains and losses arising from these financial instruments are reasonable.

The net amount recognised in profit and loss in 2021 arising from models whose significant inputs are unobservable market data (level 3) amounted to EUR 73 million profit (EUR 193 million profit in 2020 and EUR 85 million profit in 2019).

The table below shows the effect, at 31 December 2021 and 2020 on the fair value of the main financial instruments classified as level 3 of a reasonable change in the assumptions used in the valuation. This effect was determined by applying the probable valuation ranges of the main unobservable inputs detailed in the following table:

2021

Portfolio/Instrument					Impacts (EUR million)	
(Level 3)	Valuation technique	Main unobservable inputs	Range	Weighted average	Unfavourable scenario	Favourable scenario
Financial assets held for trading						
Derivatives						
Cap&Floor	Volatility option model	Volatility	10% - 90%	36.30 %	(0.50)	0.43
CCS	Discounted Cash Flows	Interest rate	(0.7)% - 0.7%	0.73 %	(0.11)	0.11
CCS	Forward estimation	Interest rate	4bps - (4)bps	(0.09)%	(0.03)	0.03
Convertibility curve - inputs: NDFs Offshore	Forward estimation	Price	0% - 2%	0.61 %	(0.65)	0.28
EQ Options	EQ option pricing model	Volatility	0% - 90%	61.20 %	(0.24)	0.52
EQ Options	Local volatility	Volatility	10% - 90%	40.00 %	(6.82)	6.82
FRAs	Asset Swap model	Interest rate	0% - 4%	1.78 %	(0.91)	0.73
FX Options	FX option pricing model	Volatility	0% - 50%	32.14 %	(0.28)	0.50
Inflation Derivatives	Asset Swap model	Inflation Swap Rate	(50)% - 50%	50.00 %	(0.56)	0.28
Inflation Derivatives	Volatility option model	Volatility	0% - 40%	13.29 %	(0.47)	0.24
IR Futures	Asset Swap model	Interest rate	0% - 15%	5.91 %	(1.09)	0.71
IR Options	IR option pricing model	Volatility	0% - 60%	36.28 %	(0.20)	0.31
IRS	Asset Swap model	Interest rate	(6)% - 12.80%	10.36 %	(0.07)	0.13
IRS	Discounted Cash Flows	Credit spread	103.10bps - 375.6bps	71.91 %	(7.21)	4.16
IRS	Discounted Cash Flows	Inflation Swap Rate	(0.8)% - 6.5%	1.81 %	(0.04)	0.01
IRS	Discounted Cash Flows	Swap Rate	7.7% - 8.2%	(2.87)%	(0.23)	0.10
IRS	Forward estimation	Interest rate	TIIE91 (8.98)bps - TIIE91 +11.12bps	n.a.	(0.27)	0.17
IRS	Forward estimation	Prepayment rate	6% - 12%	n.a.	—	—
IRS	Others	Others	0.05%	n.a.	(1.49)	—
IRS	Prepayment modelling	Prepayment rate	2.5% - 6.2%	0.44 %	(0.09)	0.05
Property derivatives	Option pricing model	Growth rate	0% - 5%	2.50 %	(2.62)	2.62
Swaptions	IR option pricing model	Volatility	0% - 40%	26.67 %	(0.13)	0.27
Debt securities						
Corporate debt	Price based	Market price	85% - 115%	15.00 %	—	—
Financial assets designated at fair value through profit or loss						
Loans and advances to customers						
Loans	Discounted Cash Flows	Credit spreads	0.1% - 1.4%	0.66 %	(0.26)	0.26
Mortgage portfolio	Black Scholes model	Growth rate	0%- 5%	2.50 %	(1.9)	1.90
Debt securities						
Corporate debt	Discounted Cash Flows	Credit spread	0% - 20%	9.88 %	(1.23)	1.20
Government debt	Discounted Cash Flows	Discount curve	0% - 10%	8.33 %	(4.14)	20.69
Other debt securities	Others	Inflation Swap Rate	0% - 10%	4.74 %	(5.47)	4.92

2021

Portfolio/Instrument					Impacts (EUR million)	
(Level 3)	Valuation technique	Main unobservable inputs	Range	Weighted average	Unfavourable scenario	Favourable scenario
Non-trading financial assets mandatorily at fair value through profit or loss						
Debt securities						
Corporate debt	Discounted Cash Flows	Margin of a reference portfolio	(1)bp - 1bp	0.01	(0.56)	0.60
Property securities	Probability weighting	Growth rate	0% - 5%	2.50 %	(1.19)	1.19
Equity instruments						
Equities	Price Based	Price	90% - 110%	10.00 %	(123.1)	123.10
Financial assets at fair value through other comprehensive income						
Loans and advances to customers						
Loans	Discounted Cash Flows	Credit spread	n.a.	n.a.	(19.84)	—
Loans	Discounted Cash Flows	Interest rate curve	(0.1)% - 0.1%	0.12 %	(0.07)	0.07
Loans	Discounted Cash Flows	Margin of a reference portfolio	(1)bp - 1bp	1.00 %	(13.12)	13.04
Loans	Forward estimation	Credit spread	77bps - 242bps	n.a.	—	—
Debt securities						
Government debt	Discounted Cash Flows	Interest rate	0.6% - 0.8%	0.09 %	(0.01)	0.01
Equity instruments						
Equities	Price Based	Price	90% - 110%	10.00 %	(82.13)	82.13
Financial liabilities held for trading						
Derivatives						
Cap&Floor	Volatility option model	Volatility	10% - 90%	36.30 %	(0.5)	0.43
Financial liabilities designated at fair value through profit or loss						
Loans and advances to customers						
Repos/Reverse repos	Asset Swap Repo Model	Long-term repo spread	n.a	n.a.	(0.36)	—

2020

Portfolio/ Instrument (Level 3)	Valuation technique	Main unobservable inputs	Range	Weighted average	Impacts (EUR million) Unfavourable scenario	Favourable scenario
Financial assets held for trading						
Derivatives						
Cap&Floor	Volatility option model	Volatility	10% - 90%	31.55 %	(0.07)	0.05
CCS	Discounted Cash Flows	Interest rate	(0.30)% - 0.66%	0.66 %	—	0.20
Convertibility curve - NDFs Offshore	Forward estimation	Price	0% - 2%	0.61 %	(0.72)	0.31
EQ Options	EQ option pricing model	Volatility	7.86% - 93.67%	48.37 %	(1.46)	1.81
FRAs	Asset Swap model	Interest rate	0% - 5%	2.22 %	(0.78)	0.63
FX Forward	Discounted Cash Flows	Swap Rate	(0.02)% - (0.30)%	0.11 %	—	—
FX Options	FX option pricing model	Volatility	0% - 50%	32.14 %	(0.39)	0.70
Inflation Derivatives	Asset Swap model	Inflation Swap Rate	(100)% - 50%	83.33 %	(0.63)	0.31
Inflation Derivatives	Volatility option model	Volatility	0% - 50%	16.67 %	(0.47)	0.23
IR Futures	Asset Swap model	Interest rate	0% - 15%	0.94 %	(0.94)	0.06
IR Options	IR option pricing model	Volatility	0% - 100%	19.05 %	(0.27)	0.06
IRS	Asset Swap model	Interest rate	(6)% - 12.50%	10 %	(0.08)	0.13
IRS	Discounted Cash Flows	Swap Rate	5.90% - 6.31%	2.26 %	(0.01)	0.02
IRS	Discounted Cash Flows	Credit spread	78.97 bps - 202.37 bps	9.82 bps	(2.81)	1.29
IRS	Prepayment modelling	Prepayment rate	2.47% - 6.22%	0.06 %	(0.12)	0.05
Property derivatives	Option pricing model	HPI Forward growth rate and HPI Spot rate	0% - 5%	2.50 %	(17.82)	17.82
Swaptions	IR option pricing model	Volatility	0% - 50%	33.33 %	(0.16)	0.31
Financial assets designated at fair value through profit or loss						
Loans and advances to customers						
Repos / Reverse repos	Asset Swap Repo Model	Long-term repo spread	n/a	n/a	(0.18)	0.23
Mortgage portfolio	Black Scholes model	HPI Forward growth rate	0% - 5%	2.50 %	(2.23)	2.23
Other loans	Present value method	Credit spreads	0.07% - 1.55%	0.74 %	(0.35)	0.35
Debt securities						
Government debt	Discounted Cash Flows	Interest rate	0% - 10%	8.33 %	(0.78)	3.91
Other debt securities	Price based	Market Price	90% - 110%	10 %	(0.15)	0.15
Property securities	Probability weighting	HPI Forward growth rate and HPI Spot rate	0% - 5%	2.50 %	(7.24)	7.24
Non-trading financial assets mandatorily at fair value through profit or loss						
Equity instruments						
Equities	Price Based	Price	90% - 110%	10 %	(50.47)	50.47
Financial assets at fair value through other comprehensive income						
Loans and advances to customers						
Loans	Discounted Cash Flows	Credit spread	n/a	n/a	(6.72)	—
Loans	Discounted Cash Flows	Interest rate curve	(0.15)% - 0.15%	0.15 %	(0.09)	0.09
Other loans	Present value method	Credit spreads	0.15% - 0.53%	0.19 %	(0.04)	0.04
Debt securities						
Government debt	Discounted Cash Flows	Interest rate	1.1% - 1.3%	0.10 %	—	—
Equity instruments						
Equities	Price Based	Price	90% - 110%	10 %	(122.14)	122.14
Financial liabilities held for trading						
Derivatives						
Cap&Floor	Volatility option model	Volatility	10% - 90%	34.61 %	(0.02)	0.01
EQ Options	Option pricing model	HPI Forward growth rate and HPI Spot rate	0% - 5%	2.50 %	(6.35)	6.35

Lastly, the changes in the financial instruments classified as Level 3 in 2021, 2020 and 2019 were as follows:

	01/01/2021	Changes						31/12/2021
EUR million	Fair value calculated using internal models (Level 3)	Purchases/ Issuances	Sales/ Settlements	Changes in fair value recognised in profit or loss	Changes in fair value recognised in equity	Level reclassifications	Other	Fair value calculated using internal models (level 3)
Financial assets held for trading	**740**	**136**	**(124)**	**(181)**	**—**	**(15)**	**(19)**	**537**
Debt instruments	7	20	(2)	(2)	—	—	(1)	22
Equity instruments	3	—	(1)	—	—	—	—	2
Trading derivatives	730	116	(121)	(179)	—	(15)	(18)	513
Swaps	272	5	(33)	(35)	—	33	(18)	224
Exchange rate options	*22*	*14*	*(27)*	*3*	—	—	—	*12*
Interest rate options	*241*	*7*	*(39)*	*(27)*	—	—	—	*182*
Index and securities options	*94*	*18*	*(12)*	*(51)*	—	*(8)*	—	*41*
Other	*101*	*72*	*(10)*	*(69)*	—	*(40)*	—	*54*
Financial assets at fair value through profit or loss	**649**	**59**	**(120)**	**(11)**	**—**	**(163)**	**4**	**418**
Credit entities	163	—	—	—	—	(163)	—	—
Loans and advances to customers	19	—	(2)	—	—	—	1	18
Debt instruments	467	59	(118)	(11)	—	—	3	400
Non-trading financial assets mandatorily at fair value through profit or loss	**934**	**534**	**(251)**	**127**	**—**	**485**	**36**	**1,865**
Customers	295	122	(149)	—	—	(3)	3	268
Debt instruments	134	206	(28)	28	—	17	9	366
Equity instruments	505	206	(74)	99	—	471	24	1,231
Financial assets at fair value through other comprehensive income	**6,220**	**5,681**	**(6,588)**	**—**	**(228)**	**(241)**	**3**	**4,847**
Loans and advances	4,791	5,597	(6,298)	—	(37)	(173)	—	3,880
Debt instruments	206	75	(25)	—	(43)	(68)	1	146
Equity instruments	1,223	9	(265)	—	(148)	—	2	821
TOTAL ASSETS	**8,543**	**6,410**	**(7,083)**	**(65)**	**(228)**	**66**	**24**	**7,667**
Financial liabilities held for trading	**295**	**85**	**(42)**	**(138)**	**—**	**(21)**	**(19)**	**160**
Trading derivatives	295	85	(42)	(138)	—	(21)	(19)	160
Swaps	*81*	*4*	*(10)*	*(36)*	—	*3*	*2*	*44*
Exchange rate options	*1*	*2*	—	*4*	—	—	—	*7*
Interest rate options	*49*	*26*	*(19)*	*(8)*	—	—	*(22)*	*26*
Index and securities options	*97*	*23*	*(5)*	*(27)*	—	*(22)*	*1*	*67*
Securities and interest rate futures	*2*	—	*(2)*	—	—	—	—	—
Others	*65*	*30*	*(6)*	*(71)*	—	*(2)*	—	*16*
Financial liabilities designated at fair value through profit or loss	**610**	**143**	**—**	**—**	**—**	**(289)**	**5**	**469**
TOTAL LIABILITIES	**905**	**228**	**(42)**	**(138)**	**—**	**(310)**	**(14)**	**629**

EUR million	01/01/2020 Fair value calculated using internal models (level 3)	Changes Purchases /Issuances	Sales/ Settlements	Changes in fair value recognized in profit or loss	Changes in fair value recognized in equity	Level reclassifications	Other	31/12/2020 Fair value calculated using internal models (level 3)
Financial assets held for trading	**598**	**52**	**(98)**	**330**	**—**	**(45)**	**(97)**	**740**
Debt instruments	65	7	(27)	1	—	—	(39)	7
Equity instruments	—	3	—	—	—	—	—	3
Trading derivatives	*533*	*42*	*(71)*	*329*	*—*	*(45)*	*(58)*	*730*
Swaps	*182*	*—*	*(8)*	*116*	*—*	*(8)*	*(10)*	*272*
Exchange rate options	*8*	*—*	*—*	*15*	*—*	*—*	*(1)*	*22*
Interest rate options	*177*	*15*	*(12)*	*61*	*—*	*—*	*—*	*241*
Index and securities options	*95*	*25*	*(43)*	*85*	*—*	*(38)*	*(30)*	*94*
Other	*71*	*2*	*(8)*	*52*	*—*	*1*	*(17)*	*101*
Financial assets at fair value through profit or loss	**664**	**280**	**(45)**	**17**	**—**	**(91)**	**(176)**	**649**
Credit entities	50	164	—	(1)	—	(50)	—	163
Loans and advances to customers	32	—	(15)	3	—	—	(1)	19
Debt instruments	582	116	(30)	15	—	(41)	(175)	467
Non-trading financial assets mandatorily at fair value through profit or loss	**1,601**	**120**	**(292)**	**(36)**	**—**	**(119)**	**(340)**	**934**
Loans and advances to customers	376	104	(136)	12	—	(30)	(31)	295
Debt instruments	675	—	(144)	(63)	—	2	(336)	134
Equity instruments	550	16	(12)	15	—	(91)	27	505
Financial assets at fair value through other comprehensive income	**3,788**	**8,795**	**(7,616)**	**—**	**(390)**	**571**	**1,072**	**6,220**
TOTAL ASSETS	**6,651**	**9,247**	**(8,051)**	**311**	**(390)**	**316**	**459**	**8,543**
Financial liabilities held for trading	**290**	**40**	**(14)**	**130**	**—**	**(96)**	**(55)**	**295**
Trading derivatives	290	40	(14)	130	—	(96)	(55)	295
Swaps	*115*	*8*	*—*	*(7)*	*—*	*(26)*	*(9)*	*81*
Exchange rate options	*1*	*—*	*—*	*2*	*—*	*—*	*(2)*	*1*
Interest rate options	*34*	*11*	*(2)*	*6*	*—*	*—*	*—*	*49*
Index and securities options	*88*	*21*	*(8)*	*95*	*—*	*(70)*	*(29)*	*97*
Securities and interest rate futures	*2*	*—*	*—*	*—*	*—*	*—*	*—*	*2*
Others	*50*	*—*	*(4)*	*34*	*—*	*—*	*(15)*	*65*
Financial liabilities designated at fair value through profit or loss	**784**	**4**	**(3)**	**(12)**	**—**	**(32)**	**(131)**	**610**
TOTAL LIABILITIES	**1,074**	**44**	**(17)**	**118**	**—**	**(128)**	**(186)**	**905**

EUR million	01/01/2019 Fair value calculated using internal models (level 3)	Changes Purchases/ Issuances	Sales/ Settlements	Changes in fair value recognised in profit or loss	Changes in fair value recognised in equity	Level reclassifications	Other	31/12/2019 Fair value calculated using internal models (level 3)
Financial assets held for trading	**738**	**142**	**(80)**	**115**	**—**	**(317)**	**—**	**598**
Debt instruments and equity instruments	153	34	(38)	4	—	(88)	—	65
Trading derivatives	585	108	(42)	111	—	(229)	—	533
Swaps	*185*	*10*	*(14)*	*22*	*—*	*(20)*	*(1)*	*182*
Exchange rate options	*2*	*—*	*—*	*6*	*—*	*—*	*—*	*8*
Interest rate options	*149*	*—*	*(5)*	*33*	*—*	*—*	*—*	*177*
Index and securities options	*198*	*48*	*(18)*	*50*	*—*	*(182)*	*(1)*	*95*
Other	*51*	*50*	*(5)*	*—*	*—*	*(27)*	*2*	*71*
Hedging derivatives (Assets)	**21**	**—**	**—**	**—**	**—**	**(21)**	**—**	**—**
Swaps	21	—	—	—	—	(21)	—	—
Financial assets designated at fair value through profit or loss	876	55	(16)	65	—	(261)	(55)	664
Credit entities	201	—	—	—	—	(151)	—	50
Loans and advances to customers	560	20	(9)	(1)	—	(496)	(42)	32
Debt instruments	115	35	(7)	66	—	386	(13)	582
Non-trading financial assets mandatorily at fair value through profit or loss	1,403	426	(325)	81	—	—	16	1,601
Loans and advances to customers	460	126	(252)	21	—	—	21	376
Debt instruments	481	199	(7)	(10)	—	—	12	675
Equity instruments	462	101	(66)	70	—	—	(17)	550
Financial assets at fair value through other comprehensive income	**1,435**	**4,424**	**(1,698)**	**—**	**(190)**	**(252)**	**69**	**3,788**
TOTAL ASSETS	**4,473**	**5,047**	**(2,119)**	**261**	**(190)**	**(851)**	**30**	**6,651**
Financial liabilities held for trading	**289**	**136**	**(12)**	**45**	**—**	**(164)**	**(4)**	**290**
Trading derivatives	289	136	(12)	45	—	(164)	(4)	290
Swaps	*111*	*6*	*(5)*	*(17)*	*—*	*20*	*—*	*115*
Exchange rate options	*7*	*1*	*—*	*—*	*—*	*(7)*	*—*	*1*
Interest rate options	*26*	*—*	*—*	*8*	*—*	*—*	*—*	*34*
Index and securities options	*143*	*79*	*(7)*	*51*	*—*	*(177)*	*(1)*	*88*
Securities and interest rate futures	*—*	*3*	*—*	*—*	*—*	*—*	*(1)*	*2*
Other	*2*	*47*	*—*	*3*	*—*	*—*	*(2)*	*50*
Hedging derivatives (Liabilities)	**6**	**—**	**—**	**—**	**—**	**(6)**	**—**	**—**
Swaps	*6*	*—*	*—*	*—*	*—*	*(6)*	*—*	*—*
Financial liabilities designated at fair value through profit or loss	**147**	**298**	**(5)**	**31**	**—**	**313**	**—**	**784**
TOTAL LIABILITIES	**442**	**434**	**(17)**	**76**	**—**	**143**	**(4)**	**1,074**

iv. Recognition of fair value changes

As a general rule, changes in the carrying amount of financial assets and liabilities are recognised in the consolidated income statement. A distinction is made between the changes resulting from the accrual of interest and similar items, (which are recognised under Interest income or Interest expense, as appropriate), and those arising for other reasons, which are recognised at their net amount under 'Gains/losses on financial assets and liabilities'.

Adjustments due to changes in fair value arising from:

- 'Financial assets at fair value with changes in other comprehensive income' are recorded temporarily, in the case of debt instruments in 'Other comprehensive income - Elements that can be reclassified to profit or loss - Financial assets at fair value with changes in other comprehensive income', while in the case of equity instruments are recorded in 'other comprehensive income - Elements that will not be reclassified to line item - Changes in the fair value of equity instruments valued at fair value with changes in other comprehensive income'.

Exchange differences on debt instruments measured at fair value with changes in other comprehensive income are recognised under 'Exchange Differences, net' of the consolidated income statement. Exchange differences on equity instruments, in which the irrevocable option of being measured at fair value with changes in other comprehensive income has been chosen, are recognised in 'Other comprehensive income - Items that will not be reclassified to profit or loss - Changes in the fair value of equity instruments measured at fair value with changes in other comprehensive income'.

- Items charged or credited to 'Items that may be reclassified to profit or loss – Financial assets at fair value through other comprehensive income' and 'Other comprehensive income – Items that may be reclassified to profit or loss – Exchange differences in equity' remain in the Group's consolidated equity until the asset giving rise to them is impaired or derecognised, at which time they are recognised in the consolidated income statement.

- Unrealised gains on Financial assets classified as Non-current assets held for sale because they form part of a disposal group or a discontinued operation are recognised in 'Other comprehensive income under Items that may be reclassified to profit or loss – Non-current assets held for sale'.

v. Hedging transactions

The consolidated entities use financial derivatives for the following purposes: i) to facilitate these instruments to customers who request them in the management of their market and credit risks; ii) to use these derivatives in the management of the risks of the Group entities' own positions and assets and liabilities (hedging derivatives); and iii) to obtain gains from changes in the prices of these derivatives (derivatives).

Financial derivatives that do not qualify for hedge accounting are treated for accounting purposes as trading derivatives.

A derivative qualifies for hedge accounting if all the following conditions are met:

1. The derivative hedges one of the following three types of exposure:

   a. Changes in the fair value of assets and liabilities due to fluctuations, among others, in the interest rate and/or exchange rate to which the position or balance to be hedged is subject (fair value hedge).

   b. Changes in the estimated cash flows arising from financial assets and liabilities, commitments and highly probable forecast transactions (cash flow hedge).

   c. The net investment in a foreign operation (hedge of a net investment in a foreign operation).

2. It is effective in offsetting exposure inherent in the hedged item or position throughout the expected term of the hedge, which means that:

   a. At the date of arrangement the hedge is expected, under normal conditions, to be highly effective (prospective effectiveness).

   b. There is sufficient evidence that the hedge was actually effective during the whole life of the hedged item or position (retrospective effectiveness). To this end, the Group checks that the results of the hedge were within a range of 80% to 125% of the results of the hedged item.

3. There must be adequate documentation evidencing the specific designation of the financial derivative to hedge certain balances or transactions and how this hedge was expected to be achieved and measured, provided that this is consistent with the Group's management of own risks.

The changes in value of financial instruments qualifying for hedge accounting are recognised as follows:

a. In fair value hedges, the gains or losses arising on both the hedging instruments and the hedged items attributable to the type of risk being hedged are recognised directly in the consolidated income statement.

   In fair value hedges of interest rate risk on a portfolio of financial instruments, the gains or losses that arise on measuring the hedging instruments are recognised directly in the consolidated income statement, whereas the gains or losses due to changes in the fair value of the hedged amount (attributable to the hedged risk) are recognised in the consolidated income statement with a balancing entry under Changes in the fair value of hedged items in portfolio hedges of interest rate risk on the asset or liability side of the balance sheet, as appropriate.

b. In cash flow hedges, the effective portion of the change in value of the hedging instrument is recognised temporarily in Other comprehensive income – under Items that may be reclassified to profit or loss – Hedging derivatives – Cash flow hedges (effective portion) until the forecast transactions occur, when it is recognised in the consolidated income statement, unless, if the forecast transactions result in the recognition of non-financial assets or liabilities, it is included in the cost of the non-financial asset or liability.

c. In hedges of a net investment in a foreign operation, the gains or losses attributable to the portion of the hedging instruments qualifying as an effective hedge are recognised temporarily in Other comprehensive income under Items that may be reclassified to profit or loss – Hedges of net investments in foreign operations until the gains or losses – on the hedged item are recognised in profit or loss.

d. The ineffective portion of the gains or losses on the hedging instruments of cash flow hedges and hedges of a net investment in a foreign operation is recognised directly under 'Gains/losses on financial assets and liabilities (net)' in the consolidated income statement, in Gains or losses from hedge accounting, net.

If a derivative designated as a hedge no longer meets the requirements described above due to expiration, ineffectiveness or for any other reason, the derivative is classified for accounting purposes as a trading derivative.

When fair value hedge accounting is discontinued, the adjustments previously recognised on the hedged item are amortised to profit or loss at the effective interest rate recalculated at the date of hedge discontinuation. The adjustments must be fully amortised at maturity.

When cash flow hedge accounting is discontinued, any cumulative gain or loss on the hedging instrument recognised in equity under other comprehensive income 'Items that may be reclassified to profit or loss' (from the period when the hedge was effective) remains in this equity item until the forecast transaction occurs, at which time it is recognised in profit or loss, unless the transaction is no longer expected to occur, in which case the cumulative gain or loss is recognised immediately in profit or loss.

vi. Derivatives embedded in hybrid financial instruments

Derivatives embedded in other financial instruments or in other host contracts are accounted for separately as derivatives if their risks and characteristics are not closely related to those of the host contracts, provided that the host contracts are not classified as financial assets/liabilities designated at fair value through profit or loss or as 'Financial assets/liabilities held for trading'.

e) Derecognition of financial assets and liabilities

The accounting treatment of transfers of financial assets depends on the extent to which the risks and rewards associated with the transferred assets are transferred to third parties:

1. If the Group transfers substantially all the risks and rewards to third parties unconditional -sale of financial assets, sale of financial assets under an agreement to repurchase them at their fair value at the date of repurchase, sale of financial assets with a purchased call option or written put option that is deeply out of the money, securitisation of assets in which the transferor does not retain a subordinated debt or grant any credit enhancement to the new holders, and other similar cases-, the transferred financial asset is derecognised and any rights or obligations retained or created in the transfer are recognised simultaneously.

2. If the Group retains substantially all the risks and rewards associated with the transferred financial asset -sale of financial assets under an agreement to repurchase them at a fixed price or at the sale price plus interest, a securities lending agreement in which the borrower undertakes to return the same or similar assets, and other similar cases-, the transferred financial asset is not derecognised and continues to be measured by the same criteria as those used before the transfer. However, the following items are recognised:

   a. An associated financial liability, which is recognised for an amount equal to the consideration received and is subsequently measured at amortised cost, unless it meets the requirements for classification under 'Financial liabilities designated at fair value through profit or loss'.

   b. The income from the transferred financial asset not derecognised and any expense incurred on the new financial liability, without offsetting.

3. If the Group neither transfers nor retains substantially all the risks and rewards associated with the transferred financial asset -sale of financial assets with a purchased call option or written put option that is not deeply in or out of the money, securitisation of assets in which the transferor retains a subordinated debt or other type of credit enhancement for a portion of the transferred asset, and other similar cases- the following distinction is made:

   a. If the transferor does not retain control of the transferred financial asset, the asset is derecognised and any rights or obligations retained or created in the transfer are recognised.

   b. If the transferor retains control of the transferred financial asset, it continues to recognise it for an amount equal to its exposure to changes in value and recognises a financial liability associated with the transferred financial asset. The net carrying amount of the transferred asset and the associated liability is the amortised cost of the rights and obligations retained, if the transferred asset is measured at amortised cost, or the fair value of the rights and obligations retained, if the transferred asset is measured at fair value.

Accordingly, financial assets are only derecognised when the rights to the cash flows they generate have expired or when substantially all the inherent risks and rewards have been transferred to third parties. Similarly, financial liabilities are only derecognised when the obligations they generate have been extinguished or when they are acquired with the intention either to cancel them or to resell them.

Regarding contractual modifications of financial assets, Grupo Santander has differentiated them into two main categories in relation to the conditions under which a modification leads to a derecognition or disposal of the financial asset (and the recognition of a new financial asset) and those under which the accounting of the original financial instrument with the modified terms is maintained:

- Contractual modifications for commercial or market reasons, which are generally carried out at the request of the debtor to apply current market conditions to the debt. The new contract is considered a new transaction and, consequently, it is necessary to derecognize the original financial asset and recognize a new financial asset subject to the classification and measurement requirements established by IFRS 9. Also, the new financial asset will be recorded at fair value and, if applicable, the difference between the carrying amount of the asset derecognized and the fair value of the new asset will be recognized in profit or loss.

- Modifications due to refinancing or restructuring, in which the payment conditions are modified to allow a customer that is experiencing financial difficulties (current or foreseeable) to meet its payment obligations and that, if such modification had not been made, it would be reasonably certain that it would not be able to meet such payment obligations. In this case, the modification does not result in the derecognition of the financial asset, but rather the original financial asset is maintained and does not require a new assessment of its classification and measurement. When assessing credit impairment, the current credit risk (considering the modified cash flows) should be compared with the credit risk at initial recognition. Finally, the gross carrying amount of the financial asset (the present value of the renegotiated or modified contractual cash flows that are discounted at the original effective interest rate of the financial asset) should be recalculated, with a gain or loss recognized in profit or loss for the difference.

f) Offsetting of financial instruments

Financial asset and liability balances are offset, i.e. reported in the consolidated balance sheet at their net amount, only if the Group entities currently have a legally enforceable right to set off the recognised amounts and intend either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Following is the detail of financial assets and liabilities that were offset in the consolidated balance sheets as of 31 December 2021, 2020 and 2019:

	31 December 2021		
	EUR million		
Assets	Gross amount of financial assets	Gross amount of financial assets offset in the balance sheet	Net amount of financial assets presented in the balance sheet
Derivatives	101,485	(42,432)	59,053
Reverse repurchase agreements	72,023	(13,917)	58,106
Total	**173,508**	**(56,349)**	**117,159**

	31 December 2021		
	EUR million		
Liabilities	Gross amount of financial liabilities	Gross amount of financial liabilities offset in the balance sheet	Net amount of financial liabilities presented in the balance sheet
Derivatives	101,461	(42,432)	59,029
Reverse repurchase agreements	73,424	(13,916)	59,508
Total	**174,885**	**(56,348)**	**118,537**

	31 December 2020		
	EUR million		
Assets	Gross amount of financial assets	Gross amount of financial assets offset in the balance sheet	Net amount of financial assets presented in the balance sheet
Derivatives	136,437	(60,975)	75,462
Reverse repurchase agreements	82,865	(16,078)	66,787
Total	**219,302**	**(77,053)**	**142,249**

	31 December 2020		
	EUR million		
Liabilities	Gross amount of financial liabilities	Gross amount of financial liabilities offset in the balance sheet	Net amount of financial liabilities presented in the balance sheet
Derivatives	132,313	(60,975)	71,338
Reverse repurchase agreements	77,925	(16,078)	61,847
Total	**210,238**	**(77,053)**	**133,185**

	31 December 2019		
	EUR million		
Assets	Gross amount of financial assets	Gross amount of financial assets offset in the balance sheet	Net amount of financial assets presented in the balance sheet
Derivatives	126,389	(55,776)	70,613
Reverse repurchase agreements	89,465	(5,168)	84,297
Total	**215,854**	**(60,944)**	**154,910**

	31 December 2019		
	EUR million		
Liabilities	Gross amount of financial liabilities	Gross amount of financial liabilities offset in the balance sheet	Net amount of financial liabilities presented in the balance sheet
Derivatives	124,840	(55,776)	69,064
Reverse repurchase agreements	81,087	(5,168)	75,919
Total	**205,927**	**(60,944)**	**144,983**

At 31 December 2021, Grupo Santander has offset other items amounting to EUR 1,188 million (EUR 1,194 million and EUR 1,366 million at 31 December 2020 and 2019, respectively).

At 31 December 2021 the balance sheet shows the amounts EUR 106,430 million (EUR 130,653 million and EUR 141,201 million at 31 December 2020 and 2019) on derivatives and repos as assets and EUR 104,130 million (EUR 122,416 million and EUR 134,694 million at 31 December 2020 and 2019) on derivatives and repos as liabilities that are subject to netting and collateral arrangements.

g) Impairment of financial assets

i. Definition

Grupo Santander associates an impairment in the value to financial assets measured at amortised cost, debt instruments measured at fair value with changes in other comprehensive income, lease receivables and commitments and guarantees granted that are not measured at fair value.

The impairment for expected credit losses is recorded with a charge to the consolidated income statement for the period in which the impairment arises. In the event of occurrence, the recoveries of previously recognised impairment losses are recorded in the consolidated income statement for the period in which the impairment no longer exists or is reduced.

In the case of purchased or originated credit-impaired assets, the Group only recognizes at the reporting date the changes in the expected credit losses during the life of the asset since the initial recognition as a credit loss. In the case of assets measured at fair value with changes in other comprehensive income, the changes in the fair value due to expected credit losses are charged in the consolidated income statement of the year where the change happened, reflecting the rest of the valuation in other comprehensive income.

As a rule, the expected credit loss is estimated as the difference between the contractual cash flows to be recovered and the expected cash flows discounted using the original effective interest rate. In the case of purchased or originated credit-impaired assets, this difference is discounted using the effective interest rate adjusted by credit rating.

Depending on the classification of financial instruments, which is mentioned in the following sections, the expected credit losses may be along 12 months or during the life of the financial instrument:

- 12-month expected credit losses: arising from the potential default events, as defined in the following sections that are estimated to be likely to occur within the 12 months following the reporting date. These losses will be associated with financial assets classified as 'normal risk' as defined in the following sections.
- Expected credit losses over the life of the financial instrument: arising from the potential default events that are estimated to be likely to occur throughout the life of the financial instruments. These losses are associated with financial assets classified as 'normal risk under watchlist' or 'doubtful risk'.

With the purpose of estimating the expected life of the financial instrument all the contractual terms have been taken into account (e.g. prepayments, duration, purchase options, etc.), being the contractual period (including extension options) the maximum period considered to measure the expected credit losses. In the case of financial instruments with an uncertain maturity period and a component of undrawn commitment (e.g.: credit cards), the expected life is estimated through quantitative analyses to determine the period during which the entity is exposed to credit risk, also considering the effectiveness of management procedures that mitigate such exposure (e.g. the ability to unilaterally cancel such financial instruments, etc.).

The following constitute effective guarantees:

a) Mortgage guarantees on housing as long as they are first duly constituted and registered in favour of the entity. The properties include:

   i. Buildings and building elements, distinguishing among:

      - Houses.
      - Offices, stores and multi-purpose premises.
      - Rest of buildings such as non-multi-purpose premises and hotels.

   ii. Urban and developable ordered land.

   iii. Rest of properties that classify as: buildings and building elements under construction, such as property development in progress and halted development, and the rest of land types, such as rustic lands.

b) Collateral guarantees on financial instruments in the form of cash deposits and debt securities issued by creditworthy issuers.

c) Other types of real guarantees, including properties received in guarantee and second and subsequent mortgages on properties, as long as the entity demonstrates its effectiveness. When assessing the effectiveness of the second and subsequent mortgages on properties the entity will implement particularly restrictive criteria. It will take into account, among others, whether the previous charges are in favour of the entity itself or not and the relationship between the risk guaranteed by them and the property value.

d) Personal guarantees, as well as the incorporation of new owners, covering the entire amount of the financial instruments and implying direct and joint liability to the entity of persons or other entities whose solvency is sufficiently proven to ensure the repayment of the loan on the agreed terms.

The different aspects that the Group considers for the evaluation of effective guarantees are set out below in relation to the individual analysis.

ii. Financial instruments presentation

For the purposes of estimating the impairment amount, and in accordance with its internal policies, the Group classifies its financial instruments (financial assets, commitments and guarantees) measured at amortised cost or fair value through other comprehensive income in one of the following categories:

- Normal Risk ('stage 1'): includes all instruments that do not meet the requirements to be classified in the rest of the categories.

- Normal risk under watchlist ('stage 2'): includes all instruments that, without meeting the criteria for classification as doubtful or default risk, have experienced significant increases in credit risk since initial recognition.

In order to determine whether a financial instrument has increased its credit risk since initial recognition and is to be classified in stage 2, the Group considers the following criteria:

Quantitative criteria	Changes in the risk of a default occurring through the expected life of the financial instrument are analysed and quantified with respect to its credit level in its initial recognition. With the purpose of determining if such changes are considered as significant, with the consequent classification into stage 2, each Group unit has defined the quantitative thresholds to consider in each of its portfolios taking into account corporate guidelines ensuring a consistent interpretation in all units. Within the quantitative thresholds, two types are considered: A relative threshold is those that compare current credit quality with credit quality at the time of origination in percentage terms of change. In addition, an absolute threshold compares both references in total terms, calculating the difference between the two. These absolute/relative concepts are used homogeneously (with different values) in all geographies. The use of one type of threshold or another (or both) is determined in accordance with the process described in note 53, below, and is marked by the type of portfolio and characteristics such as the starting point of the average credit quality of the portfolio.
Qualitative criteria	In addition to the quantitative criteria indicated, various indicators are used that are aligned with those used by the Group in the normal management of credit risk. Irregular positions of more than 30 days and renewals are common criteria in all Group units. In addition, each unit can define other qualitative indicators, for each of its portfolios, according to the particularities and normal management practices in line with the policies currently in force (i.e. use of management alerts, etc.). The use of these qualitative criteria is complemented with the use of an expert judgement, under the corresponding governance.

In the case of forbearances, instruments classified as 'normal risk under watchlist' may be generally reclassified to 'normal risk' in the following circumstances: at least two years have elapsed from the date of reclassification to that category or from its forbearance date, the client has paid the accrued principal and interest balance, and the client has no other instruments with more than 30 days past due balances.

- Doubtful Risk ('stage 3'): includes financial instruments, overdue or not, in which, without meeting the circumstances to classify them in the category of default risk, there are reasonable doubts about their total repayment (principal and interests) by the client in the terms contractually agreed. Likewise, off-balance-sheet exposures whose payment is probable and their recovery doubtful are considered in stage 3. Within this category, two situations are differentiated:

  – Doubtful risk for non-performing loans: financial instruments, irrespective of the client and guarantee, with balances more than 90 days past due for principal, interest or expenses contractually agreed.

    This category also includes all loan balances for a client which overdue amount more than 90 days past due is greater than 20% of the loan receivable balance.

These instruments may be reclassified to other categories if, as a result of the collection of part of the past due balances, the reasons for their classification in this category do not remain and the client does not have balances more than 90 days past due in other loans.

  – Doubtful risk for reasons other than non-performing loans: this category includes doubtful recovery financial instruments that are not more than 90 days past due.

Grupo Santander considers that a financial instrument to be doubtful for reasons other than delinquency when one or more combined events have occurred with a negative impact on the estimated future cash flows of the financial instrument. To this end, the following indicators, among others, are considered:

a) Negative net equity or decrease because of losses of the client's net equity by at least 50% during the last financial year.

b) Continued losses or significant decrease in revenue or, in general, in the client's recurring cash flows.

c) Generalised delay in payments or insufficient cash flows to service debts.

d) Significantly inadequate economic or financial structure or inability to obtain additional financing by the client.

e) Existence of an internal or external credit rating showing that the client is in default.

f) Existence of overdue customer commitments with a significant amount to public institutions or employees.

These financial instruments may be reclassified to other categories if, as a result of an individualised study, reasonable doubts do not remain about the total repayment under the contractually agreed terms and the client does not have balances with more than 90 days past due.

In the case of forbearances, instruments classified as doubtful risk may be reclassified to the category of 'normal risk under watchlist' when the following circumstances are present: a minimum period of one year has elapsed from the forbearance date, the client has paid the accrued principal and interest amounts, and the client has no other loan balance with more than 90 days past due.

- Default Risk: includes all financial assets, or part of them, for which, after an individualised analysis, their recovery is considered remote due to a notorious and irrecoverable deterioration of their solvency.

  In any event, except in the case of financial instruments with effective collateral covering a substantial portion of the transaction amount, the Group generally consider as remote the following:

- Those operations that, after an individualized analysis, are categorized as unsustainable debt, assuming an irrecoverability of such debt.

- Transactions classified as doubtful due to non-performing loans with recovery costs that exceed the amounts receivable.

- The operations on which the award is executed. The queue of these operations shall be included under default risk, as the recovery of the flows, provided that no further guarantees associated with the operation remain after the award of the property.

- Those operations on which a deduction is made, the portion of the operation corresponding to that deduction, will be given as a balance at the time of signature.

A financial asset amount is maintained in the balance sheet until they are considered as a "default risk", either all or a part of it, and the write-off is registered against the balance sheet.

In the case of operations that have only been partially derecognised, for forgiveness reasons or because part of the total balance is considered unrecoverable, the remaining amount shall be fully classified in the category of 'doubtful risk', except where duly justified.

The classification of a financial asset, or part of it, as a 'default risk' does not involve the disruption of negotiations and legal proceedings to recover the amount.

iii. Impairment valuation assessment

Grupo Santander has policies, methods and procedures in place to hedge its credit risk, both due to the insolvency attributable to counterparties and its residence in a specific country.

These policies, methods and procedures are applied in the concession, study and documentation of financial assets, commitments and guarantees, as well as in the identification of their impairment and in the calculation of the amounts needed to cover their credit risk.

The asset impairment model in IFRS 9 applies to financial assets measured at amortised cost, debt instruments at fair value with changes in other comprehensive income, lease receivables and commitments and guarantees granted that are not measured at fair value.

The impairment represents the best estimation of the financial assets expected credit losses at the balance sheet date, assessed both individually and collectively.

- Individually: for the purposes of estimating the provisions for credit risk arising from the insolvency of a financial instrument, the Group individually assesses impairment by estimating the expected credit losses on those financial instruments that are considered to be significant and with sufficient information to make such an estimate.

Therefore, this classification mostly includes wholesale banking customers —Corporations, specialised financing— as well as some of the largest companies —Chartered and real estate developers— from retail banking. The determination of the perimeter in which the individualised estimate is applied is detailed in a later section.

The individually assessed impairment estimate is equal to the difference between the gross carrying amount of the financial instrument and the estimated value of the expected cash flows receivable discounted using the original effective interest rate of the transaction. The estimate of these cash flows takes into account all available information on the financial asset and the effective guarantees associated with that asset. This estimation process is detailed below.

- Collectively: the Group also assesses impairment by estimating the expected credit losses collectively in cases where they are not assessed on an individual basis. This includes, for example, loans with individuals, sole proprietors or businesses in retail banking subject to a standardised risk management.

For the purposes of the collective assessment of expected credit losses, the Group has consistent and reliable internal models. For the development of these models, instruments with similar credit risk characteristics that are indicative of the debtors' capacity to pay are considered.

The credit risk characteristics used to group the instruments are, among others: type of instrument, debtor's sector of activity, geographical area of activity, type of guarantee, aging of past due balances and any other factor relevant to estimating the future cash flows.

Grupo Santander performs retrospective and monitoring tests to evaluate the reasonableness of the collective estimate.

On the other hand, the methodology required to estimate the expected credit loss due to credit events is based on an unbiased and weighted consideration by the probability of occurrence of a series of scenarios, considering a range of three to five possible future scenarios, depending on the characteristics of each unit, which could have an impact on the collection of contractual cash flows, always taking into account the time value of money, as well as all available and relevant information on past events, current conditions and forecasts of the evolution of macroeconomic scenarios that are shown to be relevant for the estimation of this amount (for example: GDP (Gross Domestic Product), housing price, unemployment rate, etc.).

The estimation of expected losses requires expert judgment and the support of historical, current and future information. The probability of loss is measured considering past events, the present situation and future trends of macroeconomic scenarios.

Grupo Santander uses forward-looking information in both internal risk management and prudential regulation processes, so that for the calculation of the impairment loss allowance, various scenarios are incorporated that take advantage of the experience with such information, thus ensuring consistency in obtaining the expected loss.

The challenge of the exercise has focused on the uncertainty of the economic outlook caused by the covid-19 crisis, coupled with a complex environment for value creation.

Grupo Santander has internally ensured the criteria to be followed for guarantees received from government bodies, both through credit lines and other public guarantees, so that when they are adequately reflected in each of the contracts, they are recognised as mitigating factors of the potential expected losses, and therefore of the provisions to be recognised, based on the provisions of the applicable standard (IFRS 9 Par. B5.5.55). Furthermore, where applicable, these guarantees are appropriately reflected in the mitigation of the significant increase in risk, considering their nature as personal guarantees.

For the estimation of the parameters used in the estimation of impairment provisions -EAD (exposure at default), PD (probability of default), LGD (loss given default)-, the Group based its experience in developing internal models for the estimation of parameters both in the regulatory area and for management purposes, adapting the development of the impairment provision models under IFRS 9.

- Exposure at default: is the amount of estimated risk incurred at the time of the counterparty's analysis.
- Probability of default: is the estimated probability that the counterparty will default on its principal and/or interest payment obligations.
- Loss given default: is the estimate of the severity of the loss incurred in the event of non-compliance. It depends mainly on the updating of the guarantees associated with the operation and the future cash flows that are expected to be recovered.

In any case, when estimating the flows expected to be recovered, portfolio sales are included. It should be noted that due to the Group's recovery policy and the experience observed in relation to the prices of past sales of assets classified as stage 3 and/or default risk, there is no substantial divergence between the flows obtained from recoveries after performing recovery management of the assets with those obtained from the sale of portfolios of assets discounting structural expenses and other costs incurred.

The definition of default implemented by the Group for the purpose of calculating the impairment provision models is based on the definition in Article 178 of Regulation 575/2013 of the European Union (CRR), which is fully aligned with the requirements of IFRS 9, which considers that a 'default' exists in relation to a specific customer/contract when at least one of the following circumstances exists: the entity considers that there are reasonable doubts about the payment of all its credit obligations or that the customer/contract is in an irregular situation for more than 90 days with respect to any significant credit obligation.

Grupo Santander will partially and voluntarily align during 2022 the accounting definition of Stage 3, as well as for the calculation of impairment provision models, to the New Definition of Default, incorporating the criteria defined by the EBA in its implementation guide of the definition of default, capturing the economic deterioration of the operations (days in default - on a daily basis - and materiality thresholds - minimum amount in arrears). The alignment of criteria will be done taking into account the criteria of IFRS 9 as well as the accounting principles of unbiased presentation of financial information. The expected increase in the default rate is estimated at around 24 basis points, with no material impact on the provision figures for credit risk.

In addition, the Group considers the risk generated in all cross-border transactions due to circumstances other than the usual commercial risk of insolvency (sovereign risk, transfer risk or risks arising from international financial activity, such as wars, natural catastrophes, balance of payments crisis, etc.).

IFRS 9 includes a series of practical solutions that can be implemented by entities, with the aim of facilitating its implementation. However, in order to achieve a complete and high-level implementation of the standard, and following the best practices of the industry, the Group does not apply these practical solutions in a generalised manner:

- Rebuttable presumption that the credit risk has increased significantly, when payments are more than 30 days past due: this threshold is used as an additional, but not primary, indicator of significant risk increase. Additionally, there may be cases in the Group where its use has been rebutted as a result of studies that show a low correlation of the significant risk increase with this past due threshold. The volume rebutted does not exceed 0.1% of the Group's total exposure.

- Assets with low credit risk at the reporting date: the Group assesses the existence of significant risk increase in all its financial instruments.

This information is provided in more detail in note 53 b.

iv. Detail of individual estimate of impairment

For the individual estimate of the assessment for impairment of the financial asset, the Group has a specific methodology to estimate the value of the cash flows expected to be collected:

- Recovery through the debtor's ordinary activities (going approach).
- Recovery through the execution and sale of the collateral guaranteeing the operations (gone approach).

Gone approach:

a. Evaluation of the effectiveness of guarantees

Grupo Santander assesses the effectiveness of all the guarantees associated considering the following:

- The time required to execute these guarantees.
- Grupo Santander's ability to enforce or assert these guarantees in its favour.
- The existence of limitations imposed by each local unit´s regulation on the foreclosure of collateral.

Under no circumstances the Group considers that a guarantee is effective if its effectiveness depends substantially on the solvency of the debtor, as could be the case:

- Promises of shares or other securities of the debtor himself when their valuation may be significantly affected by a debtor's default.
- Personal cross-collateralisation: when the guarantor of a transaction is, at the same time, guaranteed by the holder of that transaction.

On the basis of the foregoing, the following types of guarantees are considered to be effective:

- Mortgage guarantees on properties, which are first charge, duly constituted and registered. Real estate includes:
  - Buildings and finished building elements.
  - Urban and developable land in order.
  - Other real estate, including buildings under construction, developments in progress or at a standstill, and other land, such as rural properties.
- Pledges on financial instruments such as cash deposits, debt securities of reputable issuers or equity instruments.
- Other types of security interests, including movable property received as security and second and subsequent mortgages on real state , provided that they are proven to be effective under particularly restrictive criteria.
- Personal guarantees, including new holders, covering the entire amount and involving direct and joint liability to the entity, from persons or entities whose equity solvency ensures repayment of the transaction under the agreed terms.

b. Valuation of guarantees

Grupo Santander assesses the guarantees on the basis of their nature in accordance with the following:

- Mortgage guarantees on properties associated with financial instruments, using a complete individual valuations carried out by independent valuation experts and under generally accepted valuation standards. If this is not possible, alternative valuations are used with duly documented and approved internal valuation models.
- Personal guarantees are valued individually on the basis of the guarantor´s updated information.
- The rest of the guarantees are valued based on current market values.

c. Adjustments to the value of guarantees and estimation of future cash flow inflows and outflows

Grupo Santander applies a series of adjustments to the value of the guarantees in order to improve the reference values:

- Adjustments based on the historical sales experience of local units for certain types of assets.
- Individual expert adjustments based on additional management information.

Likewise, to adjust the value of the guarantees, the time value of money is taken into account based on the historical experience of each of the units, estimating:

- Period of adjudication.
- Estimated time of sale of the asset.

In addition, the Group takes into account all those cash inflows and outflows linked to that guarantee until it is sold:

- Possible future income commitments in favour of the borrower which will available after the asset is awarded.
- Estimated foreclosure costs.
- Asset maintenance costs, taxes and community costs.
- Estimated marketing or sales costs.

Finally, since it is considered that the guarantee will be sold in the future, the Group applies an additional adjustment ('index forward') in order to adjust the value of the guarantees to future valuation expectations.

v. Impairment individual assessment scope

Grupo Santander determines the perimeter over which it makes an estimate of the assessment for impairment on an individual basis based on a relevance threshold set by each of the geographical areas and the stage in which the operations are located. In general, the Group applies the individualised calculation of expected losses to the significant exposures classified in stage 3, although Banco Santander, S.A. has also extended its analyses to some of the exposures classified in stage 2.

It should be noted that, in any case and irrespective of the stage in which their transactions are carried out, for customers who do not receive standardised treatment, a relational risk management model is applied, with individualised treatment and monitoring by the assigned risk analyst. In addition to wholesale customers (Santander Corporate & Investment Banking or SCIB) and large companies, this relational management model also includes other segments of smaller companies for which there is information and capacity for more personalised and expert analysis and monitoring. As indicated in the Group's wholesale credit model, the individual treatment of the client facilitates the continuous updating of information. The risk assumed must be followed and monitored throughout its life cycle, enabling anticipation and action to be taken in the event of possible impairments. In this way, the customer's credit quality is analysed individually, taking into account specific aspects such as his competitive position, financial performance, management, etc. In the wholesale risk management model, every customer with a credit risk position is assigned a rating, which has an associated probability of customer default. Thus, individual analysis of the debtor triggers a specific rating for each customer, which determines the appropriate parameters for calculating the expected loss, so that it is the rating itself that initially modulates the necessary coverage, adjusting the severity of the possible loss to the guarantees and other mitigating factors that the customer may have available. In addition, if as a result of this individualised monitoring of the customer, the analyst finally considers that his coverage is not sufficient, he has the necessary mechanisms to adjust it under his expert judgement, always under the appropriate governance.

h) Repurchase agreements and reverse repurchase agreements

Purchases (sales) of financial instruments under a non-optional resale (repurchase) agreement at a fixed price (repos) are recognised in the consolidated balance sheet as financing granted (received), based on the nature of the debtor (creditor), under 'Loans and advances with central banks', 'Loans and advances to credit institutions' or 'Loans and advances to customers' (Deposits from central banks, Deposits from credit institutions or Customer deposits).

Differences between the purchase and sale prices are recognised as interest over the contract term.

i) 'Non-current assets' and 'liabilities associated with non-current assets held for sale'

'Non-current assets held for sale' includes the carrying amount of individual items, disposal groups or items forming part of a business unit earmarked for disposal (discontinued operations), whose sale in their present condition is highly likely to be completed within one year from the reporting date. Therefore, the recovery of the carrying amount of these items -which can be of a financial nature or otherwise- will foreseeably be effected through the proceeds from their disposal.

Specifically, property or other non-current assets received by the consolidated entities as total or partial settlement of their debtors' payment obligations to them are deemed to be 'Non-current assets held for sale', unless the consolidated entities have decided to make continuing use of these assets. In this connection, for the purpose of its consideration in the initial recognition of these assets, the Group obtains, at the foreclosure date, the fair value of the related asset through a request for appraisal by external appraisal agencies.

Grupo Santander has in place a corporate policy that ensures the professional competence and the independence and objectivity of the external appraisal agencies, in accordance with the regulations, which require appraisal agencies to meet independence, neutrality and credibility requirements, so that the use of their estimates does not reduce the reliability of its valuations. This policy establishes that all the appraisal companies and agencies with which the Group works in Spain should be registered in the Official Register of the Bank of Spain and that the appraisals performed by them should follow the methodology established in Ministry of Economy Order ECO/805/2003, of 27 March. The main appraisal companies and agencies with which the Group worked in Spain in 2021 are as follows: Gloval Valuation, S.A.U., Tinsa Tasaciones Inmobiliarias, S.A.U., Gesvalt Sociedad de Tasacion, S.A. and Sociedad de tasacion, S.A.

Also, this policy establishes that the various subsidiaries abroad work with appraisal companies that have recent experience in the area and the type of asset under appraisal and meet the independence requirements established in the corporate policy. They should verify, inter alia, that the appraisal company is not a party related to the Group and that its billings to the Group in the last twelve months do not exceed 15% of the appraisal company's total billings.

'Liabilities associated with non-current assets held for sale' includes the balances payable arising from the assets held for sale or disposal groups and from discontinued operations.

'Non-current assets and disposal groups of items that have been classified as held for sale' are generally recognised at the date of their allocation to this category and are subsequently valued at the lower of their fair value less costs to sell or its book value. 'Non-current assets and disposal groups of items that are classified as held for sale' are not amortised as long as they remain in this category.

At 31 December 2021 the fair value less costs to sell of non-current assets held for sale exceeded their carrying amount by EUR 567 million (EUR 560 million at 31 December 2020); however, in accordance with the accounting standards, this unrealised gain could not be recognised.

The valuation of the portfolio of non-current assets held for sale has been made in compliance with the requirements of International Financial Reporting Standards in relation to the estimate of the fair value of tangible assets and the value-in-use of financial assets.

The value of the portfolio is determined as the sum of the values of the individual elements that compose the portfolio, without considering any total or batch grouping in order to correct the individual values.

Banco Santander, in compliance with Bank of Spain Circular 4/2017, and subsequent amendments, on public and private financial reporting standards and financial statement models, has developed a methodology that enables it to estimate the fair value and costs of sale of assets foreclosed or received in payment of debts. This methodology is based on the classification of the portfolio of foreclosed assets into different segments. Segmentation enables the intrinsic characteristics of Banco Santander's portfolio of foreclosed assets to be differentiated, so that assets with homogeneous characteristics are grouped by segment.

Thus, the portfolio is segmented into (i) finished assets of a residential and tertiary nature, (ii) developments in progress and (iii) land[1].

In determining the critical segments in the overall portfolio, assets are classified on the basis of the nature of the asset and its stage of development. This segmentation is made in order to seek the liquidation of the asset (which should be carried out in the shortest possible time).

When making decisions, the situation and/or characteristics of the asset are fundamentally taken into account, as well as the evaluation of all the determining factors that favour the recovery of the debt. For them, the following aspects are analyzed, among others:

- The time that has elapsed since the adjudication.
- The transferability and contingencies of the foreclosed asset.
- The economic viability from the real estate point of view with the necessary investment estimate.
- The expenses that may arise from the marketing process.
- The offers received, as well as the difficulties in finding buyers.

1.The assets in a situation of 'stopped development' are included under 'land'

In the case of real estate assets foreclosed in Spain, which represent 91% of the Group's total non-current assets held for sale, the valuation of the portfolio is carried out by applying the following models:

- Market Value Model used in the valuation of finished properties of a residential nature (mainly homes and car parks) and properties of a tertiary nature (offices, commercial premises and multipurpose buildings). For the valuation of finished assets whose availability for sale is immediate, a market sale value provided by a third party external to Banco Santander is considered, calculated under the AVM methodology by the comparable properties method adjusted by our experience in selling similar assets, given the term, price, volume, trend in the value of these assets and the time elapsing until their sale and discounting the estimated costs of sale.

The market value is determined on the basis of the definition established by the International Valuation Standards drawn up by the IVSC (International Valuation Standards Council), understood as the estimated amount for which an asset or a liability should be exchanged on the measurement date between a willing buyer and a willing seller, in an arm's length transaction, after appropriate marketing, and in which the parties have acted with sufficient information, prudently and without coercion.

The current market value of the properties is estimated on the basis of automated valuations obtained by taking comparable properties as a reference; simulating the procedure carried out by an appraiser in a physical valuation according to Order ECO 805/2003: selection of properties and obtaining the unit value by applying homogenisation adjustments. The selection of the properties is carried out by location within the same real estate cluster and according to the characteristics of the properties, filtering by type[2], surface area range and age. The model enables a distinction to be made within the municipality under study as to which areas are similar and comparable and therefore have a similar value in the property market, discriminating between which properties are good comparators and which are not.

Adjustments to homogenize the properties are made according to: (i) the age of the property according to the age of the property to be valued, (ii) the deviation of the built area from the common area with respect to the property to be valued and (iii) by age of the date of capture of the property according to the price evolution index of the real estate market.

In addition, for individually significant assets, complete individual valuations are carried out, including a visit to the asset, market analysis (data relating to supply, demand, current sale or rental price ranges and supply-demand and revaluation expectations) and an estimate of expected income and costs.

2. Assets qualified as protected housing are taken into account. The maximum legal value of these assets is determined by the VPO module, obtained from the result of multiplying the State Basic Module (MBE) by a zone coefficient determined by each autonomous community. To carry out the valuation of a protected property, the useful surface area is used in accordance with current regulations.

For this segmentation of assets, when they are completed, the real costs are known and the actual expenses for the marketing and sale of the asset must be taken into account. Therefore, Banco Santander uses the actual costs in its calculation engine or, failing that, those estimated on the basis of its observed experience.

- Market Value Model according to Evolution of Market Values used to update the valuation of developments in progress. The valuation model estimates the current market value of the properties based on complete individual valuations by third parties, calculated from the values of the feasibility studies and development costs of the promotion, as well as the selling costs, distinguishing by location, size and type of property. The inputs used in the valuation model for residential assets under construction are actual revenues and costs.

For this purpose, in order to calculate the investment flows, Banco Santander considers, on the basis of the feasibility studies, the expenditure required for construction, the professional fees relating to the project and to project management, the premiums for mandatory building insurance, the developer's administrative expenses, licenses, taxes on new construction and fees, and urban development charges.

With respect to the calculation of income flows, Banco Santander takes into account the square metres built, the number of homes under construction and the estimated selling price over 1.5 years.

The market value will be the result of the difference between the income flows and the investment flows estimated at each moment.

- Land Valuation model. The methodology followed by the Group regarding land valuation consists of updating the individual reference valuation of each of the land on an annual basis, through updated valuation valuations carried out by independent professionals and following the methodology established in the OM (Ministerial Order) ECO/805/2003, of 27 March, whose main verifications in the case of land valuation, regardless of the degree of urbanisation of the land, correspond to:
  - Visual verification of the assessed property.
  - Registry description.
  - Urban planning.
  - Visible easements.
  - Visible state of occupation, possession, use and exploitation.
  - Protection regime.
  - Apparent state of preservation.
  - Correspondence with cadastral property.
  - Existence of expropriation procedure, expropriation plan or project, administrative resolution or file that may lead to expropriation.
  - Expiry of the urbanization or building deadlines.
  - Existence of a procedure for failure to comply with obligations.
  - Verification of surfaces.

For the purposes of valuation, the land will be classified in the following levels:

- Level I: It will include all the lands that do not belong to level II.
- Level II: It shall include land classified as undeveloped where building is not allowed for uses other than agriculture, forestry, livestock or linked to an economic exploitation permitted by the regulations in force. Also included are lands classified as developable that are not included in a development area of urban planning or that, in such an area, the conditions for its development have not been defined.

In those cases where the Group does not have an updated reference value through an ECO valuation for the current year, we use as a reference value the latest available ECO valuation reduced or corrected by the average annual coverage ratio of the land on which we have obtained an updated reference value, through an ECO valuation.

Grupo Santander applies a discount to the aforementioned reference values that takes into account both the discount on the reference value in the sales process and the estimated costs of marketing or selling the land:

Discount on reference value = % discount on sales + % marketing costs being:

- % discount on Sales: = 100 - (sales price / updated appraisal value).
- marketing costs: calculated on the basis of our historical experience in sales and in accordance with the marketing management fees negotiated with our suppliers of this type of service.

In this way the Group obtains the corrected market value, an amount that we compare with the net cost of each piece of land to determine its correct valuation and conclude with our valuation process.

In addition, in relation to the previously mentioned valuations, less costs to sell, are contrasted with the sales experience of each type of asset in order to confirm that there is no significant difference between the sale price and the valuation.

Impairment losses on an asset or disposal group arising from a reduction in its carrying amount to its fair value (less costs to sell) are recognised under 'Gains or (losses) on non-current assets held for sale not classified as discontinued operations' in the consolidated income statement.

The gains on a non-current asset held for sale resulting from subsequent increases in fair value (less costs to sell) increase its carrying amount and are recognised in the consolidated income statement up to an amount equal to the impairment losses previously recognised.

j) Assets under insurance or reinsurance contracts and Liabilities under insurance or reinsurance contracts

Insurance contracts involve the transfer of a certain quantifiable risk in exchange for a periodic or one-off premium. The effects on the Group's cash flows will arise from a deviation in the payments forecast and/or an insufficiency in the premium set.

The Group controls its insurance risk as follows:

- By applying a strict methodology in the launch of products and in the assignment of value thereto.
- By using deterministic and stochastic actuarial models for measuring commitments.
- By using reinsurance as a risk mitigation technique as part of the credit quality guidelines in line with the Group's general risk policy.
- By establishing an operating framework for credit risks.
- By actively managing asset and liability matching.
- By applying security measures in processes.

Reinsurance assets includes the amounts that the consolidated entities are entitled to receive for reinsurance contracts with third parties and, specifically, the reinsurer's share of the technical provisions recorded by the consolidated insurance entities.

At least once a year these assets are reviewed to ascertain whether they are impaired (i.e. there is objective evidence, as a result of an event that occurred after initial recognition of the reinsurance asset, that Grupo Santander may not receive all amounts due to it under the terms of the contract and the amount that will not be received can be reliably measured), and any impairment loss is recognised in the consolidated income statement and the assets are written down.

'Liabilities under insurance contracts' includes the technical provisions recorded by the consolidated entities to cover claims arising from insurance contracts in force at year-end.

Insurers' results relating to their insurance business are recognised, according to their nature, under the related consolidated income statement items.

In accordance with standard accounting practice in the insurance industry, the consolidated insurance entities credit to the income statement the amounts of the premiums written and charge to income the cost of the claims incurred on final settlement thereof. Insurance entities are therefore required to accrue at period-end the unearned revenues credited to their income statements and the accrued costs not charged to income.

At least at each reporting date the Group assesses whether the insurance contract liabilities recognised in the consolidated balance sheet are adequate. For this purpose, it calculates the difference between the following amounts:

- Current estimates of future cash flows under the insurance contracts of the consolidated entities. These estimates include all contractual cash flows and any related cash flows, such as claims handling costs.
- The carrying amount recognised in the consolidated balance sheet of its insurance contract liabilities (see note 15), less any related deferred acquisition costs or related intangible assets, such as the amount paid to acquire, in the event of purchase by the entity, the economic rights held by a broker deriving from policies in the entity's portfolio.

If the calculation results in a positive amount, this deficiency is charged to the consolidated income statement. When unrealised gains or losses on assets of the Group's insurance companies affect the measurement of liabilities under insurance contracts and/or the related deferred acquisition costs and/or the related intangible assets, these gains or losses are recognised directly in equity. The corresponding adjustment in the liabilities under insurance contracts (or in the deferred acquisition costs or in intangible assets) is also recognised in equity.

The most significant items forming part of the technical provisions (see note 15) are detailed below:

- Non-life insurance provisions:

  i) Provision for unearned premiums: relates to the portion of the premiums received at year-end that is allocable to the period from the reporting date to the end of the policy cover period.

ii) Provisions for unexpired risks: this supplements the provision for unearned premiums to the extent that the amount of the latter is not sufficient to reflect all the assessed risks and expenses to be covered by the insurance companies in the policy period not elapsed at the reporting date.

- Life insurance provisions: represent the value of the net obligations acquired vis-à-vis life insurance policyholders. These provisions include:

  i) Provision for unearned premiums and unexpired risks: this relates to the portion of the premiums received at year-end that is allocable to the period from the reporting date to the end of the policy cover period.

  ii) Mathematical provisions: these relate to the value of the insurance companies' obligations, net of the policyholders' obligations. These provisions are calculated on a policy-by-policy basis using an individual capitalisation system, taking as a basis for the calculation the premium accrued in the year, and in accordance with the technical bases of each type of insurance updated, where appropriate, by the local mortality tables.

- Provision for claims outstanding: this reflects the total obligations outstanding arising from claims incurred prior to the reporting date. This provision is calculated as the difference between the total estimated or certain cost of the claims not yet reported, settled or paid and all the amounts already paid in relation to such claims.
- Provision for bonuses and rebates: this provision includes the amount of the bonuses accruing to policyholders, insureds or beneficiaries and that of any premiums to be returned to policyholders or insureds, to the extent that such amounts have not been assigned at the reporting date. These amounts are calculated on the basis of the conditions of the related individual policies.
- Technical provisions for life insurance policies where the investment risk is borne by the policyholders: these provisions are calculated on the basis of the indices established as a reference to determine the economic value of the policyholders' rights.

k) Tangible assets

Tangible assets includes the amount of buildings, land, furniture, vehicles, computer hardware and other fixtures owned by the consolidated entities or acquired under finance leases. Tangible assets are classified by use as follows:

i. Property, plant and equipment for own use

Property, plant and equipment for own use – including tangible assets received by the consolidated entities in full or partial

satisfaction of financial assets representing receivables from third parties which are intended to be held for continuing use and tangible assets acquired under finance leases– are presented at acquisition cost, less the related accumulated depreciation and any estimated impairment losses (carrying amount higher than recoverable amount).

Depreciation is calculated, using the straight-line method, on the basis of the acquisition cost of the assets less their residual value. The land on which the buildings and other structures stand has an indefinite life and, therefore, is not depreciated.

The period tangible asset depreciation charge is recognised in the consolidated income statement and is calculated using the following depreciation rates (based on the average years of estimated useful life of the various assets):

	Average annual rate
Buildings for own use	2.7%
Furniture	8.5%
Fixtures	8.5%
Office and IT equipment	23.8%
Lease use rights	Less than the lease term or the useful life of the underlying asset

At the end of each reporting period, consolidated entities assess whether there is any indication that the carrying amount of an asset exceeds its recoverable amount, in which case they write down the carrying amount of the asset to its recoverable amount and adjust future depreciation charges in proportion to its adjusted carrying amount and to its new remaining useful life, if the useful life needs to be re-estimated.

Similarly, if there is an indication of a recovery in the value of a tangible asset, the consolidated entities recognise the reversal of the impairment loss recognised in prior periods and adjust the future depreciation charges accordingly. In no circumstances may the reversal of an impairment loss on an asset raise its carrying amount above that which it would have if no impairment losses had been recognised in prior years.

The estimated useful lives of the items of property, plant and equipment for own use are reviewed at least at the end of the reporting period with a view to detecting significant changes therein. If changes are detected, the useful lives of the assets are adjusted by correcting the depreciation charge to be recognised in the consolidated income statement in future years on the basis of the new useful lives.

Upkeep and maintenance expenses relating to property, plant and equipment for own use are recognised as an expense in the period in which they are incurred, since they do not increase the useful lives of the assets.

ii. Investment property

'Investment property' reflects the net values of the land, buildings and other structures held either to earn rentals or for obtaining profits by sales due to future increase in market prices.

The criteria used to recognise the acquisition cost of investment property, to calculate its depreciation and its estimated useful life and to recognise any impairment losses thereon are consistent with those described in relation to property, plant and equipment for own use.

In order to evaluate the possible impairment Grupo Santander determines periodically the fair value of its investment property so that, at the end of the reporting period, the fair value reflects the market conditions of the investment property at that date. This fair value is determined annually, taking as benchmarks the valuations performed by independent experts. The methodology used to determine the fair value of investment property is selected based on the status of the asset in question; thus, for properties earmarked for lease, the valuations are performed using the sales comparison approach, whereas for leased properties the valuations are made primarily using the income capitalisation approach and, exceptionally, the sales comparison approach.

In the sales comparison approach, the property market segment for comparable properties is analysed, inter alia, and, based on specific information on actual transactions and firm offers, current prices are obtained for cash sales of those properties. The valuations performed using this approach are considered as level 2 valuations.

In the income capitalisation approach, the cash flows estimated to be obtained over the useful life of the property are discounted taking into account factors that may influence the amount and actual obtainment thereof, such as: (i) the payments that are normally received on comparable properties; (ii) current and probable future occupancy; (iii) the current or foreseeable default rate on payments. The valuations performed using this approach are considered as Level 3 valuations, since significant unobservable inputs are used, such as current and probable future occupancy and/or the current or foreseeable default rate on payments.

iii. Assets leased out under an operating lease

'Property, plant and equipment' - Leased out under an operating lease reflects the amount of the tangible assets, other than land and buildings, leased out by the Group under an operating lease.

The criteria used to recognise the acquisition cost of assets leased out under operating leases, to calculate their depreciation and their respective estimated useful lives and to recognise the impairment losses thereon are consistent with those described in relation to property, plant and equipment for own use.

l) Accounting for leases

On 1 January 2019, Grupo Santander changed the accounting policy for leases when acting as a lessee (see note 1.d).

The main aspects contained in the regulation (IFRS 16) adopted by the Group are included below:

When the Group acts as lessee, it recognises a right-of-use asset representing its right to use the underlying leased asset with a corresponding lease liability on the date on which the leased asset is available for use by the Group. Each lease payment is allocated between the liability and the finance charge. The finance charge is allocated to the income statement during the term of the lease in such a way as to produce a constant periodic interest rate on the remaining balance of the liability for each year. The right-of-use asset is depreciated over the useful life of the asset or the lease term, whichever is shorter, on a straight-line basis. If the Group is reasonably certain to exercise a purchase option, the right-of-use asset is amortized over the useful life of the underlying asset.

Assets and liabilities arising from a lease are initially measured at present value. Lease liabilities include the net present value of the following lease payments:

- Fixed payments (including inflation-linked payments), less any lease incentive receivable
- Variable lease payments that depend on an index or rate.
- The amounts expected to be paid by the lessee under residual value guarantees.
- The exercise price of a purchase option if the lessee is reasonably certain that it will exercise that option.
- Lease termination penalty payments, if the term of the lease reflects the lessee's exercise of that option.

Lease payments are discounted using the interest rate implicit in the lease. Given in certain situations this interest rate cannot be obtained, the discount rate used in this cases, is the lessee's incremental borrowing rate at the related date. For this purpose, the entity has calculated this incremental borrowing rate taking as reference the listed debt instruments issued by the Group; in this regard, the Group has estimated different interest rate curves depending on the currency and economic environment in which the contracts are located.

In order to construct the incremental borrowing rate, a methodology has been developed at the corporate level. This methodology is based on the need for each entity to consider its economic and financial situation, for which the following factors must be considered:

- Economic and political situation (country risk).
- Credit risk of the company.
- Monetary policy.
- Volume and seniority of the company's debt instrument issues.

The incremental borrowing rate is defined as the interest rate that a lessee would have to pay for borrowing, given a similar period to the duration of the lease and with similar security, the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment. The Group entities have a wide stock and variety of financing instruments issued in different currencies to that of the euro (pound, dollar, etc.) that provide sufficient information to be able to determine an "all in rate" (reference rate plus adjustment for credit spread at different terms and in different currencies). In circumstances, where the leasing company has its own financing, this has been used as the starting point for determining the incremental borrowing rate. On the other hand, for those Grupo Santander entities that do not have their own financing, the information from the financing of the consolidated subgroup to which they belong was used as the starting point for estimating the entity's curve, analysing other factors to assess whether it is necessary to make any type of negative or positive adjustment to the initially estimated credit spread.

Right-of-use assets are valued at cost which includes the following:

- The amount of the initial measurement of the lease liability.
- Any lease payment made at or before the commencement date less any lease incentive received.
- Any initial direct costs.
- Restoration costs.

The Group recognises the payments associated with short-term leases and leases of low-value assets on a straight-line basis as an expense in the income statement. Short-term leases are leases with a lease term less than or equal to 12 months (a lease that contains a purchase option is not a short term lease).

m) Intangible assets

Intangible assets are identifiable non-monetary assets (separable from other assets) without physical substance which arise as a result of a legal transaction or which are developed internally by the consolidated entities.

Only assets whose cost can be estimated reliably and from which the consolidated entities consider it probable that future economic benefits will be generated are recognised.

Intangible assets are recognised initially at acquisition or production cost and are subsequently measured at cost less any accumulated amortisation and any accumulated impairment losses.

i. Goodwill

Any excess of the cost of the investments in the consolidated entities and entities accounted for using the equity method over the corresponding underlying carrying amounts acquired, adjusted at the date of first-time consolidation, is allocated as follows:

- If it is attributable to specific assets and liabilities of the companies acquired, by increasing the value of the assets (or reducing the value of the liabilities) whose fair values were higher (lower) than the carrying amounts at which they had been recognised in the acquired entities' balance sheets.
- If it is attributable to specific intangible assets, by recognising it explicitly in the consolidated balance sheet provided that the fair value of these assets within twelve months following the date of acquisition can be measured reliably.
- The remaining amount is recognised as goodwill, which is allocated to one or more cash-generating units (CGUs) (a cash-generating unit is the smallest identifiable group of assets that, as a result of continuing operation, generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets). The cash-generating units represent the Group's geographical and/or business segments.

Goodwill (only recognised when it has been acquired by consideration) represents, therefore, a payment made by the acquirer in anticipation of future economic benefits from assets of the acquired entity that are not capable of being individually identified and separately recognised.

At the end of each annual reporting period or whenever there is any indication of impairment goodwill is reviewed for impairment (i.e. a reduction in its recoverable amount to below its carrying amount) and, if there is any impairment, the goodwill is written down with a charge to 'Impairment or reversal of impairment on non-financial assets, net - Intangible assets' in the consolidated income statement.

An impairment loss recognised for goodwill is not reversed in a subsequent period.

In the event of sale or departure of an activity that is part of a CGU, the part of the goodwill that can be assigned to said activity would be written-off, taking as a reference the relative value of the same over the total of the CGU at the time of sale or abandonment. If applicable, the distribution by currency of the remaining goodwill will be performed based on the relative values of the remaining activities.

ii. Other intangible assets

Other intangible assets includes the amount of identifiable intangible assets, such as purchased customer lists and computer software.

Other intangible assets can have an indefinite useful life -when, based on an analysis of all the relevant factors, it is concluded that there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows for the consolidated entities- or a finite useful life, in all other cases.

Intangible assets with indefinite useful lives are not amortised, but rather at the end of each reporting period or whenever there is any indication of impairment the consolidated entities review the remaining useful lives of the assets in order to determine whether they continue to be indefinite and, if this is not the case, to take the appropriate steps.

Intangible assets with finite useful lives are amortised over those useful lives using methods similar to those used to depreciate tangible assets.

The intangible asset amortisation charge is recognised under 'Depreciation and amortisation' in the consolidated income statement.

In both cases the consolidated entities recognise any impairment loss on the carrying amount of these assets with a charge to 'Impairment or reversal of impairment on non-financial assets, net - Intangible assets in the consolidated' income statement.

The criteria used to recognise the impairment losses on these assets and, where applicable, the reversal of impairment losses recognised in prior years are similar to those used for tangible assets (see note 2.k).

Internally developed computer software

Internally developed computer software is recognised as an intangible asset if, among other requisites (basically the Group's ability to use or sell it), it can be identified and its ability to generate future economic benefits can be demonstrated.

Expenditure on research activities is recognised as an expense in the year in which it is incurred and cannot be subsequently capitalised into the carrying amount of the intangible asset.

n) Other assets

'Other assets' in the consolidated balance sheet includes the amount of assets not recorded in other items, the breakdown being as follows:

- Inventories: this item includes the amount of assets, other than financial instruments, that are held for sale in the ordinary course of business, that are in the process of production, construction or development for such purpose, or that are to be consumed in the production process or in the provision of services. Inventories include land and other property held for sale in the property development business.

Inventories are measured at the lower of cost and net realisable value, which is the estimated selling price of the inventories in the ordinary course of business, less the estimated costs of completion and the estimated costs required to make the sale.

Any write-downs of inventories -such as those due to damage, obsolescence or reduction of selling price- to net realisable value and other impairment losses are recognised as expenses for the year in which the impairment or loss occurs. Subsequent reversals are recognised in the consolidated income statement for the year in which they occur.

The carrying amount of inventories is derecognised and recognised as an expense in the period in which the revenue from their sale is recognised.

- Other: this item includes the balance of all prepayments and accrued income (excluding accrued interest, fees and commissions), the net amount of the difference between pension plan obligations and the value of the plan assets with a balance in the entity's favour, when this net amount is to be reported in the consolidated balance sheet, and the amount of any other assets not included in other items.

o) Other liabilities

'Other liabilities' includes the balance of all accrued expenses and deferred income, excluding accrued interest, and the amount of any other liabilities not included in other categories.

p) Provisions and contingent assets and liabilities

When preparing the financial statements of the consolidated entities, Banco Santander's directors made a distinction between:

- Provisions: credit balances covering present obligations at the reporting date arising from past events which could give rise to a loss for the consolidated entities, which is considered to be likely to occur and certain as to its nature but uncertain as to its amount and/or timing.

- Contingent liabilities: possible obligations that arise from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more future events not wholly within the control of the consolidated entities. They include the present obligations of the consolidated entities when it is not probable that an outflow of resources embodying economic benefits will be required to settle them. The Group does not recognise the contingent liability. The Group will disclose a contingent liability, unless the possibility of an outflow of resources embodying economic benefits is remote.

Santander UK plc is cooperating with an FCA civil regulatory investigation which commenced in July 2017 into its compliance with the Money Laundering Regulations 2007 and potential breaches of FCA principles and rules relating to anti-money laundering and financial crime systems and controls. The FCA's investigation focuses primarily on the period 2012 to 2017 and includes consideration of high risk customers including Money Service Businesses. It is not currently possible to make a reliable assessment of any liability resulting from the investigation including any financial penalty.

- Contingent assets: possible assets that arise from past events and whose existence is conditional on, and will be confirmed only by, the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group. Contingent assets are not recognised in the consolidated balance sheet or in the consolidated income statement, but rather are disclosed in the notes, provided that it is probable that these assets will give rise to an increase in resources embodying economic benefits.

Grupo Santander's consolidated financial statements include all the material provisions with respect to which it is considered that it is more likely than not the obligation will have to be settled. In accordance with accounting standards, contingent liabilities must not be recognised in the consolidated financial statements, but must rather be disclosed in the Notes.

Provisions (which are quantified on the basis of the best information available on the consequences of the event giving rise to them and are reviewed and adjusted at the end of each year) are used to cater for the specific obligations for which they were originally recognised. Provisions are fully or partially reversed when such obligations cease to exist or are reduced.

Provisions are classified according to the obligations covered as follows (see note 25):

- Provision for pensions and similar obligations: includes the amount of all the provisions made to cover post-employment benefits, including obligations to pre-retirees and similar obligations.
- Provisions for contingent liabilities and commitments: include the amount of the provisions made to cover contingent liabilities - defined as those transactions in which the Group guarantees the obligations of a third party, arising as a result of financial guarantees granted or contracts of another kind- and contingent commitments -defined as irrevocable commitments that may give rise to the recognition of financial assets.
- Provisions for taxes and other legal contingencies and Other provisions: include the amount of the provisions recognised to cover tax and legal contingencies and litigation and the other provisions recognised by the consolidated entities. Other provisions includes, inter alia, any provisions for restructuring costs and environmental measures.

q) Court proceedings and/or claims in process

At the end of 2021 certain court proceedings and claims were in process against the consolidated entities arising from the ordinary course of their operations (see note 25).

r) Own equity instruments

Own equity instruments are those meeting both of the following conditions:

- The instruments do not include any contractual obligation for the issuer (i) to deliver cash or another financial asset to a third party; or (ii) to exchange financial assets or financial liabilities with a third party under conditions that are potentially unfavourable to the issuer.
- The instruments will or may be settled in the issuer's own equity instruments and are: (i) a non-derivative that includes no contractual obligation for the issuer to deliver a variable number of its own equity instruments; or (ii) a derivative that will be settled by the issuer through the exchange of a fixed amount of cash or another financial asset for a fixed number of its own equity instruments.

Transactions involving own equity instruments, including their issuance and cancellation, are charged directly to equity.

Changes in the value of instruments classified as own equity instruments are not recognised in the consolidated financial statements. Consideration received or paid in exchange for such instruments, including the coupons on preference shares contingently convertible into ordinary shares and the coupons associated with CCPP, is directly added to or deducted from equity.

s) Equity-instrument-based employee remuneration

Own equity instruments delivered to employees in consideration for their services, if the instruments are delivered once the specific period of service has ended, are recognised as an expense for services (with the corresponding increase in equity) as the services are rendered by employees during the service period. At the grant date the services received (and the related increase in equity) are measured at the fair value of the equity instruments granted. If the equity instruments granted are vested immediately, Grupo Santander recognises in full, at the grant date, the expense for the services received.

When the requirements stipulated in the remuneration agreement include external market conditions (such as equity instruments reaching a certain quoted price), the amount ultimately to be recognised in equity will depend on the other conditions being met by the employees (normally length of service requirements), irrespective of whether the market conditions are satisfied. If the conditions of the agreement are met but the external market conditions are not satisfied, the amounts previously recognised in equity are not reversed, even if the employees do not exercise their right to receive the equity instruments.

t) Recognition of income and expenses

The most significant criteria used by Grupo Santander to recognise its income and expenses are summarised as follows:

i. Interest income, interest expenses and similar items

Interest income, interest expenses and similar items are generally recognised on an accrual basis using the effective interest method. Dividends received from other companies are recognised as income when the consolidated entities' right to receive them arises.

ii. Commissions, fees and similar items

Fee and commission income and expenses are recognised in the consolidated income statement using criteria that vary according to their nature. The main criteria are as follows:

- Fee and commission income and expenses relating to financial assets and financial liabilities measured at fair value through profit or loss are recognised when paid.

- Those arising from transactions or services that are performed over a period of time are recognised over the life of these transactions or services.
- Those relating to services provided in a single act are recognised when the single act is carried out.

iii. Non-finance income and expenses

They are recognised for accounting purposes when the good is delivered or the non-financial service is rendered. To determine the amount and timing of recognition, a five-step model is followed: identification of the contract with the customer, identification of the separate obligations of the contract, determination of the transaction price, distribution of the transaction price among the identified obligations and finally recording of income as the obligations are satisfied.

iv. Deferred collections and payments

These are recognised for accounting purposes at the amount resulting from discounting the expected cash flows at market rates.

v. Loan arrangement fees

Loan arrangement fees, mainly loan origination, application and information fees, are accrued and recognised in income over the term of the loan.

u) Financial guarantees

Financial guarantees are defined as contracts whereby an entity undertakes to make specific payments on behalf of a third party if the latter fails to do so, irrespective of the various legal forms they may have, such as guarantees, insurance policies or credit derivatives.

Grupo Santander initially recognises the financial guarantees provided on the liability side of the consolidated balance sheet at fair value, which is generally the present value of the fees, commissions and interest receivable from these contracts over the term thereof, and simultaneously the Group recognises the amount of the fees, commissions and similar interest received at the inception of the transactions and a credit on the asset side of the consolidated balance sheet for the present value of the fees, commissions and interest outstanding.

Financial guarantees, regardless of the guarantor, instrumentation or other circumstances, are reviewed periodically so as to determine the credit risk to which they are exposed and, if appropriate, to consider whether a provision is required. The credit risk is determined by application of criteria similar to those established for quantifying impairment losses on debt instruments carried at amortised cost (described in note 2.g above).

The provisions made for these transactions are recognised under 'Provisions - Provisions for commitments and guarantees given in the consolidated balance sheet' (see note 25). These provisions are recognised and reversed with a charge or credit, respectively, to 'Provisions or reversal of provisions', net, in the consolidated income statement.

If a specific provision is required for financial guarantees, the related unearned commissions recognised under 'Financial liabilities at amortised cost - Other financial liabilities in the consolidated balance sheet', are reclassified to the appropriate provision.

v) Assets under management and investment and pension funds managed by the Group

Assets owned by third parties and managed by the consolidated entities are not presented on the face of the consolidated balance sheet. Management fees are included in 'Fee and commission income' in the consolidated income statement.

The investment funds and pension funds managed by the consolidated entities are not presented on the face of the Group's consolidated balance sheet since the related assets are owned by third parties. The fees and commissions earned in the year for the services rendered by the Group entities to these funds (asset management and custody services) are recognised under Fee and 'Commission income' in the consolidated income statement.

Note 2.b.iv describes the internal criteria and procedures used to determine whether control exists over the structured entities, which include, inter alia, investment funds and pension funds.

w) Post-employment benefits

Under the collective agreements currently in force and other arrangements, the Spanish banks included in the Group and certain other Spanish and foreign consolidated entities have undertaken to supplement the public social security system benefits accruing to certain employees, and to their beneficiary right holders, for retirement, permanent disability or death, and the post-employment welfare benefits.

Grupo Santander's post-employment obligations to its employees are deemed to be defined contribution plans when the Group makes pre-determined contributions (recognised under Personnel expenses in the consolidated income statement) to a separate entity and will have no legal or effective obligation to make further contributions if the separate entity cannot pay the employee benefits relating to the service rendered in the current and prior periods. Post-employment obligations that do not meet the aforementioned conditions are classified as defined benefit plans (see note 25).

Defined contribution plans

The contributions made in this connection in each year are recognised under 'Personnel expenses' in the consolidated income statement.

The amounts not yet contributed at each year-end are recognised, at their present value, under 'Provisions - Provision for pensions' and similar obligations on the liability side of the consolidated balance sheet.

Defined benefit plans

Grupo Santander recognises under 'Provisions - Provision for pensions and similar obligations on the liability side of the consolidated balance sheet' (or under 'Other assets' on the asset side, as appropriate) the present value of its defined benefit post-employment obligations, net of the fair value of the plan assets.

Plan assets are defined as those that will be directly used to settle obligations and that meet the following conditions:

- They are not owned by the consolidated entities, but by a legally separate third party that is not a party related to the Group.
- They are only available to pay or fund post-employment benefits and they cannot be returned to the consolidated entities unless the assets remaining in the plan are sufficient to meet all the benefit obligations of the plan and of the entity to current and former

employees, or they are returned to reimburse employee benefits already paid by Grupo Santander.

If Grupo Santander can look to an insurer to pay part or all of the expenditure required to settle a defined benefit obligation, and it is practically certain that said insurer will reimburse some or all of the expenditure required to settle that obligation, but the insurance policy does not qualify as a plan asset, the Group recognises its right to reimbursement -which, in all other respects, is treated as a plan asset- under 'Insurance contracts linked to pensions' on the asset side of the consolidated balance sheet.

Grupo Santander will recognise the following items in the income statement:

- Current service cost, (the increase in the present value of the obligations resulting from employee service in the current period), is recognised under 'Staff costs'.
- The past service cost, which arises from changes to existing post-employment benefits or from the introduction of new benefits and includes the cost of reductions, is recognised under 'Provisions or reversal of provisions'.
- Any gain or loss arising from a liquidation of the plan is included in the Provisions or reversion of provisions.
- Net interest on the net defined benefit liability (asset), i.e. the change during the period in the net defined benefit liability (asset) that arises from the passage of time, is recognised under 'Interest expense' and similar charges ('Interest and similar income' if it constitutes income) in the consolidated income statement.

  The remeasurement of the net defined benefit liability (asset) is recognised in 'Other comprehensive income' under Items not reclassified to profit or loss and includes:

- Actuarial gains and losses generated in the year, arising from the differences between the previous actuarial assumptions and what has actually occurred and from the effects of changes in actuarial assumptions.
- The return on plan assets, excluding amounts included in net interest on the net defined benefit liability (asset).
- Any change in the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liability (asset).

x) Other long-term employee benefits

Other long-term employee benefits, defined as obligations to pre-retirees -taken to be those who have ceased to render services at the entity but who, without being legally retired, continue to have economic rights vis-à-vis the entity until they acquire the legal status of retiree-, long-service bonuses, obligations for death of spouse or disability before retirement that depend on the employee's length of service at the entity and other similar items, are treated for accounting purposes, where applicable, as established above for defined benefit post-employment plans, except that actuarial gains and losses are recognised under 'Provisions or reversal of provisions', net, in the consolidated income statement (see note 25).

y) Termination benefits

Termination benefits are recognised when there is a detailed formal plan identifying the basic changes to be made, provided that implementation of the plan has begun, its main features have been publicly announced or objective facts concerning its implementation have been disclosed.

z) Income tax

The expense for Spanish income tax and other similar taxes applicable to the foreign consolidated entities is recognised in the consolidated income statement, except when they arise from a transaction whose results are recognised directly in equity, in which case the related tax effect is recognised in equity.

The current income tax expense is calculated as the sum of the current tax resulting from application of the appropriate tax rate to the taxable profit for the year (net of any deductions allowable for tax purposes), and of the changes in deferred tax assets and liabilities recognised in the consolidated income statement.

'Deferred tax assets' and liabilities include temporary differences, which are identified as the amounts expected to be payable or recoverable on differences between the carrying amounts of assets and liabilities and their related tax bases, and tax loss and tax credit carryforwards. These amounts are measured at the tax rates that are expected to apply in the period when the asset is realised or the liability is settled.

'Tax assets' include the amount of all tax assets, which are broken down into current -amounts of tax to be recovered within the next twelve months- and deferred -amounts of tax to be recovered in future years, including those arising from tax loss or tax credit carryforwards.

'Tax liabilities' includes the amount of all tax liabilities (except provisions for taxes), which are broken down into current -the amount payable in respect of the income tax on the taxable profit for the year and other taxes in the next twelve months- and deferred -the amount of income tax payable in future years.

Deferred tax liabilities are recognised in respect of taxable temporary differences associated with investments in subsidiaries, associates or joint ventures, except when the Group is able to control the timing of the reversal of the temporary difference and, in addition, it is probable that the temporary difference will not reverse in the foreseeable future. In this regard, no deferred tax liabilities of EUR 317.4 million were recognised in relation to the taxation that would arise from the undistributed earnings of certain Group holding companies, in accordance with the legislation applicable in those jurisdictions.

Deferred tax assets are only recognised for temporary differences to the extent that it is considered probable that the consolidated entities will have sufficient future taxable profits against which the deferred tax assets can be utilised, and the deferred tax assets do not arise from the initial recognition (except in a business combination) of other assets and liabilities in a transaction that affects neither taxable profit nor accounting profit. Other deferred tax assets (tax loss and tax credit carryforwards) are only recognised if it is considered probable that the consolidated entities will have sufficient future taxable profits against which they can be utilised.

Differences generated by the different accounting and tax treatment of any of the income and expenses recorded directly in equity to be paid or recovered in the future are accounted for as temporary differences.

The deferred tax assets and liabilities are reassessed at the reporting date in order to ascertain whether any adjustments need to be made on the basis of the findings of the analyses performed.

aa) Residual maturity periods

The analysis of the maturities of the balances of certain items in the consolidated balance sheet.

ab) Consolidated statement of recognised income and expense

This statement presents the income and expenses generated by the Group as a result of its business activity in the year, and a distinction is made between the income and expenses recognised in the consolidated income statement for the year and the other income and expenses recognised directly in consolidated equity.

Accordingly, this statement presents:

a. Consolidated profit for the year.

b. The net amount of the income and expenses recognised in 'Other comprehensive income' under items that will not be reclassified to profit or loss.

c. The net amount of the income and expenses recognised in Other comprehensive income under items that may be reclassified subsequently to profit or loss.

d. The income tax incurred in respect of the items indicated in b and c above, except for the valuation adjustments arising from investments in associates or joint ventures accounted for using the equity method, which are presented net.

e. Total consolidated recognised income and expense, calculated as the sum of a) to d) above, presenting separately the amount attributable to the parent company and the amount relating to non-controlling interests.

The statement presents the items separately by nature, grouping together items that, in accordance with the applicable accounting standards, will not be reclassified subsequently to profit and loss since the requirements established by the corresponding accounting standards are met.

ac) Statement of changes in total equity

This statement presents all the changes in equity, including those arising from changes in accounting policies and from the correction of errors. Accordingly, this statement presents a reconciliation of the carrying amount at the beginning and end of the year of all the consolidated equity items, and the changes are grouped together on the basis of their nature into the following items:

a. Adjustments due to changes in accounting policies and to errors: include the changes in consolidated equity arising as a result of the retrospective restatement of the balances in the consolidated financial statements, distinguishing between those resulting from changes in accounting policies and those relating to the correction of errors.

b. Income and expense recognised in the year: includes, in aggregate form, the total of the aforementioned items recognised in the consolidated statement of recognised 'Income and expense'.

c. Other changes in equity: includes the remaining items recognised in equity, including, inter alia, increases and decreases in capital, distribution of profit, transactions involving own equity instruments, equity-instrument-based payments, transfers between equity items and any other increases or decreases in consolidated equity.

ad) Consolidated statement of cash flows

The following terms are used in the consolidated statements of cash flows with the meanings specified:

- Cash flows: inflows and outflows of cash and cash equivalents, which are short-term, highly liquid investments that are subject to an insignificant risk of changes in value, irrespective of the portfolio in which they are classified.

Grupo Santander classifies as cash and cash equivalents the balances recognised under 'Cash, cash balances at central banks' and 'Other deposits on demand' in the consolidated balance sheet.

- Operating activities: the principal revenue-producing activities of credit institutions and other activities that are not investing or financing activities.

- Investing activities: the acquisition and disposal of long-term assets and other investments not included in cash and cash equivalents.

- Financing activities: activities that result in changes in the size and composition of the equity and liabilities that are not operating activities.

During 2021 Grupo Santander received interest amounting to EUR 48,081 million (EUR 43,953 million and EUR 55,269 million in 2020 and 2019, respectively) and paid interest amounting to EUR 12,738 million (EUR 13,690 million and EUR 20,671 million in 2020 and 2019, respectively).

Also, dividends received and paid by the Group are detailed in notes 4, 28 and 40, including dividends paid to minority interests (non-controlling interests).

3. Grupo Santander

a) Banco Santander, S.A., and international Group structure

The growth of Grupo Santander in the last decades has led Banco Santander to also act, in practice, as a holding entity of the shares of the various companies in its Group, and its results are becoming progressively less representative of the performance and earnings of the Group. Therefore, each year the bank determines the amount of the dividends to be distributed to its shareholders on the basis of the consolidated net profit, while maintaining the Group's objectives of capitalisation and taking into account that the transactions of the Bank and of the rest of the Group are managed on a consolidated basis (notwithstanding the allocation to each company of the related net worth effect).

At the international level, the various banks and other subsidiaries, joint ventures and associates of the Group are integrated in a corporate structure comprising various holding companies which are the ultimate shareholders of the banks and subsidiaries abroad.

The purpose of this structure, all of which is controlled Banco Santander, is to optimise the international organisation from the strategic, economic, financial and tax standpoints, since it makes it possible to define the most appropriate units to be entrusted with acquiring, selling or holding stakes in other international entities, the most appropriate financing method for these transactions and the most appropriate means of remitting the profits obtained by the group's various operating units to Spain.

The Appendices provide relevant data on the consolidated group companies and on the companies accounted for using the equity method.

b) Acquisitions and disposals

Following is a summary of the main acquisitions and disposals of ownership interests in the share capital of other entities and other significant corporate transactions performed in the last three years or pending to be completed:

i. Purchase by SHUSA for shares of Santander Consumer USA

In August 2021 Santander Holdings USA, Inc. ('SHUSA') and Santander Consumer USA Holdings Inc. ('SC') entered into a definitive agreement pursuant to which SHUSA acquired all outstanding shares of common stock of SC not already owned by SHUSA via an all-cash tender offer (the 'Tender Offer') for USD 41.50 per SC common share (the 'Offer Price'), followed by a second-step consisting of a merge (together with the Offer, the 'Transaction') in which a wholly owned subsidiary of SHUSA was merged with and into SC, with SC surviving as a wholly owned subsidiary of SHUSA, and all outstanding shares of common stock of SC not tendered in the Tender Offer were converted into the right to receive the Offer Price in cash. The Offer Price represented a 14% premium to the closing price of SC common stock of USD 36.43 as of 1 July 2021, the last day prior to the announcement of SHUSA's initial offer to acquire the remaining outstanding shares of SC's common stock.

On 31 January 2022, after completion of the customary closing conditions, the Transaction was performed and SHUSA increased its share up to the 100% of SC's common stock. The transaction has meant a disbursement of USD 2,510 million (around EUR 2,239 million) for the Group.

ii. Acquisition of Amherst Pierpont, a U.S. fixed-income broker dealer

On 15 July 2021, Santander Holdings USA, Inc. reached an agreement to acquire Amherst Pierpont Securities, a market-leading independent fixed-income and structured products broker dealer, through the acquisition of its parent holding company, Pierpont Capital Holdings LLC, for a total consideration of approximately USD 600 million (around EUR 530 million). Amherst Pierpont will become part of Santander Corporate & Investment Banking (Santander CIB) Global business line.

The transaction is expected to close upon receipt of relevant regulatory approvals.

iii Tender offer for shares of Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México

On 26 March 2021, Banco Santander, S.A. announced its intention to make a tender offer for all shares of Banco Santander Mexico, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México ('Santander México') that were not owned by Grupo Santander, representing (after the execution of the operation referred to in point vii. below) approximately 8.3% of the share capital of Santander México. The announcement was subsequently supplemented by other publications on 24 May, 8 June and 28 October 2021, in which amendments to some of the terms of the offer were announced.

The offer was finally launched on 3 November 2021 and was settled on 10 December. Banco Santander accepted all of the Santander Mexico Shares and Santander Mexico American Depositary Share (ADS) (securities listed on the New York Stock Exchange, each representing 5 shares of Santander Mexico) tendered and not withdrawn representing approximately 4.5% of the share capital of Santander México. After the transaction, Santander Group holds approximately 96.2% of Santander México share capital.

The shareholders who have tendered their shares in the offer have received MXN 26.5 (approximately EUR 1) per share of Santander México and USD 6.2486 in cash per each ADS (the USD equivalent of MXN 132.50 per ADS based on the USD/MXN exchange rate on the expiration date of 7 December 2021) which has meant a disbursement of approximately EUR 335 million.

This transaction has entailed a decrease of reserves of EUR 41 million and a decrease of EUR 294 million of minority interests.

iv. Agreement for the acquisition of a significant stake in Ebury

On 28 April 2020, the investment in Ebury, a payments and currencies platform for SMEs, announced on 4 November 2019, was completed. The transaction involved a total outlay of GBP 357 million (EUR 409 million) of which GBP 70 million (approximately EUR 80 million) was for new shares. At 2019 year-end the Group had already acquired 6.4% of the company for GBP 40 million (approximately EUR 45 million). Following the disbursement made in April 2020, the Group is entitled to receive 50.38% of the dividends distributed by the company. This interest is recognized under 'Investments in Joint Ventures and Associates - Associates' in the consolidated balance sheet.

v. Reorganization of the banking insurance business, asset management and pension plans in Spain

On 24 June 2019, Banco Santander, S.A., reached an agreement with the Allianz Group to terminate the agreement that Banco Popular Español, S.A.U. ('Banco Popular') held in Spain with the Allianz Group for the exclusive distribution of certain life insurance products, non-life insurance products, collective investment institutions (IIC), and pension plans through the Banco Popular network (the 'Agreement'). Under this Agreement, the Group held a 40% stake in the capital of Popular Spain Holding de Inversiones, S.L.U., classified as investments in joint ventures and associated entities for an overall amount of EUR 409 million on 31 December 2019.

The Agreement was executed on 15 January 2020 for the non-life business and on 31 January 2020 for the remaining businesses, once the regulatory authorisations were obtained in the first half of 2020. The execution of the Termination Agreement entailed the payment by Banco Santander of a total consideration of EUR 859 million (after deducting the dividends paid until the end of the operation) and the acquisition of the remaining 60% of the capital of Popular Spain Holding de Inversiones, S.L.U.

On 10 July, 51% of the life-risk insurance business held by Banco Santander and the 51% of the new General Insurance business from Banco Popular's network not transferred to Mapfre (in accordance with the agreement indicated below) was acquired by Aegon, valuing these businesses at a total of approximately EUR 557 million.

The total amount of the life-savings business, collective investment institutions and pension plans is EUR 711 million and has resulted in the recognition of EUR 271 million of goodwill.

In addition, under the agreement reached between Banco Santander and Mapfre on 21 January 2019, 50.01% of the car, commercial multi-risk, SME multi-risk and corporate liability insurance business in the whole network of Banco Santander in Spain was acquired by Mapfre on 25 June 2019 amounting to EUR 82 million.

vi. Agreement with Crédit Agricole S.A. on the depositary and custody business

On 17 April 2019, Banco Santander, S.A., announced that it had signed a memorandum of understanding with Crédit Agricole S.A. with the purpose of combining CACEIS and its subsidiaries (the 'CACEIS Group'), which is wholly-owned by Crédit Agricole S.A., with Santander Securities Services, S.A.U. and its subsidiaries (the 'S3 Group'), which is wholly-owned by Banco Santander, S.A.

The operation consisted of the contribution by the Santander Group to the CACEIS Group of 100% of the S3 Group in Spain and 50% of the S3 Group's business in Latin America in exchange for a 30.5% stake in the CACEIS Group Capital and voting rights. The remaining 69.5% remained the property of Crédit Agricole, SA. The S3 Group's Latin American business is under the joint control of the CACEIS Group and the Santander Group.

On 27 June 2019, the signing of the final contracts took place after having carried out the precise prior consultations with the representative bodies of Crédit Agricole, SA employees and the CACEIS Group. The closing of the operation took place on 20 December 2019 once the relevant regulatory authorizations were obtained.

The operation generated a net capital gain of EUR 693 million recorded for its gross amount under the heading of 'Non-classified assets as non-current assets for sale' of the consolidated profit and loss account, of which EUR 219 million correspond to the recognition at fair value of the investment of 49.99% retained by the Group in S3 Latin America. The 30.5% interest in the CACEIS Group was recorded under the heading of 'Investments - Associates' of the consolidated balance sheet for an amount of EUR 1,010 million.

vii . Offer to acquire shares of Banco Santander Mexico, S.A., Institución de Banca Multiple, Grupo Financiero Santander México.

On 12 April 2019, Banco Santander, S.A., announced its intention to make an offer to acquire all the shares of Banco Santander Mexico, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México ('Santander México') which are not owned by Grupo Santander, representing approximately 25% of the share capital of Santander México.

The shareholders who have accepted the offer have received 0.337 newly issued shares of Banco Santander, S.A., per share of Santander México and 1.685 American Depositary Shares (ADSs) of Banco Santander, S.A., per ADS of Santander México.

The offer was accepted by holders of shares representing 16.69% of the capital stock of Santander Mexico, so the Group's participation in Santander Mexico became 91.65% of its share capital. To meet the exchange, the Bank proceeded to issue, in execution of the agreement adopted by the extraordinary general meeting held on 23 July 2019, 381,540,640 shares, which represented approximately 2.35% of the Bank's share capital in the date of issue. This operation meant an increase of EUR 191 million in Capital, EUR 1,491 million in issue premium and a decrease of EUR 670 million in Reserves and EUR 1,012 million in minority interests.

c) Offshore entities

According to current Spanish regulation (Law 11/2021, of 9 July and Royal Decree 1080/1991, of 5 July), Santander has one subsidiary and three branches in the non-cooperative jurisdictions of Jersey, the Isle of Man and the Cayman Islands (offshore entities). Santander also has three other subsidiaries incorporated in non-cooperative jurisdictions that are tax resident in the UK and subject to British tax law.

i. Offshore subsidiaries

A subsidiary resident in the Isle of Man was liquidated in 2021 so, at the reporting date, Grupo Santander has only one subsidiary resident in Jersey: Abbey National International Limited. In 2021, this subsidiary's contribution to Santander's consolidated profit was insubstantial.

ii. Offshore branches

Grupo Santander also has three offshore branches. One is found in the Cayman Islands, one is on the Isle of Man and another is in Jersey. They report to, and consolidate balance sheets and income statements with, their foreign headquarters. They are taxed either with their headquarters (the Cayman Islands branch in Brazil) or in the territories they are located in (Jersey and Isle of Man, pertain to the UK).

The entities mentioned in Sections I and II had 147 employees as of December 2021.

iii. Subsidiaries in non-cooperative jurisdictions that are tax resident in the United Kingdom

Grupo Santander also has three subsidiaries (one in liquidation) that were incorporated in offshore jurisdictions but are not deemed offshore entities. They only operate from, and are tax resident in, the UK and, thus, are subject to British tax law.

iv. Other offshore holdings

From Brazil, Grupo Santander manages Santander Brazil Global Investment Fund SPC, a segregated portfolio company located in the Cayman Islands. It also has two small financial investments in entities located in the Cayman Islands. In 2021, Guaranteed Investment Products 1 PCC Limited, a protected cell company found in Guernsey managed from the UK, was liquidated.

Organization for Economic Cooperation and Development (OECD)

Grupo Santander is not in any of the non-cooperative jurisdictions the OECD released in November 2021. Furthermore, Jersey, the Isle of Man and the Cayman Islands satisfy OECD standards on transparency and exchange of information for tax purposes.

The European Union (EU)

As of October 2021, the EU's blacklist comprises 9 jurisdictions where Santander is not present. Additionally, the EU's grey list comprises 15 jurisdictions which have sufficiently committed to adapt legislation to international standards, subject to monitoring by the EU. Within these jurisdictions, Santander is only present in Uruguay and Hong Kong mainly through Banco Santander S.A. in Uruguay and a branch in Hong Kong.

The Group's presence in offshore territories at the end of 2021 is as follows:

Presence of the Group in non-cooperative jurisdictions	Spanish legislation		OECD		European Commission Blacklist	
	Sub.	Branch	Sub.	Branch	Sub.	Branch
Jersey	1	1				
Isle of Man		1				
Guernsey*						
Bermuda*						
Cayman Islands		1				
2021	**1**	**3**	**—**	**—**	**—**	**—**
2020	**2**	**3**	**—**	**—**	**—**	**—**

* Additionally, there are 2 entities constituted in Guernsey (1 in liquidation) and 1 in Bermuda, but resident for tax purposes in the United Kingdom.

Changes to Spain's tax law

On 10 July 2021, Law 11/2021 on measures to prevent and fight against tax fraud was published in the Official Estate Gazette. The law expands the meaning of tax havens, which it renames "non-cooperative jurisdictions". It also allows government to update the non-cooperative jurisdictions list. Nonetheless, until that list conforms to the new criteria, the former list set out in Royal Decree 1080/1991 of 5 July will remain in effect.

Grupo Santander has the right mechanisms (risk management, supervision, verification and review plans, and regular reporting) to prevent reputational, tax and legal risk in entities resident in non-cooperative jurisdictions. Grupo Santander also maintains its policy of reducing the number of these entities.

PwC (PricewaterhouseCoopers) member firms audited the financial statements of Grupo Santander's offshore entities in 2021, 2020 and 2019.

4. Distribution of Banco Santander's profit, shareholder remuneration scheme and earnings per share

a) Distribution of Banco Santander's profit and shareholder remuneration scheme

The distribution of the Bank's net profit against the results for 2021, that the board of directors will propose for approval by the shareholders at the annual general meeting is as follows:

EUR million	
To dividends	1,701
*Dividend paid prior to the meeting date**	836
*Complementary dividend***	865
To voluntary reserves****	2,231
Net profit for the year	**3,932**

* Total amount paid as interim dividend, at the rate of EUR 4.85 fixed cents per eligible share (recorded in 'Shareholders' equity - Interim dividends').

** Fixed dividend of EUR 5.15 gross cents per eligible share, payable in cash as from 2 May 2022. The total amount has been estimated on the assumption that, after the implementation of the second buy-back programme announced on 24 February 2022, the number of the Bank's outstanding shares eligible for the dividend will be 16,804,353,202.

*** Estimated amount corresponding to a final dividend of EUR 865 million. To be increased or reduced by the same amount by which the final dividend is lower or higher, respectively, than that amount.

The transcribed proposal comprises the part of the 2021 shareholder remuneration policy that is implemented through cash dividends (the interim dividend paid in November 2021 of EUR 4.85 cents per share with dividend entitlement and the final dividend expected to be paid as of 2 May 2022, subject to approval by the general meeting of shareholders, of EUR 5.15 cents per share with dividend entitlement).

In addition, the 2021 remuneration policy also provided for shareholder remuneration through the implementation of share buyback programs, which are not reflected in the above-transcribed proposal for the appropriation of earnings. The first of these programs, amounting to approximately EUR 841 million, was completed between October and November 2021. Subject to obtaining the appropriate regulatory approvals, a second repurchase program for approximately EUR 865 million is planned to be launched. Capital reduction resolutions are also submitted to the general shareholders' meeting to redeem the treasury shares acquired in each of the two repurchase programs, also subject to the relevant regulatory authorizations.

Finally, and although it is not part of the remuneration charged to the 2021 financial year, it should be noted that in May 2021 Banco Santander paid a dividend of EUR 2.75 cents in cash per share corresponding to the 2020 financial year against share premium, for an amount of EUR 477 million, this being the maximum amount allowed in accordance with the limit established by the recommendation of the European Central Bank of 15 December 2020. This payment was made in execution of the premium distribution resolution approved at the General Shareholders' Meeting of Banco Santander held on 27 October 2020.

b) Earnings/loss per share from continuing and discontinued operations

i. Basic earnings / loss per share

Basic earnings/loss per share are calculated by dividing the net profit attributable to the Group, adjusted by the after-tax amount of the remuneration of contingently convertible preference shares recognised in equity (see note 23) and the capital perpetual preference shares, if applicable, by the weighted average number of ordinary shares outstanding during that period, excluding the average number of own shares held through that period.

Accordingly:

	2021	2020	2019
Profit (Loss) attributable to the Parent (EUR million)	8,124	(8,771)	6,515
Remuneration of contingently convertible preference shares (CCP) (EUR million) (note 23)	(566)	(552)	(595)
	7,558	(9,323)	5,920
Of which:			
Profit (Loss) from discontinued operations (non controlling interest net) (EUR million)	—	—	—
Profit (Loss) from continuing operations (PPC net) (EUR million)	*7,558*	*(9,323)*	*5,920*
Weighted average number of shares outstanding	17,272,055,430	17,316,288,908	16,348,415,883
Impact factor correction*	Not applicable	Not applicable	710,800,691
Adjusted number of shares	17,272,055,430	17,316,288,908	17,059,216,574
Basic earnings (Loss) per share (euros)	**0.438**	**(0.538)**	**0.347**
Of which, from discounted operations (euros)	**—**	**—**	**—**
Basic earnings (Loss) per share from continuing operations (euros)	**0.438**	**(0.538)**	**0.347**

* Correction factor for the capital increase released on 3 December 2020 (see notes 1.d and 31.a).

ii. Diluted earnings / loss per share

Diluted earnings/loss per share are calculated by dividing the net profit attributable to the Group, adjusted by the after-tax amount of the remuneration of contingently convertible preference shares recognised in equity (see note 23) and the capital perpetual preference shares, if applicable, by the weighted average number of ordinary shares outstanding during the year, excluding the average number of treasury shares and adjusted for all the dilutive effects inherent to potential ordinary shares (share options, and convertible debt instruments).

Accordingly, diluted earnings/loss per share were determined as follows:

	2021	2020	2019
Profit (Loss) attributable to the Parent (EUR million)	8,124	(8,771)	6,515
Remuneration of contingently convertible preference shares (CCP) (EUR million) (Note 23)	(566)	(552)	(595)
Dilutive effect of changes in profit for the period arising from potential conversion of ordinary shares	—	—	—
	7,558	(9,323)	5,920
Of which:			
Profit (Loss) from discontinued operations (net of non-controlling interests) (EUR million)	—	—	—
Profit (Loss) from continuing operations (net of non-controlling interests and CCP) (EUR million)	*7,558*	*(9,323)*	*5,920*
Weighted average number of shares outstanding	17,272,055,430	17,316,288,908	16,348,415,883
Dilutive effect of options/ rights on shares	48,972,459	Not applicable	35,891,644
Impact factor correction*	Not applicable	Not applicable	712,361,197
Adjusted number of shares	17,321,027,889	17,316,288,908	17,096,668,724
Diluted earnings (Loss) per share (euros)	**0.436**	**(0.538)**	**0.346**
Of which, from discounted operations (euros)	**—**	**—**	**—**
Diluted earnings (Loss) per share from continuing operations (euros)	**0.436**	**(0.538)**	**0.346**

* Correction factor for the capital increase released on 3 December 2020 (see notes 1.d and 31.a).

5. Remuneration and other benefits paid to the Bank's directors and senior managers

The following section contains qualitative and quantitative disclosures on the remuneration paid to the members of the board of directors —both executive and non-executive directors— and senior managers for 2021 and 2020:

a) Remuneration of Directors

i. Bylaw-stipulated emoluments

The annual General Meeting held on 22 March 2013 approved an amendment to the Bylaws, whereby the remuneration of directors in their capacity as board members became an annual fixed amount determined by the annual General Meeting. This amount shall remain in effect unless the shareholders resolve to change it at a general meeting. However, the board of directors may elect to reduce the amount in any years in which it deems such action justified.

The remuneration established by the Annual General Meeting was EUR 6 million in 2021 (same amount as in 2020), with two components: (a) an annual emolument and (b) attendance fees.

In regard to 2020, as a gesture of responsibility in view of the situation created by the health emergency the board of directors agreed on 5 May 2020 to reduce their allotments by 20% for the balance of 2020, with effect from 1 April 2020, and propose that amounts saved thereby be used to finance the initiatives of the Bank to fight against the covid-19 pandemic.

The specific amount payable for the above-mentioned items to each of the directors is determined by the Board of Directors. For such purpose, it takes into consideration the positions held by each director on the Board, their membership of the Board and the board committees and their attendance to the meetings thereof, and any other objective circumstances considered by the Board.

The total bylaw-stipulated emoluments earned by the Directors in 2021 amounted to EUR 4.8 million (4.1 million in 2020).

Annual emolument

In 2021, the board voted not to change the fees amount set out in the 2020 policy ahead of the aforementioned exceptional decision and, per the remuneration policy approved at the 2021 AGM. Additionally, the innovation and technology committee also began to be remunerated, and its members received EUR 25,000 and its Chair, an additional EUR 70,000. The annual amounts received individually by the directors in 2021 and 2020 based on the positions held by them on the board and their membership of the board committees were as follows:

		2020	
Amount per director in euros	2021	1 Jan to 31 Mar	1 Apr to 31 Dec
Members of the board of directors	90,000	22,500	49,500
Members of the executive committee	170,000	42,500	93,500
Members of the audit committee	40,000	10,000	22,000
Members of the appointments committee	25,000	6,250	13,750
Members of the remuneration committee	25,000	6,250	13,750
Members of the risk supervision, regulation and compliance committee	40,000	10,000	22,000
Members of the responsible banking, sustainability and culture committee	15,000	3,750	8,250
Members of the innovation and technology committee	25,000	—	—
Chairman of the audit committee	70,000	17,500	38,500
Chairman of the appointments committee	50,000	12,500	27,500
Chairman of the remuneration committee	50,000	12,500	27,500
Chairman of the risk supervision, regulation and compliance committee	70,000	17,500	38,500
Chairman of the responsible banking, sustainability and culture committee	50,000	12,500	27,500
Chairman of the innovation and technology committee	70,000	—	—
Lead director*	110,000	27,500	60,500
Non-executive vice chairmen	30,000	7,500	16,500

* Mr. Bruce Carnegie-Brown, in view of the positions held on the board and its committees, in particular as chairman of the appointments and remuneration committees and as coordinating director, and the time and dedication required to properly perform such positions, has been assigned a minimum total annual remuneration of EUR 700,000 since 2015, including the annual allowance for the items corresponding to him of those indicated above and attendance fees. However, in line with the decision taken by the board of directors to reduce his fees by 20% with effect from April 1, 2020 to 31 December, which is shared by Mr. Bruce Carnegie-Brown, the same reduction was applied to this amount. Accordingly, the amount assigned for 2020 was EUR 595,000.

Attendance fees

The directors receive fees for attending board and committee meetings, excluding executive committee meetings, since no attendance fees are received for this committee.

Like the annual allotment, the board voted not to change the fees amount set out in the 2020 policy ahead of the aforementioned exceptional decision and, per the remuneration policy approved at the 2021 AGM, added attendance fees for innovation and technology committee members (which they did not receive before).

The fees for 2021 and 2020 are as follows:

Attendance fees per director per meeting in euros	2021	2020 1 Jan to 31 Mar	2020 1 Apr to 31 Dec
Board of directors	2,600	2,600	2,080
Audit committee and risk supervision, regulation and compliance committee	1,700	1,700	1,360
Other committees (excluding executive committee)	1,500	1,500	1,200

ii. Salaries

The executive directors receive salaries. In accordance with the policy approved by the annual general meeting, salaries are composed of a fixed annual remuneration and a variable one, which consists in a unique incentive, which is a deferred variable remuneration plan linked to multi-year objectives, which establishes the following payment scheme:

- 40% of the variable remuneration amount, determined at year-end on the basis of the achievement of the established objectives, is paid immediately.
- The remaining 60% is deferred over five years, to be paid in five portions, provided that the conditions of permanence in the Group and non-concurrence of the malus clauses are met, and subject to long term metrics, taking into account the following accrual scheme:
  - The accrual of the first and second portion (payment in 2023 and 2024) will be conditional on none of the malus clauses being triggered.
  - The accrual of the third, fourth, and fifth portion (payment in 2025, 2026 and 2027), is linked to objectives related to the period 2021—2023 and the metrics and scales associated with these objectives. The fulfilment of the objectives determines the percentage to be paid of the deferred amount in these three annuities, which, accordingly, might not be paid, where the maximum amount is the amount determined at closing of 2021, when the total variable remuneration is approved.
- In accordance with current remuneration policies, the amounts already paid will be subject to a possible recovery (clawback) by the Bank during the period set out in the policy in force at each moment.

The immediate payment (or short-term), as well as each deferred payment (linked to long term metrics and not linked to long-term metrics) will be settled 50% in cash and the remaining 50% in Santander shares.

In the case of Sergio Rial, he has been considered as an executive director since his appointment as director became effective on 30 May 2020 by virtue of Article 529 *duodecies* of the Spanish Companies Act in light of his role as CEO and vice-chairman of Banco Santander Brasil, S.A. In 2021 he received as fixed pay for his role as Regional head for South America, the EUR 750,000 euros that had been approved at the 2021 AGM as part of the 2021 remuneration policy. He has not received any other remuneration for executive functions in Banco Santander, S.A.

The same policy and principles above apply to Sergio Rial's remuneration as CEO in Santander Brasil.

Comparative of Executive Remuneration (Chairman and CEO)

The board resolved to maintain the same gross annual salary for Ana Botín and José Antonio Álvarez for 2021 as in 2020. It also maintained the fixed pension contribution of 22% of gross annual salary it had declared in 2020 for 2021.

Comparing with the previous year, it should be mentioned that amid the covid-19 health crisis in 2020, Ana Botín and José Antonio Álvarez proposed to reduce their total 2020 compensation (salary and bonus) by 50%.

To achieve the 50% reduction compared to 2019, the board of directors decided to apply an additional adjustment to Ana Botín's and José Antonio Alvarez's variable compensation, reducing the variable compensation by 74% in the case of Ana Botín and 79% in the case of José Antonio Álvarez.

And in 2021, the good business performance (which enabled Banco Santander to reach a 12.73% underlying RoTE, above the end of 2019), the excellent execution of our strategy (with the highest underlying attributable profit of the last 12 years), and the efficient capital management, boosted the bonus pool and thus the variable remuneration of corporate centre employees, (including executive directors).

iii. Detail by director

The detail, by bank director, of the short-term (immediate) and deferred (not subject to long-term goals) remuneration for 2021 and 2020 is provided below:

EUR thousand

	2021								
	Bylaw-stipulated emoluments								
	Annual emolument								
	Board[M]	Executive committee	Audit committee	Appointments committee	Remuneration committee	Risk supervision, regulation and compliance oversight committee	Responsible banking, sustainability and culture committee	Innovation and technology committee	Attendance fees and commissions
Ana Botín	90	170	—	—	—	—	—	25	45
José Antonio Álvarez	90	170	—	—	—	—	—	25	45
Bruce Carnegie-Brown	276	170	—	75	75	—	—	25	80
Homaira Akbari	90	—	40	—	—	—	15	25	78
Javier Botín[A]	90	—	—	—	—	—	—	—	39
Álvaro Cardoso[B]	90	—	—	—	—	28	15	—	50
R.Martín Chávez[C]	90	—	—	25	25	40	—	95	99
Sol Daurella	90	—	—	25	25	—	15	—	84
Henrique de Castro[D]	90	—	40	—	25	—	—	25	87
Gina Díez[E]	90	—	—	1	—	—	—	—	39
Luis Isasi[F]	90	170	—	—	25	40	—	—	81
Ramiro Mato	90	170	40	—	—	40	65	—	94
Sergio Rial[G]	90	—	—	—	—	—	—	—	39
Belén Romana	90	170	40	—	—	93	15	25	100
Pamela Walkden[H]	90	—	110	—	—	27	—	—	76
Rodrigo Echenique[I]	—	—	—	—	—	—	—	—	—
Ignacio Benjumea[J]	—	—	—	—	—	—	—	—	—
Guillermo de la Dehesa[K]	—	—	—	—	—	—	—	—	—
Esther Giménez-Salinas[L]	—	—	—	—	—	—	—	—	—
Total 2021	**1,536**	**1,020**	**270**	**126**	**175**	**268**	**125**	**245**	**1,035**
Total 2020	**1,303**	**915**	**208**	**133**	**138**	**252**	**135**	**—**	**1,066**

A. All amounts received were reimbursed to Fundación Botín.
B. Director since 1 April 2018.
C. Director since 27 October 2020.
D. Director since 17 July 2019.
E. Director since 22 December 2020.
F. Director since 19 May 2020.
G. Executive director since 30 May 2020.
H. Director since 29 October 2019.
I. Stepped down as executive director on 30 April 2019. Non-executive director from 1 May 2019 to 22 December 2020.
J. Stepped down as director on 5 May 2020.
K. Stepped down as director on 3 April 2020.
L. Stepped down as director on 27 October 2020.
M Also includes emoluments for other roles in the board.

	2021									2020
	Short-term and deferred (not subject to long-term goals) salaries of executive directors									
		Variable - immediate payment		Deferred variable						
	Fixed	In cash	In shares	In cash	In shares	Total	Pension contribution	Other remuneration	Total	Total
Ana Botín	3,176	1,838	1,839	1,103	1,103	9,059	1,041	1,006	11,436	6,819
José Antonio Álvarez	2,541	1,241	1,240	744	745	6,511	783	1,536	9,160	6,019
Bruce Carnegie-Brown	—	—	—	—	—	—	—	—	700	595
Homaira Akbari	—	—	—	—	—	—	—	—	248	203
Javier Botín[A]	—	—	—	—	—	—	—	—	129	122
Álvaro Cardoso[B]	—	—	—	—	—	—	—	—	183	243
R.Martín Chávez[C]	—	—	—	—	—	—	—	—	374	37
Sol Daurella	—	—	—	—	—	—	—	—	239	214
Henrique de Castro[D]	—	—	—	—	—	—	—	—	267	217
Gina Díez[E]	—	—	—	—	—	—	—	—	130	4
Luis Isasi[F]	—	—	—	—	—	—	—	1,000	1,406	943
Ramiro Mato	—	—	—	—	—	—	—	—	499	431
Sergio Rial[G]	750	—	—	—	—	750	—	—	879	63
Belén Romana	—	—	—	—	—	—	—	—	533	418
Pamela Walkden[H]	—	—	—	—	—	—	—	—	303	214
Rodrigo Echenique[I]	—	—	—	—	—	—	—	—	—	1,956
Ignacio Benjumea[J]	—	—	—	—	—	—	—	—	—	276
Guillermo de la Dehesa[K]	—	—	—	—	—	—	—	—	—	107
Esther Giménez-Salinas[L]	—	—	—	—	—	—	—	—	—	192
Total 2021	**6,467**	**3,079**	**3,079**	**1,847**	**1,848**	**16,320**	**1,824**	**3,542**	**26,486**	**—**
Total 2020	**5,717**	**514**	**515**	**308**	**309**	**7,363**	**2,019**	**5,537**	**—**	**19,073**

Footnotes in previous table.

Following is the detail, by executive director, of the salaries linked to multi-year objectives at their fair value, which will only be received if the conditions of permanence in the group, non-applicability of malus clauses and achievement of the established objectives are met (or, as the case may be, of the minimum thresholds thereof, with the consequent reduction of amount agreed-upon at the end of the year) in the terms described in Note 46.

EUR thousand

	2021			2020
	Variable subject to Long-term objectives[1]			
	In cash	In shares	Total	Total
Ana Botín	1,158	1,158	2,316	420
José Antonio Álvarez	782	782	1,563	228
Total	**1,940**	**1,940**	**3,880**	**648**

1. Corresponds with the fair value of the maximum amount they are entitled to in a total of 3 years: 2025, 2026 and 2027, subject to conditions of continued service, with the exceptions provided, and to the non-applicability of malus clauses and achievement of the objectives established.

The fair value has been determined at the grant date based on the valuation report of an independent expert, Willis Towers Watson. Based on the design of the plan for 2021 and the levels of achievement of similar plans in comparable entities, the expert concludes that the reasonable range for estimating the initial achievement ratio is around 60% - 80%. Accordingly, it has been considered that the fair value is 70% of the maximum (see note 46).

Note 5.e below includes disclosures on the shares delivered from the deferred remuneration schemes in place in previous years and for which delivery conditions were met, as well as on the maximum number of shares that may be received in future years in connection with the aforementioned 2021 and 2020 variable remuneration plans.

In addition to the EUR 750,000 Sergio Rial received as Regional head for South America, he was paid the following amounts as CEO of Santander Brasil (additionally, in the following table, it is also disclosed the variable subject to long-term objectives at 70% of fair value):

2021	BRL thousand	EUR thousand
Base salary	12,645	1,985
Other fixed benefits	47	7
Pensions	7,350	1,153
Variable remuneration immediately payable and deferred (not linked to long-term objectives)	26,600	4,018
Total	**46,642**	**7,163**

EUR thousand

	2021			2020
	Variable subject to Long-term objectives			
	In cash	In shares	Total	Total
Sergio Rial	791	791	1,582	1,311

b) Remuneration of the Board members as representatives of the Bank

By resolution of the executive committee, all the remuneration received by the Bank's directors who represent the Bank on the Boards of Directors of listed companies in which the Bank has a stake, paid by those companies and relating to appointments made on or after 18 March, 2002, accrues to the Group. In 2021 and 2020 the Bank's directors did not receive any remuneration in respect of these representative duties.

On the other hand, in their personal capacity, in 2021 Álvaro Cardoso was paid BRL 2,130 thousand (EUR 334 thousand) as non-executive chairman of Banco Santander Brasil, S.A., Homaira Akbari was paid USD 190 thousand (EUR 161 thousand) as member of the board of Santander Consumer USA (SCUSA) and EUR 52 thousand as member of the Board of PagoNxt, and Henrique de Castro and R. Martín Chávez were each paid the same EUR 52 thousand as members of the board of PagoNxt. Likewise, Pamela Walkden was paid GBP 31 thousand (EUR 36 thousand) as member of Santander UK plc y Santander UK Group Holdings.

Likewise, Luis Isasi was paid EUR 1,000 thousand as non-executive chairman of the board of Santander Spain and for attending board and committee meetings (amounts paid by Banco Santander, S.A.).

c) Post-employment and other long-term benefits

In 2012, the contracts of Ms. Ana Botín and Mr. José Antonio Alvarez (and other members of the Bank's senior management) with defined benefit pension commitments were modified to transform these commitments into a defined contribution system, which covers the contingencies of retirement, disability and death. From that moment on, the Bank makes annual contributions to their pension system for their benefit.

This system gives them the right to receive benefits upon retirement, regardless of whether or not they are active at the Bank at such time, based on contributions to the system, and replaced their previous right to receive a pension supplement in the event of retirement.

Upon revision in 2021, José Antonio Álvarez's contract precluded the right to early retirement if terminated. Furthermore, Ana Botín is not entitled to early retirement if she freely resigns; however, she will still be entitled to it if Banco Santander terminates her contract before 31 August 2022, at which time early retirement will no longer be available. As long as she retains that right, she is entitled to an annual allotment equal to her total fixed remuneration, plus 30% of the average of up to her last three variable pays.

The initial balance for each of them in the new defined benefits system corresponded to the market value of the assets from which the provisions corresponding to the respective accrued obligations had materialised on the date on which the old pension commitments were transferred into the new benefits system.

Since 2013, the Bank has made annual contributions to the benefits system for executive directors and senior executives, in proportion to their respective pensionable bases, until they leave Grupo Santander or until their retirement within the Group, death, or disability.

The benefit plan system is outsourced to Santander Seguros y Reaseguros, Compañía Aseguradora, S.A., and the economic rights of the foregoing directors under this plan belong to them regardless of whether or not they are active at the Bank at the time of their retirement, death or disability.

In accordance with the provisions of the remuneration regulations, contributions made calculated on variable remuneration are subject to the discretionary pension benefits regime. Under this regime, contributions are subject to malus clauses and clawback according to the policy in force at any given time and during the same period in which the variable remuneration is deferred.

Furthermore, they must be invested in bank shares for a period of five years from the date when the executive director leaves the Group, regardless of whether or not they leave to retire. Once that period has elapsed, the amount invested in shares will be reinvested, along with the remainder of the cumulative balance corresponding to the executive director, or it will be paid to the executive director or to their beneficiaries in the event of a contingency covered by the benefits system.

As per the director´s remuneration policy approved at the 23 March 2018 general shareholder´s meeting, the system was changed with a focus on:

- Aligning the annual contributions with practices of comparable institutions.
- Reducing future liabilities by eliminating the supplementary benefits scheme in the event of death (death of spouse or parent) and permanent disability of serving directors.
- Not increasing total costs for the Bank.

The changes to the system were the following:

- Fixed and variable pension contributions were reduced to 22% of the respective pensionable bases. The gross annual salaries and the benchmark variable remuneration were increased in the corresponding amount with no increase in total costs for the Bank. The pensionable base for the purposes of the annual contributions for the executive directors is the sum of fixed remuneration plus 30% of the average of their last three variable remuneration amounts.
- The death and disability supplementary benefits were eliminated since 1 April 2018. A fixed remuneration supplement (included in other remuneration in section a.iii in this note) was implemented the same date.
- The total amount insured for life and accident insurance was increased.

The provisions recognised in 2021 and 2020 for retirement pensions and supplementary benefits (surviving spouse and child benefits, and permanent disability) were as follows:

EUR thousand

	2021	2020
Ana Botín	1,041	1,155
José Antonio Álvarez	783	864
Total	**1,825**	**2,019**

Following is a detail of the balances relating to each of the executive directors under the welfare system as of 31 December 2021 and 2020:

EUR thousand

	2021	2020
Ana Botín	48,075	49,444
José Antonio Álvarez	18,821	18,082
Total	**66,896**	**67,526**

d) Insurance

The Group pays for life insurance policies for the Bank's directors, who will be entitled to receive benefits if they are declared disabled; in the event of death, the benefits will be payable to their heirs. The premiums paid by the Group are included in the 'Other remuneration' column of the table shown in Note 5.a.iii above. Also, the following table provides information on the sums insured for the Bank's executive directors:

Insured capital

EUR thousand

	2021	2020
Ana Botín	21,489	21,984
José Antonio Álvarez	18,028	18,703
Total	**39,517**	**40,687**

The insured capital has been modified in 2018 for Ms Ana Botín and Mr José Antonio Alvarez as part of the pension systems transformation set out in note 5.c) above, which has encompassed the elimination of the supplementary benefits systems (death of spouse and death of parent) and the increase of the life insurance annuities.

During 2021 and 2020, the Group has disbursed a total amount of EUR 25.5 million and EUR 19.5 million , respectively, for the payment of civil-liability insurance premiums. These premiums correspond to several civil-liability insurance policies that hedge, among others, directors, senior executives and other managers and employees of the Group and the Bank itself, as well as its subsidiaries, in light of certain types of potential claims. For this reason, it is not possible to disaggregate or individualize the amount that correspond to the directors and executives.

As of 31 December 2021 and 2020, no life insurance commitments exist for the Group in respect of any other directors.

e) Deferred variable remuneration systems

The following information relates to the maximum number of shares to which the executive directors are entitled at the beginning and end of 2021 and 2020 due to their participation in the deferred variable remuneration systems, which instrumented a portion of their variable remuneration relating to 2021 and prior years, as well as on the deliveries, in shares or in cash, made to them in 2021 and 2020 once the conditions for the receipt thereof had been met (see Note 46):

i) Deferred conditional variable remuneration plan

From 2011 to 2015, the bonuses of executive directors and certain executives (including senior management) and employees who assume risk, who perform control functions or receive an overall remuneration that puts them on the same remuneration level as senior executives and employees who assume risk (all of whom are

referred to as identified staff) have been approved by the Board of Directors and instrumented, respectively, through various cycles of the deferred conditional variable remuneration plan. Application of these cycles, insofar as they entail the delivery of shares to the plan beneficiaries, was authorized by the related Annual General Meetings.

The purpose of these plans was to defer a portion of the bonus of the plan beneficiaries (60% in the case of executive directors) over a period of five years (three years for the plans approved up to 2014) for it to be paid, where appropriate, in cash and in Santander shares. The remaining 40% portion of the bonus is paid in cash and Santander shares (in equal parts), upon commencement of this plan, in accordance with the rules set forth below.

In addition to the requirement that the beneficiary remains in Santander Group's employ, the accrual of the deferred remuneration was conditional upon none of the following circumstances existing in the opinion of the Board of Directors -following a proposal of the remuneration committee-, in relation to the corresponding year, in the period prior to each of the deliveries: (i) poor financial performance of the Group; (ii) breach by the beneficiary of internal regulations, including, in particular, those relating to risks; (iii) material restatement of the Group's consolidated financial statements, except when it is required pursuant to a change in accounting standards; or (iv) significant changes in the Group's economic capital or its risk profile. All the foregoing shall be subject in each case to the regulations of the relevant plan cycle.

Deferred amounts (whether or not contingent on multi-year targets) is earned if the beneficiary continues to work with the group14, and none of the circumstances triggering the malus clause arise before each payment, according to the section on malus and clawback clauses in the remuneration policy.

Similarly, Banco Santander can clawback any paid variable amounts in the scenarios and for the period dictated by the terms and conditions in the said policy.

On each delivery, the beneficiaries are paid an amount in cash equal to the dividends paid for the amount deferred in shares and the interest on the amount deferred in cash. If the Santander Dividendo Elección scrip dividend scheme is applied, payment will be based on the price offered by the Bank for the bonus share rights corresponding to those shares.

The maximum number of shares to be delivered is calculated taking into account the daily volume-weighted average prices for the 15 trading sessions prior to the date on which the board of directors approves the bonus for the Bank's Executive Directors for each year.

This plan and the Performance Shares (ILP) plan described below have been integrated for the executive directors and other senior managers in the deferred variable compensation plan linked to multiannual objectives, in the terms approved by the General Meeting of Shareholders held on March 18, 2016.

In the case of Sergio Rial, who does not receive any remuneration for executive duties in Banco Santander, S.A., the same policy principles, deferrals, multi year targets linked to the payment of deferred amounts and malus and clawback principles described herein apply to his variable remuneration in the subsidiary where he is the CEO.

ii) Deferred variable compensation plan linked to multiannual objectives

In the annual shareholders meeting of 18 March 2016, with the aim of simplifying the remuneration structure, improving the ex-ante risk adjustment and increasing the incidence of long-term objectives, the bonus plan (deferred and conditioned variable compensation plan) and ILP were replaced by one single plan, the deferred multiyear objectives variable remuneration plan.

The variable remuneration of executive directors and certain executives (including senior management) corresponding to 2021 has been approved by the Board of Directors and implemented through the sixth cycle of the deferred variable remuneration plan linked to multi-year objectives. The application of the plan was authorised by the annual general meeting of shareholders, as it entails the delivery of shares to the beneficiaries.

As indicated in section a.ii of this note, 60% of the variable remuneration amount is deferred over five years (three years for certain beneficiaries, not including executive directors), to be paid, where appropriate, in five portions, provided that the conditions of permanence in the group and non-concurrence of *malus* clauses are met, and subject to long term metrics, according to the following accrual scheme:

- The accrual of the first and second parts (instalments in 2023 and 2024) is conditional on none of the *malus* clauses being triggered.
- The accrual of the third, fourth and fifth parts (instalments in 2025, 2026 and 2027) is linked to the fulfilment of certain objectives related to the 2021-2023 period and the metrics and scales associated with those objectives, as well as to non-concurrence of *malus* clauses. These objectives are:
  - The growth of consolidated earnings per share in 2023 compared to 2020;
  - The relative performance of the Bank's total shareholder return (RTA) in the 2021-2023 period in relation to the weighted RTAs of a reference group of 9 credit institutions;
  - Compliance with the fully loaded ordinary level 1 capital objective for the year 2023.

The degree of compliance with the above objectives determines the percentage to be applied to the deferred amount in these three annuities, the maximum being the amount determined at the end of the year 2021 when the total variable remuneration is approved.

Both the immediate (short-term) and each of the deferred (long-term and conditioned) portions are paid 50% in cash and the remaining 50% in Santander shares.

The accrual of deferred amounts (whether or not subject to performance measures) is conditioned, in addition to the permanence of the beneficiary in the Group, to non-occurrence, during the period prior to each of the deliveries, of any the circumstances giving rise to the application of malus as set out in the Group's remuneration policy in its chapter related to malus and clawback. Likewise, the amounts already paid of the incentive will be subject to clawback by the Bank in the cases and during the term foreseen in said policy, and in accordance with the terms and conditions foreseen in it.

Malus and clawback clauses are triggered by poor financial performance of Banco Santander, a division or area, or exposures from staff as a result of an executive(s)'s management of, at least, one of these factors:

(i) Significant failures in risk management committed by the entity, or by a business unit or risk control.

(ii) The increase suffered by the entity or by a business unit of its capital needs, not foreseen at the time of generation of the exposures.

(iii) Regulatory sanctions or judicial sentences from events that could be attributable to the unit or the personnel responsible for those. Also, the breach of internal codes of conduct of the entity.

(iv) Irregular conduct, whether individual or collective. In this regard, the negative effects derived from the marketing of inappropriate products and the responsibilities of the people or bodies that made those decisions will be specially considered.

The maximum number of shares to be delivered is calculated by taking into account the average weighted daily volume of the average weighted listing prices corresponding to the fifteen trading sessions prior to the previous Friday (excluded) to the date on which the bonus is agreed by the board of executive directors of the Bank.

In the case of Mr. Sergio Rial, as explained above, he just received a fixed pay for executive duties in Banco Santander, S.A. (head for South America), and he is included as CEO of Santander Brasil in the deferred variable compensation plan linked to multiannual objectives and thus subject to the same conditions and principles of deferral, multiannual objectives, deferrals and malus and clawback herein in respect of the remuneration he receives in his role as CEO of this subsidiary.

iii) Shares assigned by deferred variable remuneration plans

The following table shows the number of Santander shares assigned to each executive director and pending delivery as of 1 January 2020, 31 December 2020 and 31 December 2021, as well as the gross shares that were delivered to them in 2020 and 2021, either in the form of an immediate payment or a deferred payment. In this case after having been appraised by the board, at the proposal of the remuneration committee, that the corresponding one-fifth of each plan had accrued. They come from each of the plans through which the variable remunerations of deferred conditional variable remuneration plans in 2015 and of the deferred conditional and linked to multi-year objectives in 2016, 2017, 2018, 2019, 2020 and 2021 were formalized.

Share-based variable remuneration

	Maximum number of shares to be delivered at January 1,2020	Shares delivered in 2020 (immediate payment 2019 variable remuneration)	Shares delivered in 2020 (deferred payment 2018 variable remuneration)	Shares delivered in 2020 (deferred payment 2017 variable remuneration)	Shares delivered in 2020 (deferred payment 2016 variable remuneration)	Variable remuneration 2020 (Maximum number of shares to be delivered)
2015 variable remuneration						
Ms Ana Botín-Sanz de Sautuola y O'Shea	128,809	—	—	—	—	—
Mr José Antonio Álvarez Álvarez	85,620	—	—	—	—	—
	214,429					
2016 variable remuneration						
Ms Ana Botín-Sanz de Sautuola y O'Shea	216,308	—	—	—	(72,102)	—
Mr José Antonio Álvarez Álvarez	145,998	—	—	—	(48,667)	—
	362,306				**(120,769)**	
2017 variable remuneration						
Ms Ana Botín-Sanz de Sautuola y O'Shea	275,700	—	—	(68,925)	—	—
Mr José Antonio Álvarez Álvarez	184,377	—	—	(46,094)	—	—
	460,077			**(115,019)**		
2018 variable remuneration						
Ms Ana Botín-Sanz de Sautuola y O'Shea	516,519	—	(103,304)	—	—	—
Mr José Antonio Álvarez Álvarez	345,161	—	(69,032)	—	—	—
	861,680		**(172,336)**			
2019 variable remuneration						
Ms Ana Botín-Sanz de Sautuola y O'Shea	887,193	(354,877)	—	—	—	—
Mr José Antonio Álvarez Álvarez	592,915	(237,166)	—	—	—	—
	1,480,108	**(592,043)**				
2020 variable remuneration						
Ms Ana Botín-Sanz de Sautuola y O'Shea	—	—	—	—	—	310,615
Mr José Antonio Álvarez Álvarez	—	—	—	—	—	168,715
Mr Sergio Rial[2]	—	—	—	—	—	355,263
						834,593
2021 variable remuneration[1]						
Ms Ana Botín-Sanz de Sautuola y O'Shea	—	—	—	—	—	—
Mr José Antonio Álvarez Álvarez	—	—	—	—	—	—
Mr Sergio Rial[2]	—	—	—	—	—	—

1. For each director, 40% of the shares indicated correspond to the short-term variable (or immediate payment). The remaining 60% is deferred for delivery, where appropriate, by fifths in the next five years, the last three being subject to the fulfilment of multiannual objectives.
2. Mr. Sergio Rial's share-based variable remuneration awarded in shares of Banco Santander (Brasil). He has the right to a maximum of 51,483 Santander shares and 269,148 options over Santander shares for his participation in the 2019 Digital Transformation Award.
In addition, Mr. Rodrigo Echenique maintains the right to a maximum of 518,517 shares arising from his participation in the corresponding plans during his term as executive director.

Maximum number of shares to be delivered at December 31, 2020	Instruments matured but not consolidated at January 1, 2021	Shares delivered in 2021 (immediate payment 2020 variable remuneration)	Shares delivered in 2021 (deferred payment 2019 variable remuneration)	Shares delivered in 2021 (deferred payment 2018 variable remuneration)	Shares delivered in 2021 (deferred payment 2017 variable remuneration)	Shares delivered in 2021 (deferred payment 2016 variable remuneration)	Variable remuneration 2021 (Maximum number of shares to be delivered)	Maximum number of shares to be delivered at December 31, 2021
128,809	—	—	—	—	—	—	—	128,809
85,620	—	—	—	—	—	—	—	85,620
214,429								**214,429**
144,206	(34,177)	—	—	—	—	(72,102)	—	37,927
97,331	(23,067)	—	—	—	—	(48,667)	—	25,597
241,537	**(57,244)**					**(120,769)**		**63,524**
206,775	(112,692)	—	—	—	(68,925)	—	—	25,158
138,283	(75,364)	—	—	—	(46,094)	—	—	16,825
345,058	**(188,057)**				**(115,019)**			**41,983**
413,215		—	—	(103,304)	—	—	—	309,911
276,129		—	—	(69,032)	—	—	—	207,097
689,344				**(172,336)**				**517,008**
532,316	—	—	(106,463)	—	—	—	—	425,853
355,749	—	—	(71,150)	—	—	—	—	284,599
888,065			**(177,613)**					**710,452**
310,615	—	(124,246)	—	—	—	—	—	186,369
168,715	—	(67,486)	—	—	—	—	—	101,229
355,263	—	(142,105)	—	—	—	—	—	213,158
834,593		**(333,837)**						**500,756**
—	—	—	—	—	—	—	1,480,622	1,480,622
—	—	—	—	—	—	—	999,259	999,259
—	—	—	—	—	—	—	625,000	625,000
							3,104,881	**3,104,881**

In addition, the table below shows the cash delivered in 2021 and 2020, by way of either immediate payment or deferred payment, in the latter case once the Board had determined, at the proposal of the remuneration committee, that one-fifth relating to each plan had accrued:

EUR thousand

	2021		2020	
	Cash paid (immediate payment 2020 variable remuneration)	Cash paid (deferred payments from 2019, 2018, 2017 and 2016 variable remuneration)	Cash paid (immediate payment 2019 variable remuneration)	Cash paid (deferred payments from 2018, 2017, 2016 and 2015 variable remuneration)
Ms. Ana Botín-Sanz de Sautuola y O'Shea	334	1,550	1,302	1,383
Mr. José Antonio Álvarez Álvarez	181	1,037	870	925
Total	**515**	**2,586**	**2,172**	**2,308**

iv) Information on former members of the Board of Directors

The chart below includes information on the maximum number of shares to which former members of the Board of Directors who ceased in office prior to 1 January 2020 are entitled for their participation in the various deferred variable remuneration systems, which instrumented a portion of their variable remuneration relating to the years in which they were Executive Directors. Also set forth below is information on the deliveries, whether in shares or in cash, made in 2021 and 2020 to former board members, upon achievement of the conditions for the receipt thereof (see note 46):

MAXIMUM NUMBER OF SHARES TO BE DELIVERED

	2021	2020
Deferred conditional variable remuneration plan (2015)	—	60,847
Deferred conditional variable remuneration plan and linked to objectives (2016)	60,251	65,502
Deferred conditional variable remuneration plan and linked to objectives (2017)	64,659	47,956
Deferred conditional variable remuneration plan and linked to objectives (2018)	164,462	—
Deferred conditional variable remuneration plan and linked to objectives (2019)	130,790	—

NUMBER OF SHARES DELIVERED

	2021	2020
Deferred conditional variable remuneration plan (2015)	92,557	60,847
Performance shares plan ILP (2015)	—	—
Deferred conditional variable remuneration plan and linked to objectives (2016)	60,254	32,751
Deferred conditional variable remuneration plan and linked to objectives (2017)	32,330	35,132
Deferred conditional variable remuneration plan and linked to objectives (2018)	54,821	—
Deferred conditional variable remuneration plan and linked to objectives (2019)	32,698	—

In addition, EUR 1,213 thousand and EUR 612 thousand relating to the deferred portion payable in cash of the aforementioned plans were paid each in 2021 and 2020.

f) Loans

Grupo Santander's direct risk exposure to the bank's directors and the guarantees provided for them are detailed below. These transactions were made on terms equivalent to those that prevail in arm's-length transactions or the related compensation in kind was recognized:

EUR thousand

	2021			2020		
	Loans and credits	Guarantees	Total	Loans and credits	Guarantees	Total
Mrs Ana Botín-Sanz de Sautuola y O'Shea	25	—	25	14	—	14
Mr José Antonio Álvarez Álvarez	4	—	4	5	—	5
Mr Bruce Carnegie-Brown	—	—	—	—	—	—
Mr Javier Botín-Sanz de Sautuola y O'Shea	16	—	16	2	—	2
Mrs Sol Daurella Comadrán	69	—	69	22	—	22
Mrs Belén Romana García	—	—	—	—	—	—
Mr Ramiro Mato García-Ansorena	—	—	—	—	—	—
Mrs Homaira Akbari	—	—	—	—	—	—
Mr Álvaro Cardoso de Souza	—	—	—	—	—	—
Mr Henrique de Castro	—	—	—	—	—	—
Mrs Pamela Ann Walkden	—	—	—	—	—	—
Mr Luis Isasi Fernández de Bobadilla	—	—	—	—	—	—
Mr Sergio Agapito Lires Rial	1	—	1	—	—	—
Mr R. Martín Chávez Márquez	—	—	—	—	—	—
Mrs Gina Lorenza Díez Barroso	—	—	—	6	—	6
	115	**—**	**115**	**49**	**—**	**49**

g) Senior managers

The table below includes the amounts relating to the short-term remuneration of the members of senior management at 31 December 2021 and those at 31 December 2020, excluding the remuneration of the executive directors, which is detailed above:

EUR thousand

		Short-term salaries and deferred remuneration							
			Variable remuneration (bonus) - Immediate payment		Deferred variable remuneration				
Year	Number of persons	Fixed	In cash	In shares[2]	In cash	In shares[3]	Pensions	Other remuneration[1]	Total
2021	15	19,183	8,402	8,402	3,648	3,648	5,542	5,055	53,880
2020	18	21,642	5,739	5,740	2,470	2,471	6,039	6,312	50,413

1. Includes other remuneration items such as life and medical insurance premiums and localization aids.
2. The amount of immediate payment in shares for 2021 is 2,706,819 shares (2,135,700 Santander shares in 2020).
3. The deferred amount in shares not linked to long-term objectives for 2021 is 1,175,191 shares (919,308 Santander shares in 2020).

At the annual general meeting on 26 March 2021, shareholders approved the 2021 Digital Transformation Incentive, a variable remuneration scheme that delivers Santander shares and share options if the group hits major milestones on its digital roadmap.

In 2021, no senior executives are included in this programme. However, in 2020, three senior executives were included within this plan (aimed at a group of up to 250 employees whose functions are deemed essential to Santander Group's growth and digital transformation) and, thus, can receive a total of EUR 1,700 thousand to be paid in thirds on the third, fourth and fifth anniversary of the authorisation date (2024, 2025 and 2026). This amount was implemented in 316,574 Santander shares and 944,445 options over Santander shares, using for these purposes the fair value of the options at the moment of their grant (EUR 0.90).

See note 46 to the 2021 Group's consolidated financial statements for further information on the Digital Transformation Incentive.

In 2021, the ratio of variable to fixed pay components was 125% of the total for senior managers, well within the maximum limit of 200% set by 2021 AGM.

Also, the detail of the breakdown of the remuneration linked to long-term objectives of the members of senior management at 31 December 2021 and 31 December 2020 is provided below. These remuneration payments shall be received, as the case may be, in the corresponding deferral periods, upon achievement of the conditions stipulated for each payment (see note 46):

EUR thousand

		Variable remuneration subject to long-term objectives[1]		
Year	Number of people	Cash payment	Share payment	Total
2021	15	3,830	3,830	7,660
2020	18	2,594	2,594	5,188

1. Relates to the fair value of the maximum annual amounts for years 2025, 2026 and 2027 of the sixth cycle of the deferred conditional variable remuneration plan (2024, 2025 and 2026 for the fifth cycle of the deferred variable compensation plan linked to annual objectives for the year 2020).

Senior executive vice presidents who retired in 2021 and, therefore, were not members of senior management at year-end, received in 2021 salaries and other remuneration amounting to EUR 5,294 thousand (EUR 5,984 thousand in 2020). Likewise, these same individuals have generated as senior managers the right to obtain variable remuneration linked to long-term objectives for a total amount of EUR 55 thousand (this right has been generated in 2020 for a total amount of EUR 133 thousand).

The maximum number of Santander shares that the members of senior management at each plan grant date (excluding executive directors) were entitled to receive as of 31 December 2021 and 31 December 2020 relating to the deferred portion under the various plans then in force is the following (see note 46):

Maximum number of shares to be delivered

	2021	2020
Deferred conditional variable remuneration plan (2015)	—	179,617
Deferred conditional variable remuneration plan (2017)	—	2,786
Deferred conditional variable remuneration plan (2018)	3,475	6,949
Deferred conditional variable remuneration plan and linked to objectives (2016)	150,445	417,818
Deferred conditional variable remuneration plan and linked to objectives (2017)	164,428	791,360
Deferred conditional variable remuneration plan and linked to objectives (2018)	803,056	1,512,992
Deferred conditional variable remuneration plan and linked to objectives (2019)	1,274,450	2,154,312
Deferred conditional variable remuneration plan and linked to objectives (2020)	1,829,720	—

Since the conditions established in the corresponding deferred share-based remuneration schemes for prior years had been met, the following number of Santander shares was delivered in 2021 and 2020 to the senior management, in addition to the payment of the related cash amounts:

Number of shares delivered

	2021	2020
Deferred conditional variable remuneration plan (2015)	146,930	179,614
Deferred conditional variable remuneration plan (2017)	2,786	2,786
Deferred conditional variable remuneration plan (2018)	3,474	3,474
Deferred conditional variable remuneration plan and linked to objectives (2016)	131,938	170,185
Deferred conditional variable remuneration plan and linked to objectives (2017)	79,104	219,363
Deferred conditional variable remuneration plan and linked to objectives (2018)	267,686	342,884
Deferred conditional variable remuneration plan and linked to objectives (2019)	321,006	—
Deferred conditional variable remuneration plan and linked to objectives (2020)	1,742,419	—

As indicated in note 5.c above, senior management participate in the benefit system created in 2012, which covers the contingencies of retirement, disability and death. Banco Santander makes annual contributions to the benefit plans of its senior managers. In 2012, the contracts of the senior managers with benefit pension commitments were amended to transform them into a contribution system. The system, which is outsourced to Santander Seguros y Reaseguros, Compañía Aseguradora, S.A., gives senior managers the right to receive benefits upon retirement, regardless of whether or not they are active at Banco Santander at such time, based on contributions to the system. This new system replaced their previous right to receive a pension supplement in the event of retirement. In the event of pre-retirement, and up to the retirement date, senior managers appointed prior to September 2015 are entitled to receive an annual allowance.

In addition, further to applicable remuneration regulations, from 2016 (inclusive), a discretionary pension benefit component of at least 15% of total remuneration in contributions to the pension system has been included. Under the regime corresponding to these discretionary benefits, the contributions that are calculated on variable remunerations are subject to malus and clawback clauses, subject to policies applicable at each time, and during the same period in which the variable remuneration is deferred.

Likewise, the annual contributions calculated on variable remunerations must be invested in Bank shares for a period of five years from the date that the senior manager leaves the Group, regardless of whether or not they leave to retire. Once that period has elapsed, the amount invested in shares will be reinvested, along with the remainder of the cumulative balance corresponding to the senior manager, or it will be paid to the senior manager or to their beneficiaries in the event of a contingency covered by the benefits system.

The contracts of some senior executives were modified at the beginning of 2018 with the same objective and changes indicated in section c of this note for Ms Ana Botín and Mr José Antonio Álvarez. The modifications, which are aimed at aligning the annual contributions with the practices of comparable institutions and reducing the risk of future obligations by eliminating the supplementary scheme for death (widowhood and orphanhood) and permanent disability in service without increasing the costs to the bank, are as follows:

- Contributions to the pensionable bases were reduced. Gross annual salaries were increased in the corresponding amount.
- The death and disability supplementary benefits were eliminated since January 1, 2018. A fixed remuneration supplement reflected in other remuneration in the table above was implemented on the same date.
- The amounts insured for life and accident insurance were increased.

All of the above was done without an increase in total cost for the Bank.

The balance as of 31 December 2021 in the pension system for those who were part of senior management during the year amounted to EUR 64.3 million (EUR 59.4 million at 31 December 2020).

The net charge to income corresponding to pension and supplementary benefits for widows, orphans and permanent invalidity amounted to EUR 5.5 million in 2021 (EUR 6.4 million in 31 December 2020).

In 2021 and 2020 there have been no payments in the form of a single payment of the annual voluntary pre-retirement allowance.

Additionally, the capital insured by life and accident insurance at 31 December 2020 of this group amounts to EUR 100 million (EUR 135.1 million at 31 December 2020).

h) Post-employment benefits to former Directors and former senior executive vice presidents

The post-employment benefits and settlements paid in 2021 to former directors of the Bank, other than those detailed in note 5.c amounted to EUR 5.6 million and EUR 11.2 million in 2020, respectively. Also, the post-employment benefits and settlements paid in 2021 to former executive vice presidents amounted to EUR 51.6 million and EUR 10.26 million in 2020, respectively.

Contributions to insurance policies that hedge pensions and complementary widowhood, orphanhood and permanent disability benefits to previous members of the Bank's board of directors, amounted to EUR 0.17 million in 2021 (EUR 0.17 million in 2020). Likewise, contributions to insurance policies that hedge pensions and complementary widowhood, orphanhood and permanent disability benefits for previous senior managers amounted to EUR 4.4 million in 2021 (EUR 5.8 million in 2020).

During the 2021 financial year, no release or charge was recorded in the consolidated income statement for pension commitments and similar obligations held by the Group with previous former members of the bank's board of directors (in 2020, five million releases were recorded), and no provisions/releases has been recorded in respect of former senior managers in 2021 and 2020.

In addition, 'Provisions - Pension Fund and similar obligations' in the consolidated balance sheet as at 31 December 2021 included EUR 50 million in respect of the post-employment benefit obligations to former Directors of the Bank (EUR 52 million at 31 December 2020) and EUR 114 million corresponding to former senior managers (EUR 159 million at 31 December 2020).

i) Pre-retirement and retirement

The board of directors approved an amendment to the contracts of the executive directors whereby:

- Ms Ana Botín ceases to have the right to pre-retire if she leaves the Bank out of her own volition, keeping this right in case of termination by the Bank until 1 September 2022. After this date, she does not have the right to pre-retire. While she keeps this right she will be entitled to an annual allotment equal to the sum of her fixed remuneration and 30% of the average amount of her last variable remuneration, to a maximum of three. This allotment is subject to the *malus* and clawback provisions in place for a period of five years.
- Mr. José Antonio Álvarez ceases to have the right to pre-retire in case of termination of his contract.

j) Contract termination

The executive directors and senior managers have indefinite-term employment contracts. Executive directors or senior managers whose contracts are terminated voluntarily or due to breach of duties are not entitled to receive any economic compensation. If Banco Santander terminates the contract for any other reason, they will be entitled to the corresponding legally-stipulated termination benefit, without prejudice to any compensation that may for non-competition obligations, as detailed in the directors' remuneration policy.

If Banco Santander were to terminate her contract, Ms. Ana Botín-Sanz de Sautuola y O'Shea would have to remain at Banco Santander's disposal for a period of 4 months in order to ensure an adequate transition, and would receive her fixed salary during that period.

k) Information on investments held by the directors in other companies and conflicts of interest

None of the members of the board of directors have declared that they or persons related to them may have a direct or indirect conflict of interest with the interests of Banco Santander, S.A., as set forth in Article 229 of the Corporate Enterprises Act.

6. Loans and advances to central banks and credit institutions

The detail, by classification, type and currency, of Loans and advances to central banks and credit institutions in the consolidated balance sheets is as follows:

EUR million

	2021	2020	2019
CENTRAL BANKS			
Classification			
Financial assets held for trading	3,608	—	—
Non-trading financial assets mandatorily at fair value through profit or loss	—	—	—
Financial assets designated at fair value through profit or loss	—	9,481	6,473
Financial assets designated at fair value through other comprehensive income	—	—	—
Financial assets at amortised cost	15,657	12,499	18,474
	19,265	**21,980**	**24,947**
Type			
Time deposits	13,275	11,757	17,533
Reverse repurchase agreements	5,990	10,223	7,414
Impaired assets	—	—	—
Valuation adjustments for impairment	—	—	—
	19,265	**21,980**	**24,947**
CREDIT INSTITUTIONS			
Classification			
Financial assets held for trading	10,397	3	—
Non-trading financial assets mandatorily at fair value through profit or loss	—	—	—
Financial assets designated at fair value through profit or loss	3,152	12,136	21,649
Financial assets designated at fair value through other comprehensive income	—	—	—
Financial assets at amortised cost	39,169	37,838	40,943
	52,718	**49,977**	**62,592**
Type			
Time deposits	10,684	7,338	9,699
Reverse repurchase agreements	18,853	20,862	31,180
Non- loans advances	23,188	21,784	21,726
Impaired assets	1	1	1
Valuation adjustments for impairment	(8)	(8)	(14)
	52,718	**49,977**	**62,592**
CURRENCY			
Euro	24,286	22,260	32,248
Pound sterling	3,228	4,127	3,659
US dollar	12,639	13,209	14,442
Brazilian real	24,011	26,437	30,919
Other currencies	7,819	5,924	6,271
TOTAL	**71,983**	**71,957**	**87,539**

The loans and advances to credit institutions classified under 'Financial assets at amortised' cost are mainly time accounts and deposits.

Note 50 contains a detail of the residual maturity periods of 'Financial assets at amortised cost'.

At 31 December 2021 the exposure by impairment stage of the assets accounted for amounts to EUR 54,833, EUR 0 and EUR 1 million (EUR 50,344, EUR 0 and EUR 1 million in 2020 and EUR 59,430, EUR 0 and EUR 1 million in 2019), and the loan loss provision by impairment stage amounts to EUR 8, EUR 0 and EUR 0 million (EUR 8, EUR 0 and EUR 0 million in 2020 and EUR 14, EUR 0 and EUR 0 million in 2019) in stage 1, stage 2 and stage 3, respectively.

7. Debt instruments

a) Detail

The detail, by classification, type and currency, of Debt instruments in the consolidated balance sheets is as follows:

EUR million	2021	2020	2019
Classification			
Financial assets held for trading	26,750	37,894	32,041
Non-trading financial assets mandatorily at fair value through profit or loss	957	700	1,175
Financial assets designated at fair value through profit or loss	2,516	2,979	3,186
Financial assets designated at fair value through other comprehensive income	97,922	108,903	118,405
Financial assets at amortised cost	35,708	26,078	29,789
	163,853	**176,554**	**184,596**
Type			
Spanish government debt securities	20,638	30,397	42,054
Foreign government debt securities	102,976	110,570	107,434
Issued by financial institutions	12,324	10,133	9,670
Other fixed-income securities	27,850	25,337	25,265
Impaired financial assets	280	401	647
Impairment losses	(215)	(284)	(474)
	163,853	**176,554**	**184,596**
Currency			
Euro	45,197	58,850	70,357
Pound sterling	6,304	7,372	15,713
US dollar	34,229	29,009	29,846
Brazilian real	35,907	35,139	38,316
Other currencies	42,431	46,468	30,838
Debt securities excluding impairment adjustments	**164,068**	**176,838**	**185,070**
Impairment losses	(215)	(284)	(474)
	163,853	**176,554**	**184,596**

In the last quarter of 2019, debt securities were transferred from the 'Financial asset at amortised cost' to the 'Financial asset at fair value through other comprehensive income'. The fair value of these assets at the date of the transfer being EUR 6,359 million.

As established in IFRS 9, the aforementioned transfer was made prospectively, recognising the difference between the previous amortised cost of the transferred financial assets and their fair value in 'Other comprehensive income'. In application of this standard, the effective interest rate and the measurement of expected credit losses were not adjusted as a result of the reclassification.

The context of adapting the Group´s commercial strategy to the changes in business models, in order to favour a greater alignment of the sensitivity of the Bank's balance sheet masses to interest rates, has led to a change in the assets related to these liabilities from a business model whose objective is to collect the principal and interest flows to a business model whose objective is achieved through the collection of the principal and interest flows and the sale of these assets.

At 31 December 2021, 2020 and 2019 the exposure by impairment stage of the book assets under IFRS 9 amounted to EUR 133,437 million, EUR 134,792 million and EUR 147,575 million in stage 1; EUR 128 million, EUR 72 million and EUR 446 million in stage 2, and EUR 280 million, EUR 401 million and EUR 647 million in stage 3, respectively.

b) Breakdown

The breakdown, by origin of the issuer, of debt instruments at 31 December 2021, 2020 and 2019, net of impairment losses, is as follows:

EUR million

	2021				2020				2019			
	Private fixed-income	Public fixed-income	Total	%	Private fixed-income	Public fixed-income	Total	%	Private fixed-income	Public fixed-income	Total	%
Spain	3,773	20,638	24,411	14.90%	1,588	30,397	31,985	18.12%	3,634	42,054	45,688	24.75%
United Kingdom	3,334	2,097	5,431	3.31%	3,099	2,795	5,894	3.34%	3,806	11,479	15,285	8.28%
Portugal	3,008	3,845	6,853	4.18%	3,095	6,462	9,557	5.41%	2,979	7,563	10,542	5.71%
Italy	1,215	1,531	2,746	1.68%	1,047	4,688	5,735	3.25%	1,384	3,620	5,004	2.71%
Ireland	4,759	52	4,811	2.94%	2,924	2	2,926	1.66%	2,387	2	2,389	1.29%
Poland	2,848	12,727	15,575	9.51%	3,126	11,400	14,526	8.23%	460	9,361	9,821	5.32%
Other European countries	8,922	3,422	12,344	7.53%	8,211	2,891	11,102	6.29%	7,186	1,784	8,970	4.86%
United States	5,634	21,465	27,099	16.54%	6,386	14,645	21,031	11.91%	5,915	15,609	21,524	11.66%
Brazil	5,446	29,251	34,697	21.18%	5,179	33,316	38,495	21.80%	5,808	35,036	40,844	22.13%
Mexico	517	14,572	15,089	9.21%	435	19,053	19,488	11.04%	708	13,234	13,942	7.55%
Chile	51	9,467	9,518	5.81%	41	8,082	8,123	4.60%	50	4,819	4,869	2.64%
Other American countries	655	2,128	2,783	1.70%	274	3,098	3,372	1.91%	605	1,095	1,700	0.92%
Rest of the world	77	2,419	2,496	1.52%	182	4,138	4,320	2.44%	186	3,832	4,018	2.18%
	40,239	**123,614**	**163,853**	**100%**	**35,587**	**140,967**	**176,554**	**100%**	**35,108**	**149,488**	**184,596**	**100%**

The detail, by issuer rating, of Debt instruments at 31 December 2021, 2020 and 2019 is as follows:

EUR million

	2021				2020				2019			
	Private fixed-income	Public fixed-income	Total	%	Private fixed-income	Public fixed-income	Total	%	Private fixed-income	Public fixed-income	Total	%
AAA	15,956	1,773	17,729	10.82%	14,088	2,099	16,187	9.17%	14,737	1,085	15,822	8.57%
AA	2,005	26,355	28,360	17.31%	1,714	18,784	20,498	11.61%	5,133	28,325	33,458	18.13%
A	8,594	44,359	52,953	32.32%	6,228	53,655	59,883	33.92%	3,238	59,744	62,982	34.12%
BBB	5,234	20,304	25,538	15.59%	6,515	31,204	37,719	21.36%	4,889	24,766	29,655	16.06%
Below BBB	3,584	30,823	34,407	21.00%	3,431	35,164	38,595	21.86%	1,244	35,466	36,710	19.89%
Unrated	4,866	—	4,866	2.97%	3,611	61	3,672	2.08%	5,867	102	5,969	3.23%
	40,239	**123,614**	**163,853**	**100%**	**35,587**	**140,967**	**176,554**	**100%**	**35,108**	**149,488**	**184,596**	**100%**

During 2021, 2020 and 2019, the distribution of the exposure by rating level of the previous table has not been affected by ratings reviews of the sovereign issuers.

The detail, by type of financial instrument, of private fixed-income securities at 31 December 2021, 2020 and 2019, net of impairment losses, is as follows:

EUR million

	2021	2020	2019
Securitised mortgage bonds	5,806	5,926	5,494
Other asset-backed bonds	6,304	5,479	6,388
Floating rate debt	8,081	7,829	10,348
Fixed rate debt	20,048	16,353	12,878
Total	**40,239**	**35,587**	**35,108**

c) Impairment losses

The changes in the impairment losses on debt instruments are summarised below:

EUR million

	2021	2020	2019
Balance at beginning of year	284	474	635
Net impairment losses for the year*	*28*	79	(170)
Of which:			
Impairment losses charged to income	*49*	*91*	*77*
Impairment losses reversed with a credit to income	*(21)*	*(12)*	*(247)*
Exchange differences and other items	(97)	(269)	9
Balance at end of year	**215**	**284**	**474**
Of which:			
By geographical location of risk:			
European Union	*25*	*21*	*14*
Latin America	*190*	*263*	*460*

* Of the EUR 28 million corresponding to net provisions for the year ended 31 December 2021 (EUR 79 million and EUR -170 million at 31 December 2020 and 2019, respectively), EUR 31 million relates to financial assets at amortized cost (EUR 77 million and EUR -176 million at 31 December 2020 and 2019, respectively) and EUR -3 million relates to financial assets designated at fair value through other comprehensive income (EUR 2 million and EUR 6 million at 31 December 2020 and 2019, respectively).

At 31 December 2021, 2020 and 2019 the loan loss provision by impairment stage of the assets accounted for under IFRS9 amounted to EUR 26 million, EUR 25 million and EUR 22 million in stage 1, EUR 8 million, EUR 2 million and EUR 6 million in stage 2, and EUR 181 million, EUR 257 million and EUR 446 million in stage 3, respectively.

8. Equity instruments

a) Breakdown

The detail, by classification and type, of Equity instruments in the consolidated balance sheets is as follows:

EUR million

	2021	2020	2019
Classification			
Financial assets held for trading	15,077	9,615	12,437
Non-trading financial assets mandatorily at fair value through profit or loss	4,042	3,234	3,350
Financial assets designated at fair value through other comprehensive income	2,453	2,783	2,863
	21,572	**15,632**	**18,650**
Type			
Shares of Spanish companies	3,896	3,364	3,711
Shares of foreign companies	15,184	10,437	12,682
Shares of investment funds	2,492	1,831	2,257
	21,572	**15,632**	**18,650**

Note 29 contains a detail of the 'Other comprehensive income', recognised in equity, on 'Financial assets designated at fair value through other comprehensive income'.

b) Changes

The changes in 'Financial assets at fair value through other comprehensive income' were as follows:

EUR million

	2021	2020	2019
Balance at beginning of the year	2,783	2,863	2,671
Net additions (disposals)	(276)	833	177
Changes in the fair value of equity instruments measured at fair value through other comprehensive income (EIGR)*	(171)	(917)	(29)
Changes in the RV hedged with micro-hedging transactions	117	4	44
Balance at end of year	**2,453**	**2,783**	**2,863**

* They do not include fair value movements for currency risk hedged with hedging instruments.

c) Notifications of acquisitions of investments

The notifications of the acquisitions and disposals of holdings in investees made by the Bank in 2021, in compliance with Article 155 of the Spanish Limited Liability Companies Law and Article 125 of Spanish Securities Market Law 24/1998, are listed in appendix IV.

9. Trading Derivatives (assets and liabilities) and short positions

a) Trading Derivatives

The detail, by type of inherent risk, of the fair value of the trading derivatives arranged by the Group is as follows (see note 11):

EUR million

	2021		2020		2019	
	Debit balance	Credit balance	Debit balance	Credit balance	Debit balance	Credit balance
Interest rate risk	31,884	30,192	43,832	41,085	42,614	40,956
Currency risk	19,823	21,894	21,162	22,028	18,085	19,870
Price risk	1,498	891	1,931	944	2,329	1,772
Other risks	1,087	589	212	412	369	418
	54,292	**53,566**	**67,137**	**64,469**	**63,397**	**63,016**

b) Short positions

Following is a breakdown of the short positions (liabilities):

EUR million

	2021	2020	2019
Borrowed securities			
Debt instruments	825	625	390
Of which:			
Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México	*825*	*625*	*390*
Equity instruments	389	289	393
Of which:			
Banco Santander, S.A.	*318*	*289*	*308*
Short sales			
Debt instruments	11,022	15,784	13,340
Of which:			
Banco Santander, S.A.	*8,926*	*8,645*	*7,980*
Banco Santander (Brasil) S.A.	*1,952*	*7,085*	*5,194*
	12,236	**16,698**	**14,123**

10. Loans and advances to customers

a) Detail

The detail, by classification, of Loans and advances to customers in the consolidated balance sheets is as follows:

EUR million

	2021	2020	2019
Financial assets held for trading	6,829	296	355
Non-trading financial assets mandatorily at fair value through profit or loss	537	552	386
Financial assets designated at fair value through profit or loss	10,289	24,121	30,761
Financial assets at fair value through other comprehensive income	7,663	9,267	4,440
Financial assets at amortized cost	947,364	881,963	906,276
Of which:			
Impairment losses	*(22,964)*	*(23,595)*	*(22,242)*
	972,682	916,199	942,218
Loans and advances to customers disregarding impairment losses	**995,646**	**939,794**	**964,460**

Note 50 contains a detail of the residual maturity periods of 'Financial assets.

Note 53 shows the Group's total exposure, by geographical origin of the issuer.

There are no loans and advances to customers for material amounts without fixed maturity dates.

b) Breakdown

Following is a breakdown of the loans and advances granted to the Group's customers, which reflect the Group's exposure to credit risk in its main activity, without considering the balance of value adjustments for impairment, taking into account the type and situation of the transactions, the geographical area of their residence and the type of interest rate on the transactions:

EUR million

	2021	2020	2019
Loan type and status			
Commercial credit	49,603	37,459	37,753
Secured loans	542,404	503,014	513,929
Reverse repurchase agreements	33,264	35,702	45,703
Other term loans	269,526	269,143	267,154
Finance leases	38,503	36,251	35,788
Receivable on demand	10,304	7,903	7,714
Credit cards receivables	20,397	19,507	23,876
Impaired assets	31,645	30,815	32,543
	995,646	**939,794**	**964,460**
Geographical area			
Spain	216,741	215,330	204,810
European Union (excluding Spain)*	190,032	192,988	460,338
United States and Puerto Rico	102,491	93,405	100,152
Other OECD countries*	374,729	338,362	86,327
South America (non - OECD)	94,010	79,629	92,145
Rest of the world	17,643	20,080	20,688
	995,646	**939,794**	**964,460**
Interest rate formula			
Fixed rate	593,645	550,883	546,619
Floating rate	402,001	388,911	417,841
	995,646	**939,794**	**964,460**

* The amounts referring to the years 2021 and 2020 for the United Kingdom have been considered in the line Other OECD countries, instead of in the line European Union (excluding Spain) due to the leaving of the United Kingdom from the European Union.

At 31 December 2021, 2020 and 2019 the Group had granted loans amounting to EUR 14,131, 12,104 and 9,993 million to Spanish public sector agencies which had a rating at 31 December 2021 of A (ratings of A at 31 December 2020 and 31 December 2019), and EUR 10,263, 10,779, and 12,218 million to the public sector in other countries (at 31 December 2021, the breakdown of this amount by issuer rating was as follows: 1.2% AAA, 13.4% AA, 5.2% A, 69.9% BBB, 9.7% below BBB and 0.5% without rating).

Without considering the public administrations, the amount of the loans and advances at 31 December 2021, 2020 and 2019 amounts to EUR 971,252 million, EUR 916,911 million and EUR 942,249 million, of which, EUR 939,645 million, EUR 886,118 million and EUR 909,741 million are classified as performing, respectively.

Following is a detail, by activity, of the loans to customers at 31 December 2021, net of impairment losses:

EUR million

			Secured loans						
			Net exposure		Loan-to-value ratio***				
	Total	Without collateral	Of which property collateral	Of which other collateral	Less than or equal to 40%	More than 40% and less than or equal to 60%	More than 60% and less than or equal to 80%	More than 80% and less than or equal to 100%	More than 100%
Public sector	22,152	21,359	180	613	68	81	26	608	10
Other financial institutions (financial business activity)	70,348	27,770	2,612	39,966	2,532	1,868	1,585	35,871	722
Non-financial corporations and individual entrepreneurs (non-financial business activity) (broken down by purpose)	323,475	182,711	60,112	80,652	24,034	21,064	18,461	57,321	19,884
Of which:									
Construction and property development	*18,936*	*2,349*	*9,778*	*6,809*	*5,357*	*4,821*	*1,695*	*3,555*	*1,159*
Civil engineering construction	*3,061*	*1,818*	*219*	*1,024*	*108*	*149*	*167*	*688*	*131*
Large companies	*174,191*	*116,018*	*19,655*	*38,518*	*7,789*	*5,111*	*5,365*	*31,122*	*8,786*
SMEs and individual entrepreneurs	*127,287*	*62,526*	*30,460*	*34,301*	*10,780*	*10,983*	*11,234*	*21,956*	*9,808*
Households – other (broken down by purpose)	540,339	96,351	360,447	83,541	98,463	117,198	138,456	55,419	34,452
Of which:									
Residential	*353,623*	*2,257*	*350,651*	*715*	*91,428*	*110,574*	*121,400*	*24,007*	*3,957*
Consumer loans	*167,760*	*91,829*	*1,403*	*74,528*	*2,927*	*3,938*	*13,083*	*26,721*	*29,262*
Other purposes	*18,956*	*2,265*	*8,393*	*8,298*	*4,108*	*2,686*	*3,973*	*4,691*	*1,233*
Total*	**956,314**	**328,191**	**423,351**	**204,772**	**125,097**	**140,211**	**158,528**	**149,219**	**55,068**
Memorandum item									
*Refinanced and restructured transactions***	27,781	11,975	11,222	4,584	3,856	2,237	4,678	2,442	2,593

* In addition, the Group has granted advances to customers amounting to EUR 16,368 million, bringing the total of loans and advances to EUR 972,682 million.
** Includes the net balance of the impairment of the accumulated value or accumulated losses in the fair value due to credit risk.
*** The ratio is the carrying amount of the transactions at 31 December 2021 provided by the latest available appraisal value of the collateral.

Note 53 contains information relating to the forborne loan portfolio.

Following is the movement of the gross exposure broken down by impairment stage of loans and advances to customers recognised under "Financial assets at amortised cost" and "Financial assets at fair value through other comprehensive income" during 2021, 2020 and 2019:

2021

EUR million

	Stage 1	Stage 2	Stage 3	Total
Balance at the beginning of year	817,906	66,104	30,318	914,328
Movements				
Transfers				
To stage 2 from stage 1	(33,051)	33,051		—
To stage 3 from stage 1	(6,617)		6,617	—
To stage 3 from stage 2		(5,836)	5,836	—
To stage 1 from stage 2	17,796	(17,796)		—
To stage 2 from stage 3		1,865	(1,865)	—
To stage 1 from stage 3	271		(271)	—
Net changes on financial assets	62,629	(11,629)	(719)	50,281
Write-offs	—	—	(9,089)	(9,089)
Exchange differences and others	19,766	1,825	460	22,051
Balance at the end of the year	**878,700**	**67,584**	**31,287**	**977,571**

2020

EUR million

	Stage 1	Stage 2	Stage 3	Total
Balance at the beginning of year	849,939	50,476	31,837	932,252
Movements				
Transfers				
To stage 2 from stage 1	(43,170)	43,170		—
To stage 3 from stage 1	(5,120)		5,120	—
To stage 3 from stage 2		(8,734)	8,734	—
To stage 1 from stage 2	13,459	(13,459)		—
To stage 2 from stage 3		1,831	(1,831)	—
To stage 1 from stage 3	578		(578)	—
Net changes on financial assets	53,555	(2,951)	(659)	49,945
Write-offs	—	—	(8,930)	(8,930)
Exchange differences and others	(51,335)	(4,229)	(3,375)	(58,939)
Balance at the end of the year	**817,906**	**66,104**	**30,318**	**914,328**

2019

EUR million

	Stage 1	Stage 2	Stage 3	Total
Balance at the beginning of year	795,829	52,183	33,461	881,473
Movements				
Transfers				
To stage 2 from stage 1	(28,369)	28,369		—
To stage 3 from stage 1	(4,101)		4,101	—
To stage 3 from stage 2		(13,240)	13,240	—
To stage 1 from stage 2	12,436	(12,436)		—
To stage 2 from stage 3		2,439	(2,439)	—
To stage 1 from stage 3	488		(488)	—
Net changes on financial assets	61,581	(8,092)	(3,608)	49,881
Write-offs	—	—	(12,593)	(12,593)
Exchange differences and others	12,075	1,253	163	13,491
Balance at the end of the year	**849,939**	**50,476**	**31,837**	**932,252**

In addition, at 31 December 2021, the Group had EUR 420 million (EUR 497 million at 31 December 2020 and EUR 706 million at 31 December 2019) of exposure in assets purchased with impairment of which EUR 358 million still show signs of impairment, which correspond mainly to the business combinations carried out by the Group.

c) Impairment losses on loans and advances to customers at amortised cost and at fair value through other comprehensive income

The changes in the impairment losses on the assets making up the balances of financial assets at amortised cost and at fair value through other comprehensive income - Loans and advances - Customers:

EUR million	2021	2020	2019
Amount at beginning of the year	23,595	22,242	23,307
Impairment losses charged to income for the year	8,762	13,385	11,108
Of which:			
Impairment losses charged to profit or loss	*18,240*	*20,909*	*19,192*
Impairment losses reversed with a credit to profit or loss	*(9,478)*	*(7,524)*	*(8,084)*
Change of perimeter	—	(82)	—
Write-off of impaired balances against recorded impairment allowance	(9,089)	(8,930)	(12,593)
Exchange differences and other changes	(304)	(3,020)	420
Amount at end of the year	**22,964**	**23,595**	**22,242**
Which correspond to:			
Impaired assets	*13,550*	*13,658*	*13,933*
Other assets	*9,414*	*9,937*	*8,309*
Of which:			
Individually calculated	*2,496*	*2,679*	*3,555*
Collective calculated	*20,468*	*20,916*	*18,687*

In addition, provisions for debt securities amounting to EUR 28 million were recorded at 31 December 2021 (provisions amounting to EUR 79 million and releases amounting EUR 170 million as of 31 December 2020 and 2019, respectively), written-off assets recoveries have been recorded in the year amounting to EUR 1,383 million at 31 December 2021 (EUR 1,221 million and EUR 1,586 million at 31 December 2020 and 2019, respectively) and EUR 0 million were recorded in the account for losses on renegotiation or contractual modification at 31 December 2021 (EUR 139 million and EUR 0 million at 31 December 2020 and 2019, respectively). With this, the impairment recorded in Impairment or reversal of impairment at financial assets not measured at fair value through profit or loss and net gains and losses from changes: 'Financial assets at fair value through other comprehensive income' and 'Financial assets at amortised cost'; amounts EUR 7,407 million at 31 December 2021 (EUR 12,382 million and EUR 9,352 million at 31 December 2020 and 2019, respectively).

Following is the movement of the loan loss provision broken down by impairment stage of loans and advances to customers during 2021, 2020 and 2019:

2021

EUR million	Stage 1	Stage 2	Stage 3	Total
Loss allowance at the beginning of the year	4,265	5,672	13,658	23,595
Transfers				
To stage 2 from stage 1	(578)	2,968		2,390
To stage 3 from stage 1	(237)		2,209	1,972
To stage 3 from stage 2		(1,086)	2,474	1,388
To stage 1 from stage 2	254	(1,025)		(771)
To stage 2 from stage 3		216	(760)	(544)
To stage 1 from stage 3	8		(67)	(59)
Net changes of the exposure and modifications in the credit risk	617	(1,557)	5,326	4,386
Write-offs	—	—	(9,089)	(9,089)
FX and other movements	(141)	38	(201)	(304)
Loss allowance at the end of the year	**4,188**	**5,226**	**13,550**	**22,964**

2020

EUR million	Stage 1	Stage 2	Stage 3	Total
Loss allowance at the beginning of the year	3,835	4,474	13,933	22,242
Transfers				
To stage 2 from stage 1	(1,040)	2,880		1,840
To stage 3 from stage 1	(255)		2,386	2,131
To stage 3 from stage 2		(971)	2,066	1,095
To stage 1 from stage 2	294	(976)		(682)
To stage 2 from stage 3		303	(727)	(424)
To stage 1 from stage 3	53		(138)	(85)
Net changes of the exposure and modifications in the credit risk	1,966	535	7,009	9,510
Write-offs	—	—	(8,930)	(8,930)
FX and other movements	(588)	(573)	(1,941)	(3,102)
Loss allowance at the end of the year	**4,265**	**5,672**	**13,658**	**23,595**

2019

EUR million

	Stage 1	Stage 2	Stage 3	Total
Loss allowance at the beginning of the year	3,658	4,743	14,906	23,307
Transfers				
To stage 2 from stage 1	(964)	3,235		2,271
To stage 3 from stage 1	(214)		1,296	1,082
To stage 3 from stage 2		(3,065)	5,612	2,547
To stage 1 from stage 2	301	(1,048)		(747)
To stage 2 from stage 3		381	(817)	(436)
To stage 1 from stage 3	29		(123)	(94)
Net changes of the exposure and modifications in the credit risk	1,119	(182)	5,548	6,485
Write-offs	—	—	(12,593)	(12,593)
FX and other movements	(94)	410	104	420
Loss allowance at the end of the year	**3,835**	**4,474**	**13,933**	**22,242**

d) Impaired assets and assets with unpaid past-due amounts

The detail of the changes in the balance of the financial assets classified as 'Financial assets Loans to customers' considered to be impaired due to credit risk is as follows:

EUR million

	2021	2020	2019
Balance at beginning of year	30,815	32,543	34,218
Net additions	9,390	10,577	10,755
Written-off assets	(9,089)	(8,930)	(12,593)
Changes in the scope of consolidation	—	(39)	—
Exchange differences and other	529	(3,336)	163
Balance at end of year	**31,645**	**30,815**	**32,543**

This amount, after deducting the related allowances, represents the Group's best estimate of the discounted value of the flows that are expected to be recovered from the impaired assets.

At 31 December 2021, the Group's written-off assets totalled EUR 40,585 million (EUR 39,087 million and EUR 46,209 million at 31 December 2020 and 2019, respectively).

Set forth below for each class of impaired asset are the gross amount, associated allowances and information relating to the collateral and/or other credit enhancements obtained at 31 December 2021:

EUR million

	Gross amount	Allowance recognised	Estimated collateral value*
Without associated real collateral	13,327	7,416	—
With real estate collateral	12,907	3,540	9,054
With other collateral	5,411	2,594	2,317
Total	**31,645**	**13,550**	**11,371**

* Including the estimated value of the collateral associated with each loan. Accordingly, any other cash flows that may be obtained, such as those arising from borrowers' personal guarantees, are not included.

When classifying assets in the previous table, the main factors considered by the Group to determine whether an asset has become impaired are the existence of amounts past due —assets impaired due to arrears— or other circumstances may be arise which will not result in all contractual cash flow being recovered, such as a deterioration of the borrower's financial situation, the worsening of its capacity to generate funds or difficulties experienced by it in accessing credit.

e) Transferred credits

'Loans and advances to customers' includes, inter alia, the securitised loans transferred to third parties on which the Group has retained the risks and rewards, albeit partially, and which therefore, in accordance with the applicable accounting standards, cannot be derecognised. This is mainly due to mortgage loans, loans to companies and consumer loans in which the group retains subordinate financing and/or grants some kind of credit enhancement to new holders.

Securitisation is used as a tool for the management of regulatory capital and as a means of diversifying the Group's liquidity sources.

The breakdown of securitized loans held on the balance sheet, according to the nature of the financial instrument in which they are originated, is shown below:

EUR million

	2021	2020	2019
Retained on the balance sheet	80,600	88,662	93,553
Of which			
Securitised mortgage assets	*19,523*	*30,145*	*31,868*
Of which: UK assets	*5,295*	*9,034*	*13,002*
Other securitised assets	*61,077*	*58,517*	*61,685*
Total*	**80,600**	**88,662**	**93,553**

* Note 22 details the liabilities associated with these securitisation transactions.

At 31 December 2021, Grupo Santander had loans that had been fully derecognised and for which it retained servicing amounting to EUR 14,141 million (EUR 13,999 million and EUR 16,786 million at 31 December 2020 and 2019, respectively).

11. Trading derivatives

The detail of the notional amounts and the market values of the trading derivatives held by the Group in 2021, 2020 and 2019 is as follows:

EUR million

	2021		2020		2019	
	Notional amount	Market value	Notional amount	Market value	Notional amount	Market value
Trading derivatives						
Interest rate risk						
Forward rate agreements	147,603	(11)	515,889	—	218,252	(8)
Interest rate swaps	3,920,945	1,931	3,789,169	3,638	4,322,199	2,573
Options, futures and other derivatives	508,723	(228)	698,500	(891)	794,140	(907)
Credit risk						
Credit default swaps	13,571	436	12,378	(133)	23,701	(71)
Foreign currency risk						
Foreign currency purchases and sales	329,781	(664)	304,280	(45)	325,720	(441)
Foreign currency options	49,680	(114)	45,074	(7)	44,763	(182)
Currency swaps	430,644	(1,293)	394,178	(814)	379,176	(1,162)
Securities and commodities derivatives and other	69,850	669	70,861	920	61,966	579
Total	**5,470,797**	**726**	**5,830,329**	**2,668**	**6,169,917**	**381**

12. Non-current assets

The detail of Non-current assets held for sale in the consolidated balance sheets is as follows:

EUR million

	2021	2020	2019
Tangible assets	4,089	4,445	4,588
Of which:			
Foreclosed assets	*3,651*	*4,081*	*4,485*
*Of which property assets in Spain**	*3,120*	*3,485*	*3,667*
Other tangible assets held for sale	*438*	*364*	*103*
Other assets	—	—	13
Total	**4,089**	**4,445**	**4,601**

* During 2019, the sale of real estate assets to Cerberus from foreclosures materialized, generating losses of EUR 180 million.

At 31 December 2021, the allowances recognised for the total non-current assets held for sale represented 48% (48% at 31 December 2020 and 2019). The charges recorded in those years amounted to EUR 239 million, EUR 250 million and EUR 279 million, respectively, and the recoveries during these exercises are amounted to EUR 98 million, EUR 35 million and EUR 133 million, respectively.

13. Investments

a) Breakdown

The detail, by company, of Investments is as follows:

EUR million

	2021	2020	2019
Associated entities	**5,833**	**6,130**	**7,447**
Merlin Properties, SOCIMI, S.A.	1,640	1,581	1,511
Metrovacesa, S.A.	1,087	1,157	1,226
Caceis (note 3)	975	1,077	1,010
Zurich Santander Insurance America, S.L. - Consolidated	826	955	1,009
CNP Santander	418	439	402
Ebury Partners Limited (note 3)	394	388	—
Popular Spain Holding de Inversiones, S.L.U. (former Allianz Popular, S.L.) (note 3)	—	—	409
Project Quasar Investment 2017 S.L.*	—	—	1,351
Other companies	493	533	529
Joint Ventures entities	**1,692**	**1,492**	**1,325**
Santander Vida Seguros y Reaseguros, S.A. (note 3)	378	381	170
Santander Caceis Latam Holding 1, S.L. - Consolidated (previously Santander Securites Services Latam Holding, S.L)	334	326	349
U.C.I., S.A. - Consolidated	228	168	206
Fortune Auto Finance Co., ltd	222	172	155
Hyundai Capital UK Limited	201	151	135
Banco RCI Brasil S.A.	92	88	116
Other companies	237	206	194
Total Associated entities and Joint ventures	**7,525**	**7,622**	**8,772**

* At 31 December 2021 and 2020, the Group did not hold significant influence over this company, despite holding a 49% interest in it, since it did not meet any of the requirements established in the Standard by which an entity is considered to exercise significant influence over another.

Of the entities included above, at 31 December 2021, the entities Merlin Properties, SOCIMI, S.A, Metrovacesa S.A. and Compañía Española de Viviendas en Alquiler, S.A. are the only listed companies.

Below is a breakdown of the Goodwill of the main investments in joint ventures and associates included in the balance of this heading:

EUR million

	2021	2020	2019
Goodwill	**1,723**	**1,862**	**2,043**
Of which:			
Zurich Santander Insurance America, S.L. - Consolidated	*526*	*526*	*526*
Caceis	*337*	*337*	*466*

b) Changes

The changes in the investments were as follows:

EUR million

	2021	2020	2019
Balance at beginning of year	7,622	8,772	7,588
Acquisitions (disposals) of companies and capital increases (reductions)	94	676	(123)
Of which:			
Ebury Partners Limited (note 3)	*—*	*409*	*—*
Santander Vida Seguros y Reaseguros, S.A. (note 3)	*—*	*219*	*—*
Changes in the consolidation method (note 3)	—	*(1,359)*	*1,368*
Of which:			
Project Quasar Investments 2017, S.L.	*—*	*(956)*	*—*
Popular Spain Holding de Inversiones, S.L.U. (former Allianz Popular, S.L.) (note 3)	*—*	*(409)*	*—*
Caceis	*—*	*—*	*1,010*
Santander CACEIS Latam Holding 1, S.L. - Consolidado (former Santander Securities Services Latam Holding, S.L.)	*—*	*—*	*349*
Effect of equity accounting	*432*	*(96)*	*324*
Dividends distributed and reimbursements of share premium	*(662)*	*(186)*	*(407)*
Of which:			
Zurich Santander Insurance America S.L. - Consolidated	*(230)*	*(80)*	*(158)*
Caceis	*(144)*	*—*	*—*
CNP Santander	*(60)*	*—*	*(37)*
Metrovacesa, S.A.	*(60)*	*—*	*(25)*
Santander Vida Seguros y Reaseguros, S.A.- Consolidado	*(31)*	*(37)*	*(29)*
Merlin Properties, SOCIMI, S.A.	*(52)*	*(17)*	*(53)*
Popular Spain Holding de Inversiones, S.L.U. (former Allianz Popular, S.L.) (note 3)	*—*	*—*	*(52)*
Other global result	(13)	(1)	5
Exchange differences and other changes	52	(184)	17
Balance at end of year	**7,525**	**7,622**	**8,772**

c) Impairment adjustments

During the years 2021, 2020 and 2019 there was no evidence of significant impairment in the Group's associated interests.

d) Other information

A summary of the financial information at the end of December 2021 of the main associates and joint ventures (obtained from the information available at the date of preparation of the consolidated financial statements) is shown below:

EUR million

	Associates						Joint ventures					
	Merlin Properties, SOCIMI, S.A.*	Metrovacesa, S.A.*	Caceis (note 3)	Zurich Santander Insurance América, S.L. - Consolidated	CNP Santander	Ebury Partners Limited (note 3)**	Santander Caceis Latam Holding, S.L. - Consolidated	U.C.I., S.A. - Consolidated	Hyundai Capital UK Limited	Fortune Auto Finance Co., LTD	Santander Vida Seguros y Reaseguros, S.A.- Consolidated (note 3)	Banco RCI Brasil S.A.
Current assets	416	2,452	51,995	704	155	688	151	368	1,837	670	112	5
Non current assets	13,062	475	70,137	12,785	2,174	93	385	10,963	2,501	2,511	1,666	1,694
Total assets	**13,478**	**2,927**	**122,132**	**13,489**	**2,329**	**781**	**536**	**11,331**	**4,338**	**3,181**	**1,778**	**1,699**
Current liabilities	180	485	7,708	259	19	768	124	55	1,619	34	193	50
Non current liabilities	6,602	262	110,259	12,441	1,878	28	9	10,856	2,317	2,702	932	1,408
Total liabilities	**6,782**	**747**	**117,967**	**12,700**	**1,897**	**796**	**133**	**10,911**	**3,936**	**2,736**	**1,125**	**1,458**
Attributable profit for the period	56	(164)	187	291	86	(69)	39	6	79	61	76	25
Other accumulated comprehensive income	(16)	—	24	(675)	2	1	(288)	(11)	5	25	1	(228)
Rest of equity	6,656	2,344	3,954	1,173	344	53	652	425	318	359	576	444
Total Equity	**6,696**	**2,180**	**4,165**	**789**	**432**	**(15)**	**403**	**420**	**402**	**445**	**653**	**241**
Total liabilities and equity	**13,478**	**2,927**	**122,132**	**13,489**	**2,329**	**781**	**536**	**11,331**	**4,338**	**3,181**	**1,778**	**1,699**
Ordinary activities income	417	150	2,196	3,841	785	124	115	239	845	278	763	165
Profit (loss) from continuing operations	56	(164)	187	291	86	(69)	39	6	79	61	76	25
Profit (loss) for the year from discontinuing operations	—	—	—	—	—	—	—	—	—	—	—	—

* Data as of 31 December 2020, latest accounts available.
** Data as of 30 April 2021, latest accounts available.

14. Insurance contracts linked to pensions

The detail of Insurance contracts linked to pensions in the consolidated balance sheets is as follows:

EUR million

	2021	2020	2019
Assets relating to insurance contracts covering post-employment benefit plan obligations:			
Banco Santander, S.A.	149	174	192
	149	**174**	**192**

15. Liabilities and assets under insurance contracts and reinsurance assets

The detail of Liabilities under insurance contracts and reinsurance assets in the consolidated balance sheets (see note 2.j) is as follows:

EUR million

	2021			2020			2019		
Technical provisions for:	Direct insurance and reinsurance assumed	Reinsurance ceded	Total (balance payable)	Direct insurance and reinsurance assumed	Reinsurance ceded	Total (balance payable)	Direct insurance and reinsurance assumed	Reinsurance ceded	Total (balance payable)
Unearned premiums and unexpired risks	56	(50)	6	51	(45)	6	59	(52)	7
Life insurance	209	(150)	59	189	(137)	52	206	(151)	55
Unearned premiums and risks	*146*	*(130)*	*16*	*126*	*(122)*	*4*	*139*	*(132)*	*7*
Mathematical provisions	*63*	*(20)*	*43*	*63*	*(15)*	*48*	*67*	*(19)*	*48*
Claims outstanding	451	(55)	396	561	(59)	502	399	(55)	344
Bonuses and rebates	20	(11)	9	23	(11)	12	22	(10)	12
Other technical provisions	34	(17)	17	86	(9)	77	53	(24)	29
	770	**(283)**	**487**	**910**	**(261)**	**649**	**739**	**(292)**	**447**

16. Tangible assets

a) Changes

The changes in Tangible assets in the consolidated balance sheets were as follows:

EUR million

	Tangible assets				Of which: For leasing			
	For own use	Leased out under an operating lease	Investment property	Total	For own use	Leased out under an operating lease	Investment property	Total
Cost								
Balances at 1 January 2019	25,428	25,087	2,378	52,893	6,693	—	—	6,693
Additions / disposals (net) due to change in the scope of consolidation	(5)	—	(15)	(20)	—	—	—	—
Additions / disposals (net)	1,863	3,148	(310)	4,701	(997)	—	—	(997)
Transfers, exchange differences and other items	(178)	(3,781)	(603)	(4,562)	(10)	—	—	(10)
Balance at 31 December 2019	**27,108**	**24,454**	**1,450**	**53,012**	**5,686**	**—**	**—**	**5,686**
Additions / disposals (net) due to change in the scope of consolidation	(16)	1,082	7	1,073	(37)	—	—	(37)
Additions / disposals (net)	827	512	(29)	1,310	(1,339)*	—	—	(1,339)
Transfers, exchange differences and other items	(3,023)	(1,844)	32	(4,835)	(362)	—	—	(362)
Balance at 31 December 2020	**24,896**	**24,204**	**1,460**	**50,560**	**3,948**	**—**	**—**	**3,948**
Additions / disposals (net) due to change in the scope of consolidation	66	(257)	—	(191)	1	—	—	1
Additions / disposals (net)	781	(1,076)	(64)	(359)	96 *	—	—	96
Transfers, exchange differences and other items	(214)	1,552	141	1,479	384	—	—	384
Balance at 31 December 2021	**25,529**	**24,423**	**1,537**	**51,489**	**4,429**	**—**	**—**	**4,429**
Accumulated depreciation								
Balances at 1 January 2019	(10,524)	(8,404)	(199)	(19,127)	—	—	—	—
Disposals due to change in the scope of consolidation	3	—	6	9	—	—	—	—
Disposals	356	2,149	32	2,537	37	—	—	37
Charge for the year	(2,021)	—	(14)	(2,035)	(807)	—	—	(807)
Transfers, exchange differences and other items	212	1,045	31	1,288	5	—	—	5
Balance at 31 December 2019	**(11,974)**	**(5,210)**	**(144)**	**(17,328)**	(765)	—	—	(765)
Disposals due to change in the scope of consolidation	(40)	—	—	(40)	(3)	—	—	(3)
Disposals	527	2,387	11	2,925	167	—	—	167
Charge for the year	(1,906)	—	(8)	(1,914)	(706)	—	—	(706)
Transfers, exchange differences and other items	1,850	(2,762)	8	(904)	90	—	—	90
Balance at 31 December 2020	**(11,543)**	**(5,585)**	**(133)**	**(17,261)**	**(1,217)**	**—**	**—**	**(1,217)**
Disposals due to change in the scope of consolidation	(1)	40	—	39	—	—	—	—
Disposals	733	3,390	3	4,126	44	—	—	44
Charge for the year	(1,733)	—	(10)	(1,743)	(612)	—	—	(612)
Transfers, exchange differences and other items	529	(3,083)	(9)	(2,563)	(4)	—	—	(4)
Balance at 31 December 2021	**(12,015)**	**(5,238)**	**(149)**	**(17,402)**	**(1,789)**	**—**	**—**	**(1,789)**

* Includes contract extensions on operating leases and repurchases.

EUR million

	Tangible assets				Of which: For leasing			
	For own use	Leased out under an operating lease	Investment property	Total	For own use	Leased out under an operating lease	Investment property	Total
Impairment losses								
Balances at 1 January 2019	(61)	(239)	(616)	(916)	—	—	—	—
Impairment charge for the year	(14)	(12)	(36)	(62)	—	—	—	—
Releases	8	6	3	17	—	—	—	—
Disposals due to change in the scope of consolidation	—	—	—	—	—	—	—	—
Exchange differences and other	(26)	222	316	512	—	—	—	—
Balances at 31 December 2019	**(93)**	**(23)**	**(333)**	**(449)**	**—**	**—**	**—**	**—**
Impairment charge for the year	(104)	(70)	(11)	(185)	(4)	—	—	(4)
Releases	4	2	5	11	1	—	—	1
Disposals due to change in the scope of consolidation	—	—	—	—	—	—	—	—
Disposals	20	—	3	23	—	—	—	—
Exchange differences and other	33	31	(28)	36	(6)	—	—	(6)
Balances at 31 December 2020	**(140)**	**(60)**	**(364)**	**(564)**	**(9)**	**—**	**—**	**(9)**
Impairment charge for the year	(144)	(17)	(8)	(169)	(13)	—	—	(13)
Releases	10	4	5	19	1	—	—	1
Disposals due to change in the scope of consolidation	—	—	—	—	—	—	—	—
Disposals	61	—	3	64	7	—	—	7
Exchange differences and other	(42)	(29)	(44)	(115)	(1)	—	—	(1)
Balances at 31 December 2021	**(255)**	**(102)**	**(408)**	**(765)**	**(15)**	**—**	**—**	**(15)**
Tangible assets, net								
Balances at 31 December 2019	15,041	19,221	973	35,235	4,921	—	—	4,921
Balances at 31 December 2020	13,213	18,559	963	32,735	2,722	—	—	2,722
Balances at 31 December 2021	**13,259**	**19,083**	**979**	**33,321**	**2,625**	**—**	**—**	**2,625**

b) Tangible assets - For own use

The detail, by class of asset, of 'Property, plant and equipment' which is owned by the Group in the consolidated balance sheets is as follows:

EUR million

	Tangible assets for own use				
	Cost	Accumulated depreciation	Impairment losses	Carrying amount	Of which: for leasing
Land and buildings	13,972	(2,889)	(93)	10,990	4,908
IT equipment and fixtures	5,995	(4,808)	—	1,187	2
Furniture and vehicles	6,952	(4,216)	—	2,736	11
Construction in progress and other items	189	(61)	—	128	—
Balances at 31 December 2019	**27,108**	**(11,974)**	**(93)**	**15,041**	**4,921**
Land and buildings	13,081	(3,215)	(133)	9,733	2,716
IT equipment and fixtures	5,562	(4,416)	—	1,146	1
Furniture and vehicles	6,085	(3,854)	—	2,231	5
Construction in progress and other items	168	(58)	(7)	103	—
Balances at 31 December 2020	**24,896**	**(11,543)**	**(140)**	**13,213**	**2,722**
Land and buildings	13,855	(3,675)	(240)	9,940	2,570
IT equipment and fixtures	5,543	(4,335)	—	1,208	42
Furniture and vehicles	5,982	(3,954)	—	2,028	12
Construction in progress and other items	149	(51)	(15)	83	—
Balances at 31 December 2021	**25,529**	**(12,015)**	**(255)**	**13,259**	**2,625**

The carrying amount at 31 December 2021 in the foregoing table includes the following approximate amounts EUR 6,753 million (EUR 6,299 million at 31 December 2020 and EUR 7,737 million at 31 December 2019) relating to property, plant and equipment owned by group entities and branches located abroad.

c) Tangible assets - Leased out under an operating lease

Grupo Santander has assets leased out under operating leases where the company is the lessor and do not meet the accounting requirements to be classified as finance leases. The net cost of these leases is recorded as an asset and depreciated on a straight-line basis over the contractual term of the lease to the expected residual value.

The expected residual value and, consequently, the monthly depreciation expense may change during the term of the lease. The Group estimates expected residual values using independent data sources and internal statistical models. It also assesses the estimate of the residual value of these leases and adjusts the depreciation rate in line with the change in the expected value of the asset at the end of the lease.

Grupo Santander periodically assesses its investment in operating leases for impairment in certain circumstances, such as a systemic and material decrease in the values of used vehicles. If assets leased out under operating leases are deemed to be impaired, impairment is measured as the amount by which the carrying amount of the assets exceeds the fair value as estimated by discounted cash flows.

Of the EUR 19,083 million that the Group had assigned to operating leases at 31 December 2021 (EUR 18,559 million and EUR 19,221 million at 31 December 2020 and 2019, respectively), EUR 12,977 million (EUR 13,455 million and EUR 14,799 million at 31 December 2020 and 2019, respectively) relate to vehicles of Santander Consumer USA Holdings Inc. The variable lease payments of various items of this entity are not representative.

In addition, the maturity analysis of the payments for assets leased out under operating leases from Santander Consumer USA Holdings Inc. is as follows:

EUR million

	2021
Maturity Analysis	
2022	3,030
2023	3,814
2024	5,644
2025	872

d) Tangible assets - Investment property

The fair value of investment property at 31 December 2021, 2020, 2019 amounted to EUR 1,088, 1,055 and 1,076 million, respectively. A comparison of the fair value of investment property at 31 December 2021, 2020 and 2019 with the net book value shows gross unrealised gains of EUR 109, 92 and 103 million, respectively, attributed completely to the group.

The rental income earned from investment property and the direct costs related both to investment properties that generated rental income in 2021, 2020 and 2019 and to investment properties that did not generate rental income in those years are not material in the context of the consolidated financial statements.

17. Intangible assets – Goodwill

The detail of goodwill, based on the cash-generating units giving rise thereto, is as follows:

EUR million	2021	2020	2019
Banco Santander (Brasil)	3,219	3,109	4,388
SAM Investment Holdings Limited	1,444	1,444	1,173
Santander Consumer Germany	1,304	1,314	1,236
Santander Bank Polska	1,095	1,104	2,427
Santander Portugal	1,040	1,040	1,040
Santander España	1,027	1,027	1,027
Santander Consumer USA	979	904	2,143
Santander Bank, National Association	643	594	1,828
Santander UK	633	592	7,147
Banco Santander - Chile	516	571	589
Grupo Financiero Santander (México)	435	399	460
Santander Consumer Nordics	224	216	496
Other companies	154	157	292
Total Goodwill	**12,713**	**12,471**	**24,246**

The changes in goodwill were as follows:

EUR million	2021	2020	2019
Balance at beginning of year	12,471	24,246	25,466
Additions (note 3)	81	429	41
Of which:			
SAM Investment Holdings Limited	—	*271*	—
Santander España	—	—	*4*
Impairment losses	(6)	(10,100)	(1,491)
Of which:			
Santander UK	—	*(6,101)*	*(1,491)*
Santander Bank Polska	—	*(1,192)*	—
Santander Bank, National Association	—	*(1,177)*	—
Santander Consumer USA	—	*(1,153)*	—
Santander Consumer Nordics	—	*(277)*	—
Disposals or changes in scope of consolidation	—	—	—
Exchange differences and other items	167	(2,104)	230
Balance at end of year	**12,713**	**12,471**	**24,246**

Grupo Santander has goodwill generated by cash-generating units located in non-euro currency countries (mainly Brazil, Poland, the United States, the United Kingdom, Chile, Mexico, Norway and Sweden) and, therefore, this gives rise to exchange differences on the translation to euros, at closing rates, of the amounts of goodwill denominated in foreign currencies. Accordingly, in 2021 there was an increase of EUR 167 million (a decrease of EUR 2,104 million in 2020 and an increase of EUR 230 million in 2019), due to exchange differences and other items which, pursuant to current standards, were recognised with a change to 'Other comprehensive income - Items that may be reclassified to profit or loss - Exchange differences in other comprehensive income in the consolidated statement of recognised income and expense' (see note 29.d).

At least once per year (or whenever there is any indication of impairment), Grupo Santander performs an analysis of the potential impairment of its recorded goodwill with respect to its recoverable amount. The first step that must be taken in order to perform this analysis is the identification of the cash-generating units, which are the Group's smallest identifiable groups of assets that generate cash inflows that are largely independent of the cash flows of other assets or groups of assets.

The amount to be recovered of each cash-generating unit is determined taking into consideration the carrying amount (including any fair value adjustment arising on the business combination) of all the assets and liabilities of all the independent legal entities composing the cash-generating unit, together with the related goodwill.

The amount to be recovered of the cash-generating unit is compared with its recoverable amount in order to determine whether there is any impairment.

Grupo Santander's directors assess the existence of any indication that might be considered to be evidence of impairment of the cash-generating unit by reviewing information including the following (i) certain macroeconomic variables that might affect its investments (population data, political situation, economic situation —including banking concentration level—, among others) and (ii) various microeconomic variables comparing the investments of the Group with the financial services industry of the country in which the cash-generating unit carries on most of its business activities (balance sheet composition, total funds under management, results, efficiency ratio, capital adequacy ratio, return on equity, among others).

Regardless of whether there is any indication of impairment, every year the Group calculates the recoverable amount of each cash-generating unit to which goodwill, has been allocated and, to this end, it uses price quotations, market references (multiples), internal estimates and valuations performed by internal and external experts.

Firstly, the Group determines the recoverable amount by calculating the fair value of each cash-generating unit on the basis of the quoted price of the cash-generating units, if available.

In addition, the Group performs estimates of the recoverable amounts of certain cash-generating units by calculating their value in use using discounted cash flow projections. The main assumptions used in this calculation are (i) earnings projections based on the financial budgets approved by the Group's directors which cover between three and five year periods (unless a longer time horizon can be justified), (ii) discount rates determined as the cost of capital taking into account the risk-free rate of return plus a risk premium in line with the market and the business in which the units operate and (iii) constant growth rates used in order to extrapolate earnings in perpetuity which do not exceed the long-term average growth rate for the market in which the cash-generating unit in question operates.

The cash flow projections used by Group management to obtain the values in use are based on the financial budgets approved by both local management of the related local units and the Group's directors. The Group's budgetary estimation process is common for all the cash-generating units. The local management teams prepare their budgets using the following key assumptions:

a) Microeconomic variables of the cash-generating unit: management takes into consideration the current balance sheet structure, the product mix and the business decisions taken by local management in this regard.

b) Macroeconomic variables: growth is estimated on the basis of the changing environment, taking into consideration expected GDP growth in the unit's geographical location and forecast trends in interest and exchange rates. These data, which are based on external information sources, are provided by the Group's economic research service.

c) Past performance variables: in addition, management takes into consideration in the projection the difference (both positive and negative) between the cash-generating unit's past performance and budgets.

During 2021, the Group recognised impairment losses of EUR 6 million of immaterial goodwill which were recognised under 'Impairment or reversal of impairment of non-financial assets, net - Intangible assets'. Goodwill is deducted from CET1 for regulatory purposes and therefore an impairment of goodwill has no impact on the Group's capital ratios.

In 2020, considering the economic and business environment resulting from covid-19, market conditions and the existing economic uncertainty, an impairment test was performed for certain CGUs during the second quarter. As a result, the Group recognised goodwill impairment of EUR 10,100 million, mainly associated with Santander UK, Santander Bank Polska, Santander Bank, National Association, Santander Consumer USA and Santander Consumer Nordics.

In 2019, the Group recorded an impairment of goodwill associated with Santander UK amounting to EUR 1,491 million considering the following reasons: decrease in the profit generation capacity of the cash generating unit in contrast to the forecast made in previous years, the general competitive environment in the UK, the impact of the banking reform on retail businesses and the impact of the uncertainty generated by Brexit on the country's economic growth.

Following is a detail of the main assumptions taken into account in determining the recoverable amount, at 2021 year-end, of the most significant cash-generating units which were valued using the discounted cash flow method:

	2021		
	Projected period	Discount rate*	Nominal perpetual growth rate
Santander UK	5 years	9.2%	2.3%
Santander Bank Polska	5 years	10.3%	3.5%
Santander Consumer USA	3 years	10.6%	1.5%
Santander Bank, National Association**	5 years	11.6%	3.0%
Santander Consumer Germany	5 years	8.3%	1.8%
SAM Investment Holdings, Limited	5 years	10.4%	2.5%
Santander Portugal	5 years	9.7%	1.8%
Santander Consumer Nordics	5 years	9.9%	2.0%

* Post-tax discount rate.
** Weighted information of the main assumptions of the segments to which goodwill has been allocated.

The discount and nominal perpetual growth rates taken into account in 2020 and 2019 are presented below for comparison purposes:

	Discount rate*		Nominal perpetual growth rate	
	2020	2019	2020	2019
Santander UK	9.5%	8.5%	2.3%	2.5%
Santander Bank Polska	10.0%	9.2%	3.5%	3.5%
Santander Consumer USA	10.7%	9.5%	1.5%	1.5%
Santander Bank, National Association**	11.6%	9.6%	2.5%	3.6%
Santander Consumer Germany	9.0%	8.2%	1.8%	2.5%
SAM Investment Holdings, Limited	10.1%	10.0%	2.5%	2.5%
Santander Portugal	9.8%	8.9%	1.8%	2.0%
Santander Consumer Nordics	10.1%	8.6%	2.0%	2.5%

* Post-tax discount rate.
** Weighted information of the main assumptions of the segments to which goodwill has been allocated.

Given the degree of uncertainty of the above key assumptions on which the recoverable amount of the cash-generating units is based, the Group performs a sensitivity analysis which consisted of adjusting +/- 50 basis points the discount rate, adjusting +/- 50 basis points the growth rate in perpetuity and reducing the cash flow projections by 5%. These changes in the key assumptions in isolation mean that the recoverable amount of all the cash-generating units continues to exceed their amount to be recovered and have been considered by the Group to be reasonably possible in a stable economic environment and in which non-recurring events unrelated to the business operations of the cash-generating units are not contemplated.

The recoverable amount of Banco Santander - Chile, Grupo Financiero Santander (México) and Banco Santander (Brasil) was calculated as the fair values of the aforementioned cash-generating units obtained from the quoted market prices of their shares at year-end. This value exceeded the amount to be recovered. A significant reduction in the quoted market prices of these cash generating unit could result in an indication of impairment which in turn may lead to a goodwill impairment charge in the future.

18. Intangible assets - Other intangible assets

The detail of Intangible assets - Other intangible assets in the consolidated balance sheets and of the changes therein in 2021, 2020, and 2019 is as follows:

EUR million

	Estimated useful life	31 December 2020	Net additions and disposals	Change in scope of consolidation	Amortization and impairment	Application of amortization and impairment	Exchange differences and other	31 December 2021
Cost		**9,376**	**1,409**	**5**	**—**	**(293)**	**215**	**10,712**
Brand names		37	—	—	—	(34)	1	4
IT developments	3 -7 years	7,900	1,325	4	—	(212)	172	9,189
Other		1,439	84	1	—	(47)	42	1,519
Accumulated amortisation		(5,809)	—	(2)	(1,013)	232	(115)	(6,707)
Development		*(5,307)*	—	*(1)*	*(922)*	*178*	*(97)*	*(6,149)*
Other		*(502)*	—	*(1)*	*(91)*	*54*	*(18)*	*(558)*
Impairment losses		(130)	—	—	(65)	61	—	(134)
Of which addition		—	—	—	*(65)*	—	—	—
Liberation		—	—	—	—	—	—	—
		3,437	**1,409**	**3**	**(1,078)**	**—**	**100**	**3,871**

EUR million

	Estimated useful life	31 December 2019	Net additions and disposals	Change in scope of consolidation	Amortization and impairment	Application of amortization and impairment	Exchange differences and other	31 December 2020
Cost		**9,263**	**1,451**	**(33)**	**—**	**(241)**	**(1,064)**	**9,376**
Brand names		42	—	—		—	(5)	37
IT developments	3-7 years	7,945	1,123	(34)		(224)	(910)	7,900
Other		1,276	328	1		(17)	(149)	1,439
Accumulated amortisation		(5,686)	35	49	(896)	105	584	(5,809)
Development		*(5,139)*	—	*49*	*(792)*	*88*	*487*	*(5,307)*
Other		*(547)*	*35*	—	*(104)*	*17*	*97*	*(502)*
Impairment losses		(136)	—	—	(142)	136	12	(130)
Of which addition		—	—	—	*(142)*	—	—	—
Liberation		—	—	—	—	—	—	—
		3,441	**1,486**	**16**	**(1,038)**	**—**	**(468)**	**3,437**

EUR million

	Estimated useful life	31 December 2018	Net additions and disposals	Change in scope of consolidation	Amortization and impairment	Application of amortization and impairment	Exchange differences and other	31 December 2019
Cost		**8,680**	**1,377**	**(41)**	**—**	**(887)**	**134**	**9,263**
Brand names		36	2	2		—	2	42
IT developments	3-7 years	7,134	1,374	(19)		(639)	95	7,945
Other		1,510	1	(24)		(248)	37	1,276
Accumulated amortisation		(5,432)	—	8	(966)	806	(102)	(5,686)
Development		*(4,743)*	—	*4*	*(874)*	*570*	*(96)*	*(5,139)*
Other		*(689)*	—	*4*	*(92)*	*236*	*(6)*	*(547)*
Impairment losses		(154)	—	—	(73)	81	10	(136)
Of which addition		—	—	—	*(75)*	—	—	—
Liberation		—	—	—	*2*	—	—	—
		3,094	**1,377**	**(33)**	**(1,039)**	**—**	**42**	**3,441**

In 2021, 2020 and 2019, impairment losses of EUR 65 million, EUR 142 million and EUR 73 million, respectively, were recognised under Impairment or reversal of impairment on non-financial assets, net – intangible assets. This impairment losses are related mainly to the decline in or loss of the recoverable value of certain computer systems and applications as a result of the processes initiated by the Group to adapt to the various regulatory changes and to transform or integrate businesses.

19. Other assets

The detail of 'Other assets' is as follows:

EUR million

	2021	2020	2019
Transactions in transit	157	88	157
Net pension plan assets (note 25)	1,990	635	903
Prepayments and accrued income	2,610	2,806	3,129
Other (note 2.n)	3,683	7,362	5,752
	8,440	**10,891**	**9,941**

20. Deposits from central banks and credit institutions

The detail, by classification, counterparty, type and currency, of Deposits from central banks and 'Deposits from credit institutions' in the consolidated balance sheets is as follows:

EUR million

	2021	2020	2019
CENTRAL BANKS			
Classification			
Financial liabilities held for trading	1,038	—	—
Financial liabilities designated at fair value through profit or loss	607	2,490	12,854
Financial liabilities at amortized cost	139,757	112,804	62,468
	141,402	**115,294**	**75,322**
Type			
Deposits on demand	10	10	5
Time deposits	134,439	108,090	67,424
Reverse repurchase agreements	6,953	7,194	7,893
	141,402	**115,294**	**75,322**
CREDIT INSTITUTIONS			
Classification			
Financial liabilities held for trading	6,488	—	—
Financial liabilities designated at fair value through profit or loss	1,064	6,765	9,340
Financial liabilities at amortized cost	52,235	62,620	90,501
	59,787	**69,385**	**99,841**
Type			
Deposits on demand	6,139	5,727	9,136
Time deposits	37,332	43,308	61,406
Reverse repurchase agreements	16,198	20,179	29,115
Subordinated deposits	118	171	184
	59,787	**69,385**	**99,841**
Currency			
Euro	107,908	104,499	79,008
Pound sterling	42,451	23,339	18,129
US dollar	24,012	26,581	53,403
Brazilian real	11,297	12,356	13,022
Other currencies	15,521	17,904	11,601
TOTAL	**201,189**	**184,679**	**175,163**

In 31 December 2021, the balance of the conditional long-term financing of the European Central Bank (TLTRO- Targeted Long-Term Refinancing Operation-) amounted to EUR 88,894 million, all corresponding to TLRTO III (EUR 77,732 million and EUR 46,201 million at 31 December 2020 and 2019, respectively).

In December 2021, the income recognized in the consolidated income statement corresponding to TLTRO III amounts to EUR 868 million (EUR 391 million at 31 December 2020).

Grupo Santander´s deposits with central banks in 2021 amounted to EUR 193,102 million (EUR 137,047 million and EUR 75,353 million in 2020 and 2019), of which EUR 99,530 million with the European Central Bank (EUR 71,324 million and EUR 28,182 million in 2020 and 2019, respectively), at an average effective cost of -0.40%.

Note 50 contains a detail of the residual maturity periods of financial liabilities at amortised cost.

21. Customer deposits

The detail, by classification, geographical area and type, of Customer deposits is as follows:

EUR million

	2021	2020	2019
Classification			
Financial liabilities held for trading	6,141	—	—
Financial liabilities designated at fair value through profit or loss	25,608	34,343	34,917
Financial liabilities at amortized cost	886,595	814,967	789,448
	918,344	**849,310**	**824,365**
Geographical area			
Spain	319,565	294,516	271,103
European Union (excluding Spain)*	112,361	106,013	334,542
United States and Puerto Rico	73,814	59,057	60,011
Other OECD countries*	321,607	306,243	71,235
South America	90,997	83,481	87,474
	918,344	**849,310**	**824,365**
Type			
Demand deposits-	717,728	642,897	588,533
Current accounts	*482,649*	*418,752*	*373,146*
Savings accounts	*227,318*	*216,500*	*208,701*
Other demand deposits	*7,761*	*7,645*	*6,686*
Time deposits-	164,259	171,939	196,921
Fixed-term deposits and other term deposits	*162,172*	*170,127*	*194,163*
Home-purchase savings accounts	*38*	*43*	*44*
Discount deposits	*3*	*3*	*3*
Hybrid financial liabilities	*1,906*	*1,743*	*2,711*
Subordinated liabilities	*140*	*23*	—
Repurchase agreements	36,357	34,474	38,911
	918,344	**849,310**	**824,365**

* The amounts referring to 2021 and 2020 exercises for the United Kingdom geographical area have been considered in the line Other OECD countries, instead of in the line European Union (excluding Spain) due to the leaving of the United Kingdom from the European Union.

Note 50 contains a detail of the residual maturity periods of financial liabilities at amortised cost.

22. Marketable debt securities

a) Breakdown

The detail, by classification and type, of Marketable debt securities is as follows:

EUR million

	2021	2020	2019
Classification			
Financial liabilities held for trading	—	—	—
Financial liabilities designated at fair value through profit or loss	5,454	4,440	3,758
Financial liabilities at amortized cost	240,709	230,829	258,219
	246,163	**235,269**	**261,977**
Type			
Bonds and debentures outstanding	194,362	191,577	208,455
Subordinated	25,938	21,686	20,878
Notes and other securities	25,863	22,006	32,644
	246,163	**235,269**	**261,977**

The distribution of the book value of debt securities issued by contractual maturity at 31 December 2021 is shown below:

EUR million

	On demand	Within 1 month	1 to 3 months	3 to 12 months	1 to 3 years	3 to 5 years	More than 5 years	Total
Subordinated debt	—	—	49	130	656	6,167	18,936	25,938
Senior unsecured debt	—	3,033	3,734	10,621	38,731	26,715	28,600	111,434
Senior secured debt	—	1,673	5,271	12,364	33,562	13,340	16,718	82,928
Promissory notes and other securities	—	9,201	9,304	7,358	—	—	—	25,863
Debt securities issued	**—**	**13,907**	**18,358**	**30,473**	**72,949**	**46,222**	**64,254**	**246,163**

The distribution by contractual maturity of the notional amounts of these debt securities issued at 31 December 2021 is as follows:

EUR million

	On demand	Within 1 month	1 to 3 months	3 to 12 months	1 to 3 years	3 to 5 years	More than 5 years	Total
Subordinated debt	—	—	49	129	652	6,128	18,816	25,774
Senior unsecured debt	—	3,063	3,771	10,725	39,110	26,976	28,880	112,525
Senior secured debt	—	1,663	5,241	12,293	33,369	13,263	16,622	82,451
Promissory notes and other securities	—	9,341	9,447	7,471	—	—	—	26,259
Debt securities issued	**—**	**14,067**	**18,508**	**30,618**	**73,131**	**46,367**	**64,318**	**247,009**

b) Bonds and debentures outstanding

The detail, by currency of issue, of 'Bonds and debentures outstanding' is as follows:

	EUR million			2021	
Currency of issue	2021	2020	2019	Outstanding issue amount in foreign currency (Million)	Annual interest rate (%)
Euro	90,348	89,031	89,008	90,348	1.06%
US dollar	66,581	61,174	64,952	75,406	2.39%
Pound sterling	13,340	16,569	20,178	11,206	2.13%
Brazilian real	9,131	8,398	15,292	57,702	1.99%
Chilean peso	3,757	5,624	6,848	3,623,635	5.03%
Other currencies	11,205	10,781	12,177		
Balance at end of year	**194,362**	**191,577**	**208,455**		

The changes in 'Bonds and debentures outstanding' were as follows:

EUR million	2021	2020	2019
Balance at beginning of year	**191,577**	**208,455**	**195,498**
Net inclusion of entities in the Group	—	785	—
Issues	**59,937**	**54,905**	**64,184**
Of which:			
Santander Consumer USA Holdings Inc.	*15,771*	*12,246*	*15,631*
Banco Santander (Brasil) S.A.	*14,996*	*11,036*	*13,227*
Banco Santander, S.A.	*11,766*	*10,220*	*12,066*
Santander UK Group Holdings plc	*3,372*	*6,320*	*4,547*
Santander Consumo 4, F.T.	*1,531*	—	—
SC Germany S.A. (New Compartment: Consumer 2021-1)	*1,496*	—	—
Santander Consumer Finance, S.A.	*1,169*	*2,394*	*5,150*
Banco Santander - Chile	*1,158*	*766*	*1,644*
Santander International Products, Plc.	*914*	*1,588*	*848*
Auto ABS French Lease Master Compartiment 2016	*900*	*300*	*300*
Santander Factoring Sp. z o.o.	*819*	*391*	*375*
PSA Banque France	*815*	*385*	*1,132*
Santander Consumer Bank AS	*779*	*773*	*1,572*
PSA Bank Deutschland GmbH	*600*	—	*1,104*
Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México	*541*	*1,770*	*577*
PSA Financial Services, Spain, E.F.C, S.A.	—	*605*	—
Santander Holdings USA, Inc.	—	*1,269*	*2,778*
SC Germany S.A., Compartment Consumer 2020-1	—	*1,800*	—
SCF Rahoituspalvelut IX DAC	—	*650*	—
Santander Consumer Bank AG	—	*500*	*750*
SCF Rahoituspalvelut VIII DAC	—	—	*799*
Redemptions and repurchases	**(61,846)**	**(62,699)**	**(52,462)**
Of which:			
Banco Santander (Brasil) S.A.	*(15,182)*	*(14,211)*	*(12,817)*
Santander Consumer USA Holdings Inc.	*(15,151)*	*(13,959)*	*(14,517)*
Santander UK Group Holdings plc	*(14,695)*	*(14,102)*	*(9,115)*
Santander Consumer Finance, S.A.	*(3,779)*	*(4,371)*	*(2,550)*
Banco Santander, S.A.	*(3,185)*	*(5,991)*	*(3,303)*
Banco Santander - Chile	*(1,030)*	*(1,974)*	*(848)*
Santander Factoring Sp. z o.o.	*(920)*	*(299)*	*(407)*
Auto ABS French Lease Master Compartiment 2016	*(900)*	—	—
Santander Holdings USA, Inc.	*(778)*	*(1,201)*	*(1,990)*
PSA Bank Deutschland GmbH	*(580)*	—	*(902)*
Santander Consumer Bank AS	*(348)*	*(936)*	*(1,551)*
Santander International Products, Plc.	*(345)*	*(324)*	*(722)*
PSA Banque France	*(335)*	*(684)*	—
Banco Santander Totta, S.A.	*(9)*	*(784)*	*(739)*
Exchange differences and other movements	4,694	(9,869)	1,235
Balance at year-end	**194,362**	**191,577**	**208,455**

c) Notes and other securities

These notes were issued basically by Santander Consumer Finance, S.A., Santander UK plc, Banco Santander (México), S.A. Institución de Banca Múltiple, Grupo Financiero Santander México, Banco Santander, S.A., Santander Consumer Bank AG, PSA Banque France, Banco Santander - Chile, Santander Bank Polska S.A. and Banco Santander S.A. - Uruguay.

d) Guarantees

Set forth below is information on the liabilities secured by assets:

EUR million

	2021	2020	2019
Asset-backed securities	40,519	35,753	38,616
Of which, mortgage-backed securities	*1,487*	*2,274*	*3,819*
Other mortgage securities	41,779	49,425	50,269
Of which: mortgage-backed bonds	*23,197*	*24,736*	*24,736*
Territorial covered bond	630	869	1,270
	82,928	**86,047**	**90,155**

The main characteristics of the assets securing the aforementioned financial liabilities are as follows:

1. Asset-backed securities

   a. Mortgage-backed securities- these securities are secured by mortgage assets (see Note 10.e) with average maturities of more than ten years that must: be a first mortgage for acquisition of principal or second residence, be current in payments, have a loan-to-value ratio below 80% and have a liability insurance policy in force covering at least the appraisal value. The value of the financial liabilities broken down in the foregoing table is lower than the balance of the assets securing them —securitised assets retained on the balance sheet— mainly because the Group repurchases a portion of the bonds issued, and in such cases they are not recognised on the liability side of the consolidated balance sheet.

   b. Other asset - backed securities: includes asset-backed securities, notes issued by securitization funds collateralized mainly by mortgage loans that do not meet the above requirements and other loans (mainly personal loans with an average maturity of five years and loans to SMEs with average maturities of seven years) and private issues of Santander Consumer USA Holdings Inc collateralized by vehicles assigned under operating leases.

2. Other mortgage securities include mainly: (i) mortgage-backed bonds with average maturities of more than ten years that are secured by a portfolio of mortgage loans and credits (included in secured loans —see note 10.b—) which must: not be classified as of procedural stage; have available appraisals performed by specialised entities; have a loan-to-value (LTV) ratio below 80% in the case of home loans and below 60% for loans for other assets and have sufficient liability insurance, (ii) other debt securities issued as part of the Group's liquidity strategy in the UK, mainly covered bonds in the UK secured by mortgage loans and other assets.

The fair value of the guarantees received by the Group (financial and non-financial assets) which the Group is authorised to sell or pledge even if the owner of the guarantee has not defaulted is scantly material taking into account the Consolidated financial statements as a whole.

e) Spanish mortgage-market issues

The members of the board of directors hereby state that the Group entities operating in the Spanish mortgage-market issues area have established and implemented specific policies and procedures to cover all activities carried on and guarantee strict compliance with mortgage-market regulations applicable to these activities as provided for in Royal Decree 716/2009, of 24 April implementing certain provisions of Mortgage Market Law 2/1981, of 25 March, and, by application thereof, in Bank of Spain Circulars 7/2010 and 5/2011, and other financial and mortgage system regulations. Also, financial management defines the Grupo Santander's funding strategy.

The risk policies applicable to mortgage market transactions envisage maximum loan-to-value (LTV) ratios, and specific policies are also in place adapted to each mortgage product, which occasionally require the application of stricter limits.

Grupo Santander's general policies in this respect require the repayment capacity of each potential customer (the effort ratio in loan approval) to be analysed using specific indicators that must be met. This analysis must determine whether each customer's income is sufficient to meet the repayments of the loan requested. In addition, the analysis of each customer must include a conclusion on the stability over time of the customer's income considered with respect to the life of the loan. The aforementioned indicator used to measure the repayment capacity (effort ratio) of each potential customer takes into account mainly the relationship between the potential debt and the income generated, considering on the one hand the monthly repayments of the loan requested and other transactions and, on the other, the monthly salary income and duly supported income.

Grupo Santander entities have specialised document comparison procedures and tools for verifying customer information and solvency (see note 53).

Grupo Santander entities' procedures envisage that each mortgage originated in the mortgage market must be individually valued by an appraisal company not related to the Group.

In accordance with Article 3 of Mortgage Market Law 41/2007, any appraisal company approved by the Bank of Spain may issue valid appraisal reports. However, as permitted by this same article, the Group entities perform several checks and select, from among these companies, a small group with which they enter into cooperation agreements with special conditions and automated control mechanisms. The Group's internal regulations specify, in detail, each of the internally approved companies, as well as the approval requirements and procedures and the controls established to uphold them. In this connection, the regulations establish the functions of an appraisal company committee on which the various areas of the Group related to these companies are represented. The aim of the committee is to regulate and adapt the internal regulations and the activities of the appraisal companies to the current market and business situation (see note 2.i).

Basically, the companies wishing to cooperate with the Group must have a significant level of activity in the mortgage market in the area in which they operate, they must pass a preliminary screening process based on criteria of independence, technical capacity and solvency -in order to ascertain the continuity of their business- and, lastly, they must pass a series of tests prior to obtaining definitive approval.

In order to comply in full with the legislation, any appraisal provided by the customer is reviewed, irrespective of which appraisal company issues it, to check that the requirements, procedures and methods used to prepare it are formally adapted to the valued asset pursuant to current legislation and that the values reported are customary in the market.

The information required by Bank of Spain circulars 7/2010 and 5/2011, by application of Royal Decree 716/2009, of 24 April is as follows:

EUR million

	2021	2020	2019
Face value of the outstanding mortgage loans and credits that support the issuance of mortgage-backed and mortgage bonds pursuant to Royal Decree 716/2009 (excluding securitised bonds)	83,088	76,554	84,720
Of which:			
Loans eligible to cover issues of mortgage-backed securities	*64,896*	*57,382*	*59,517*
Transfers of assets retained on balance sheet: mortgage-backed certificates and other securitised mortgage assets	*11,133*	*17,610*	*14,569*

Mortgage-backed bonds

The mortgage-backed bonds ('*cédulas hipotecarias*') issued by the Group entities are securities the principal and interest of which are specifically secured by mortgages, there being no need for registration in the property register, by mortgage on all those that at any time are recorded in favour of the issuer and are not affected by the issuance of mortgage bonds and / or are subject to mortgage participations, and / or mortgage transfer certificates, and, if they exist, by substitution assets eligible to be hedged and for the economic flows generated by derivative financial instruments linked to each issue, and without prejudice to the issuer's unlimited liability.

The mortgage bonds include the credit right of its holder against the issuing entity, guaranteeing in the manner provided for in the previous paragraph, and involve the execution to claim from the issuer the payment after due date. The holders of these securities are recognised as preferred creditors, singularly privileged, with the preference, included in number 3º of article 1,923 of the Spanish Civil Code against any other creditor, in relation with the entire group of loans and mortgage loans registered in favour of the issuer, except those that act as coverage for mortgage bonds and / or are subject to mortgage participations and / or mortgage transfer certificates.

In the event of insolvency, the holders of mortgage-backed bonds, as long as they are not considered 'person especially related' to the issuing entity in accordance with Royal Legislative Decree 1/2020, of 5 May, approving the revised text of the Bankruptcy Law , will enjoy the special privilege established in Article 270.1.1 of the aforementioned Bankruptcy Law. Without prejudice to the foregoing, in accordance with Article 242.10 of the Bankruptcy Law, during the insolvency proceedings, the payments relating to the repayment of the principal and interest of the bonds issued and outstanding at the date of the insolvency filing will be settled up to the amount of the income received by the insolvent party from the mortgage loans and credits and, where appropriate, from the replacement assets backing the bonds and from the cash flows generated by the financial instruments associated with the issues (Article 14 of Law 2/1981 of 25 March 1981 regulating the mortgage market).

If, due to a timing mismatch, the income received by the insolvent party is insufficient to meet the payments described in the preceding paragraph, the insolvency managers must settle them by realising the replacement assets set aside to cover the issue and, if this is not sufficient, they must obtain financing to meet the mandated payments to the holders of the mortgage-backed bonds, and the finance provider must be subrogated to the position of the bond-holders.

In the event that it would be necessary to proceed in accordance with the terms of Article 212.1 and, in accordance with the requirements of Article 413 of the Insolvency Law, the payments to all holders of the mortgage-backed bonds issued would be made on a pro-rata basis, irrespective of the issue dates of the bonds. If the same credit or loan is subject to the payment of bonds and a mortgage bond issue, it will be paid first to the holders of the bonds.

The outstanding mortgage-backed bonds issued by Grupo Santander totalled EUR 23,197 million at 31 December 2021 (all of which were denominated in euros), of which EUR 22,747 million were issued by Banco Santander, S.A (with an outstanding face value of EUR 22,266 million), and EUR 450 million were issued by Santander Consumer Finance, S.A. The issues outstanding at 31 December 2021 and 2020 are detailed in the separate financial statements of each of these companies.

Mortgage-backed bond issuers have an early redemption option for the purpose of complying with the limits on the volume of outstanding mortgage-backed bonds stipulated by mortgage market regulations. In addition, the issuing entity may advance the mortgage-backed bonds, if this has been expressly established in the final conditions of the issue in question and under the conditions set out therein.

None of the mortgage-backed bonds issued by the Group entities had replacement assets assigned to them.

23. Subordinated liabilities

a) Breakdown

The detail, by currency of issue, of Subordinated liabilities, deposits and marketable debt securities, in the consolidated balance sheets is as follows:

	EUR million			2021	
				Outstanding issue amount in foreign currency (million)	Annual interest rate (%)
Currency of issue	2021	2020	2019		
Euro	13,857	13,570	12,542	13,857	3.52%
US dollar	8,236	5,991	6,506	9,328	4.92%
Pound sterling	1,535	565	655	1,289	4.36%
Brazilian real	879	—	—	5,555	9.65%
Other currencies	1,689	1,754	1,359		
Balance at end of year	**26,196**	**21,880**	**21,062**		

Note 50 contains a detail of the residual maturity periods of subordinated liabilities at each year-end.

b) Changes

The movement in the balance of subordinated liabilities in the last three years were as follows:

EUR million			
	2021	2020	2019
Balance at beginning of year	21,880	21,062	23,820
Net inclusion of entities in the Group (note 3)	—	—	—
Placements	5,340	4,075	1,090
Of which:			
Banco Santander, S.A.	*4,469*	*3,722*	*1,056*
Banco Santander (Brasil) S.A.	*871*	—	—
Banco Santander - Chile	—	*353*	—
PSA Bank Deutschland GmbH	—	—	*23*
Banca PSA Italia S.p.a.	—	—	*11*
Net redemptions and repurchases*	(1,500)	(2,838)	(4,009)
Of which:			
Banco Santander, S.A.	*(1,500)*	*(1,671)*	*(3,782)*
Santander UK plc	—	*(740)*	*(16)*
Santander UK Group Holdings plc	—	*(316)*	—
Santander Bank, National Association	—	*(111)*	*(19)*
Banco Santander (Brasil) S.A.	—	—	*(124)*
Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México	—	—	*(69)*
Exchange differences and other movements	476	(419)	161
Balance at end of year	**26,196**	**21,880**	**21,062**

* The balance relating to issuances, redemptions and repurchases (EUR 3,840 million), together with the interest paid in remuneration of these issuances including PPCC (EUR 1,184 million), is included in the cash flow from financing activities.

c) Other disclosures

This caption includes contingent convertible or redeemable preferred participations, as well as other subordinated financial instruments issued by consolidated companies, which do not qualify as equity (preferred shares).

Preferred shares do not have voting rights and are non-cumulative. They have been subscribed by third parties outside the Group, and except for the issues of Santander UK plc, the rest are redeemable by decision of the issuer, according to the terms of each issue.

Banco Santander's contingently convertible preferred participations are subordinated debentures and rank after common creditors and any other subordinated credit that by law and/or by their terms, to the extent permitted by Spanish law, ranks higher than the contingently convertible preferred participations. Their remuneration is conditioned to the obtainment of sufficient distributable profits, and to the limitations imposed by the regulations on shareholders' equity, and they have no voting rights. The other issues of Banco Santander, S.A. mentioned in this caption are also subordinated debentures and, for credit ranking purposes, they rank behind all the common creditors of the issuing entities and ahead of any other subordinated credit that ranks pari passu with the Bank's contingently convertible preferred participations.

The main issues of subordinated debt securities issued, broken down by company, are detailed below:

Issues by Banco Santander, S.A.

At 22 November 2021, Banco Santander, S.A. issued subordinated debentures for a term of eleven years, with a redemption option on the tenth anniversary of the issue date, in the amount of USD 1,000 million (EUR 1,007 million at the exchange rate on the day of issue). The issue bears interest at an annual rate of 3.225%, payable semi-annually, for the first ten years (then repricing at a margin of 160 points over the one-year U.S. government bond).

At 4 October 2021, Banco Santander, S.A. issued subordinated debentures for a term of eleven years, with a redemption option on the sixth anniversary of the issue date, amounting to GBP 850 million (EUR 887 million at the exchange rate on the day of issue). The issue bears interest at an annual rate of 2.25%, payable annually for the first six years (then repricing at a margin of 165 points over the 5-year UK government bond).

At 21 September 2021, Banco Santander, S.A. carried out a placement of preferential shares contingently convertible into newly issued ordinary shares of the Bank ('PPCC') for a nominal amount of EUR 1,000 million (issue placed on the market EUR 997 million). The issuance has been carried out at par and the remuneration of the PPCC, whose payment is subject to certain conditions and is also discretionary, has been set at 3.625% per year for the first eight years, being reviewed every five years applying a margin of 376 basis points over the 5-year Mid-Swap Rate.

At 11 September 2021, Banco Santander, S.A. proceeded to redeem early and voluntarily the entire issue made on 11 September 2014 of tier 1 contingently convertible preference shares (PPCC) with ISIN code XS110729154 which are traded in the Irish Stock Exchange Market 'Global Exchange Market', for a total nominal amount of EUR 1,500 million .

At 12 May 2021, Banco Santander placed the issue of preference shares contingently convertible into newly issued ordinary shares of the Bank, previously announced, for a total nominal amount of EUR 1,578 million, issued in a Series in Dollars of USD 1,000 million (EUR 828 million at the exchange rate on the day of issue) and a Series in Euros for an amount of EUR 750 million. The issuance is carried out at par and the remuneration of the PPCC, whose payment is subject to certain conditions and is also discretionary, has been set (i) for the Series in Dollars at 4.750% per annum for the first six years, being revised every five years applying a margin of 375.3 basis points over the 5-year UST rate and (ii) for the Series in Euros by 4.125% per annum for the first seven years, being revised every five years applying a margin of 431.1 basis points over the applicable 5-year euro mid-swap.

At 3 December 2020, Banco Santander, S.A. issued subordinated debentures with a ten-year term of USD 1,500 million (EUR 1,222 million at the date of issue). The issue bears interest at an annual rate of 2.749%, payable semiannually.

At 22 October 2020, it carried out a ten-year subordinated debenture issue for an amount of EUR 1,000 million. The issue bears interest at an annual rate of 1.625%, payable annually.

At 12 March 2020, it proceeded to redeem early and voluntarily the entire outstanding issue of Tier 1 Contingently Convertible Preferred Participations Series I/2014, for a total nominal amount of EUR 1,500 million.

At 14 January 2020, it carried out a placement of contingently convertible preferred participations into newly issued ordinary shares of the Bank (the 'PPCCs'), excluding the pre-emptive subscription rights of its shareholders and for a nominal amount of EUR 1,500 million (the 'Issue' and the 'PPCCs'). The Issue was made at par and the remuneration of the PPCCs, the payment of which is subject to certain conditions and is also discretionary, was set at 4.375% per annum for the first six years, revised every five years thereafter by applying a margin of 453.4 basis points over the 5-year Mid-Swap Rate (5-year Mid-Swap Rate).

At 19 May 2019, the voluntary early redemption of the preferred shares relating to the second issue made on 9 May 2014 (code ISIN XS1066553329) was communicated for an amount of USD 1,500 million (EUR 1,345 million) at the redemption date.

At 8 February 2019, Banco Santander, S.A, carried out an issue of PPCC for a nominal amount of USD 1,200 million (EUR 1,056 million). The remuneration of the issues whose payment is subject to certain conditions and is also discretionary was set at 7.50% per annum, for the first five years (revised thereafter by applying a margin of 498.9 points over the mid-swap rate).

At 19 March 2018, a 'PPCC' issue was carried out, for a nominal amount of EUR 1,500 million. The remuneration of the issue, the payment of which is subject to certain conditions and is also discretionary, was set at 4.75% per annum, payable quarterly, for the first seven years (revised thereafter by applying a margin of 410 basis points over the Mid-swap rate).

At 8 February 2018, a 10-year subordinated debenture issue of EUR 1,250 million was carried out. The issue accrues annual interest of 2.125% payable annually.

At 25 April and 29 September 2017, Banco Santander, S.A. carried out issues of 'PPCCs', for a nominal amount of EUR 750 million, and EUR 1,000 million respectively. The remuneration of the PPCCs, the payment of which is subject to certain conditions and is also discretionary, was set at 6.75% per annum for the first five years (revised thereafter by applying a margin of 680.3 basis points over the 5-year Mid-Swap Rate) for the issue disbursed in April, at 5.25% per annum for the first six years (revised thereafter by applying a margin of 499.9 basis points over the 5 years Mid-Swap Rate) for the issue disbursed in September.)

Issues by Banco Santander - Chile

In June 2020, Banco Santander - Chile issued subordinated debentures for a term of fifteen years, in the amount of UF 5 million (equivalent to USD 185 million). The issue bears annual interest at 3.5%.

In April 2020, Banco Santander - Chile issued two subordinated debentures, the first for a term of fourteen years, for an amount of UF 3 million (equivalent to USD 100 million), bearing annual interest at 3%, and the second for a term of nineteen years, for an amount of UF 3 million (equivalent to USD 100 million), bearing annual interest at 3.15%.

Issues Banco Santander (Brasil) S.A.

At the end of November 2021, Banco Santander (Brasil) S.A. carried out an issue of Subordinated Financial Bills (TIER II) in its local market for a 10-year term, with a repurchase option as of the fifth anniversary of the issue date, in the amount of BRL 5,500 million. The issue price was CDI +2% per annum, payable at maturity.

On 29 January 2014 Banco Santander (Brasil) S.A. issued Tier 1 perpetual subordinated notes for a nominal amount of USD 1,248 million and the Group acquired 89.6% of the issue. The notes are perpetual and would be converted into common shares of Banco Santander (Brasil) S.A. if the common equity Tier 1 ratio, calculated as established by the Central Bank of Brazil, were lower than 5.125%. This issue was fully redeemed in fiscal year 2019.

Issues by Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México

At 1 October 2018, a ten-year subordinated debenture issue was made by Banco Santander México, S.A. Institución de Banca Múltiple, Grupo Financiero Santander México for a nominal amount of USD 1,300 million and at an interest rate of 5.95%, with the group having acquired 75% of the issue.

Additionally, at 30 December 2016, a nominal amount of USD 500 million was made, with the Group having acquired 88.2% of the issue. The perpetual debentures are automatically converted into shares when the Regulatory Capital Ratio (CET1) is equal to or less than 5.125% at the conversion price.

Issues by Santander Bank Polska S.A.

At 20 April 2018, Santander Bank Polska S.A. carried out a ten-year subordinated debenture issue with a redemption option on the fifth anniversary of the issue date in the amount of PLN 1,000 million. The issue bears floating interest at Wibor (6M) + 160 basis points payable semi-annually.

The accrued interests from the subordinated liabilities during 2021 amounted to EUR 648 million (EUR 571 million and EUR 645 million during 2020 and 2019, respectively).

In addition, interests from the PPCC during 2021 amounted to EUR 566 million (EUR 552 million and EUR 595 million in 2020 and 2019, respectively).

24. Other financial liabilities

The detail of Other financial liabilities in the consolidated balance sheets is as follows:

EUR million

	2021	2020	2019
Trade payables	1,475	1,177	1,279
Clearing houses	650	599	165
Tax collection accounts:			
Public Institutions	5,315	4,122	4,122
Factoring accounts payable	275	222	409
Unsettled financial transactions	3,779	5,080	3,693
Lease liabilities (note 2.l)	2,856	3,049	5,108
Other financial liabilities	15,523	12,719	15,459
	29,873	**26,968**	**30,235**

Note 50 contains a detail of the residual maturity periods of other financial liabilities at each year-end.

Lease liabilities

The cash outflow of leases in 2021 was EUR 715 million (EUR 789 and EUR 946 million in 2020 and 2019, respectively).

The analysis of the maturities of lease liabilities at December 2021, 2020 and 2019 is shown below:

EUR million

	2021	2020	2019
Maturity Analysis - Discounted payments			
Within 1 year	690	594	766
Between 1 and 3 years	933	981	1,254
Between 3 and 5 years	534	637	875
Later than 5 years	699	837	2,213
Total discounted payments at the end of the year	**2,856**	**3,049**	**5,108**

During 2021, 2020 and 2019 there were no significant variable lease payments not included in the valuation of lease liabilities.

25. Provisions

a) Breakdown

The detail of Provisions in the consolidated balance sheets is as follows:

EUR million

	2021	2020	2019
Provision for pensions and other obligations post-employments	3,185	3,976	6,358
Other long term employee benefits	1,242	1,751	1,382
Provisions for taxes and other legal contingencies	1,996	2,200	3,057
Provisions for contingent liabilities and commitments (note 2)	733	700	739
Other provisions	2,427	2,225	2,451
Provisions	**9,583**	**10,852**	**13,987**

b) Changes

The changes in 'Provisions' in the last three years were as follows:

EUR million

	2021				
	Post employment plans	Long term employee benefits	Contingent liabilities and commitments	Other provisions	Total
Balances at beginning of year	**3,976**	**1,751**	**700**	**4,425**	**10,852**
Additions charged to income	100	101	29	2,748	2,978
Interest expense (note 39)	78	13	—	—	91
Staff costs (note 47)	67	6	—	—	73
Provisions or reversion of provisions	(45)	82	29	2,748	2,814
Addition	*21*	*154*	*473*	*3,065*	*3,713*
Release	*(66)*	*(72)*	*(444)*	*(317)*	*(899)*
Other additions arising from insurance contracts linked to pensions	(8)	—	—	—	(8)
Changes in value recognised in equity	(1,705)	—	—	—	(1,705)
Payments to pensioners and pre-retirees with a charge to internal provisions	(201)	(605)	—	—	(806)
Payments to external funds	(440)	—	—	—	(440)
Amounts used	—	—	—	(2,961)	(2,961)
Transfer, exchange differences and other changes	1,463	(5)	4	211	1,673
Balances at end of year	**3,185**	**1,242**	**733**	**4,423**	**9,583**

EUR million

	2020					2019				
	Post employment plans	Long term employee benefits	Contingent liabilities and commitments	Other provisions	Total	Post employment plans	Long term employee benefits	Contingent liabilities and commitments	Other provisions	Total
Balances at beginning of year	**6,358**	**1,382**	**739**	**5,508**	**13,987**	**5,558**	**1,239**	**779**	**5,649**	**13,225**
Incorporation of Group companies, net	(5)	—	(1)	(2)	(8)	—	(1)	—	—	(1)
Additions charged to income	(217)	782	50	1,934	2,549	173	729	(31)	2,836	3,707
Interest expense (note 39)	84	11	—	—	95	128	17	—	—	145
Staff costs (note 47)	69	7	—	—	76	65	7	—	—	72
Provisions or reversion of provisions	(370)	764	50	1,934	2,378	(20)	705	(31)	2,836	3,490
Addition	*6*	*787*	*490*	*2,258*	*3,541*	*10*	*713*	*422*	*4,276*	*5,421*
Release	*(376)*	*(23)*	*(440)*	*(324)*	*(1,163)*	*(30)*	*(8)*	*(453)*	*(1,440)*	*(1,931)*
Other additions arising from insurance contracts linked to pensions	2	—	—	—	2	4	—	—	—	4
Changes in value recognised in equity	547	—	—	—	547	1,520	—	—	—	1,520
Payments to pensioners and pre-retirees with a charge to internal provisions	(303)	(408)	—	—	(711)	(331)	(612)	—	—	(943)
Benefits paid due to settlements	(1,551)	—	—	—	(1,551)	—	—	—	—	—
Insurance premiums paid	(1)	—	—	—	(1)	(1)	—	—	—	(1)
Payments to external funds	(333)	—	—	—	(333)	(455)	—	—	—	(455)
Amounts used	—	—	—	(2,485)	(2,485)	—	—	—	(2,907)	(2,907)
Transfer, exchange differences and other changes	(521)	(5)	(88)	(530)	(1,144)	(110)	27	(9)	(70)	(162)
Balances at end of year	**3,976**	**1,751**	**700**	**4,425**	**10,852**	**6,358**	**1,382**	**739**	**5,508**	**13,987**

c) Provision for pensions and other obligations post – employments and Other long term employee benefits

The detail of Provisions for pensions and similar obligations is as follows:

EUR million

	2021	2020	2019
Provisions for post-employment plans - Spanish entities	1,709	1,881	3,951
Provisions for other similar obligations - Spanish entities	1,188	1,695	1,321
Of which pre-retirements	*1,176*	*1,676*	*1,303*
Provisions for post-employment plans - United Kingdom	44	449	329
Provisions for post-employment plans - Other subsidiaries	1,432	1,646	2,078
Provisions for other similar obligations - Other subsidiaries	54	56	61
Provision for pensions and other obligations post -employments and Other long term employee benefits	**4,427**	**5,727**	**7,740**
Of which defined benefits	*4,419*	*5,719*	*7,731*

i. Spanish entities - Post-employment plans and other similar obligations

At 31 December 2021, 2020 and 2019, the Spanish entities had post-employment benefit obligations under defined contribution and defined benefit plans. In addition, in various years some of the consolidated entities offered certain of their employees the possibility of taking pre-retirement and, therefore, provisions are recognised each year for the obligations to employees taking pre-retirement -in terms of salaries and other employee benefit costs- from the date of their pre-retirement to the agreed end date.

In 2019, the provisions accounted for benefit plans and contribution commitments were EUR 688 million.

In December 2020, Banco Santander reached an agreement with the workers' representatives to implement an early retirement and incentivized dismissals plan, which was expected to benefit 3,572 employees during 2021, constituting a provision to cover these commitments amounting to EUR 688 million. In addition to this plan, in 2020, 443 employees took advantage of the offer of early retirement and incentivized dismissals, increasing the provision made to cover these commitments to EUR 84 million. In 2021, due to the increase in the number of employees covered by the plan, a provision of EUR 139 million has been recognised.

In December 2019 Banco Santander reached an agreement with the workers' representatives to offer during 2020 to part of its passive personnel, the possibility of receiving the pensionable rights derived from the collective bargaining agreement in the form of a single consideration or divided into a maximum of 5 equal annuities. The proposal was also extended to personnel with pensionable rights recognized under individual contracts or agreements. The number of beneficiaries who exercised the voluntary option of accepting the substitution of the life annuity for the payment of a lump sum in the form of a capital sum or in instalments of a maximum of 5 annuities amounted to 15,613 people. The effect of the reduction of the aforementioned commitments is shown in the tables below under the headings 'Benefits paid in settlement' in the amount of EUR 1,551 million and 'Effect of reduction/settlement' in the amount of EUR 362 million.

On 8 July 2021, Banco Santander reached an agreement with the employee representatives for the transformation of defined benefit pension commitments into defined contributions for certain retired personnel from Banco Popular and Banco Pastor. Through the aforementioned Collective Agreement, it was agreed to carry out an offer to replace the life annuities that the passive personnel included in the scope of application of said Collective Agreement had been receiving, for a capitalization fund in the Santander Employees pension plan. The number of beneficiaries who exercised the voluntary option to accept the substitution of the life annuity for a capitalization fund in the Santander Employees pension plan amounted to 1,468 people.

The effect of the reduction of the aforementioned commitments is shown in the tables below under the headings 'Benefits paid by settlement' amounting to EUR 166 million and 'Effect reduction / settlement' amounting to EUR 36 million.

The expenses incurred by the Spanish companies in 2021, 2020 and 2019 in respect of contributions to defined contribution plans amounted to EUR 91 million, EUR 89 million and EUR 89 million, respectively.

The amount of the defined benefit obligations was determined on the basis of the work performed by independent actuaries using the following actuarial techniques.

1. Valuation method: projected unit credit method, which sees each period of service as giving rise to an additional unit of benefit entitlement and measures each unit separately.

2. Actuarial assumptions used: unbiased and mutually compatible. Specifically, the most significant actuarial assumptions used in the calculations were as follows:

	Post-employment plans			Other similar obligations		
	2021	2020	2019	2021	2020	2019
Annual discount rate	0.90%	0.60%	0.80%	0.90%	0.60%	0.80%
Mortality tables	PE2020 M/F Col. Orden 1	PE2020 M/F Col. Orden 1	PERM/F-2000	PE2020 M/F Col. Orden 1	PE2020 M/F Col. Orden 1	PERM/F-2000
Cumulative annual CPI growth	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Annual salary increase rate	1.25%*	1.25%*	1.25%*	N/A	N/A	N/A
Annual social security pension increase rate	1.00%	1.00%	1.00%	N/A	N/A	N/A
Annual benefit increase rate	N/A	N/A	N/A	0%	0%	0 %

* Corresponds to the group's defined-benefit obligations.

The discount rate used for the flows was determined by reference to high-quality corporate bonds (at least AA in euros) matching the durations of the commitments. From the bond portfolio considered, callable, putable and sinkable bonds, which could distort the rates, are excluded.

Any changes in the main assumptions could affect the calculation of the obligations. At 31 December 2021, if the discount rate used had been decreased or increased by 50 basis points (bp), there would have been an increase or decrease in the present value of the post-employment obligations of 5.00% (-50 bp) to -5.06% (+50 bp),respectively, and an increase or decrease in the present value of the long-term obligations of 1.18% (-50 bp) to -1.18% (+50 bp), respectively.

These changes would be offset in part by increases or decreases in the fair value of the assets and insurance contracts linked to pensions.

3. The estimated retirement age of each employee is the first at which the employee is entitled to retire or the agreed-upon age, as appropriate.

The fair value of insurance contracts was determined as the present value of the related payment obligations, taking into account the following assumptions:

	Post-employment plans			Other similar obligations		
	2021	2020	2019	2021	2020	2019
Expected rate of return on plan assets	0.90%	0.60%	0.80%	0.90%	0.60%	0.80%
Expected rate of return on reimbursement rights	0.90%	0.60%	0.80%	N/A	N/A	N/A

The funding status of the defined benefit obligations in 2021 and the two preceding years is as follows:

EUR million

	Post-employment plans			Other similar obligations		
	2021	2020	2019	2021	2020	2019
Present value of the obligations						
To current employees	29	60	59	—	—	—
Vested obligations to retired employees	2,797	3,318	5,393	—	—	—
To pre-retirees employees	—	—	—	1,186	1,688	1,317
Long-service bonuses and other benefits	—	—	—	12	18	18
Other	65	41	42	—	1	—
	2,891	**3,419**	**5,494**	**1,198**	**1,707**	**1,335**
Less - Fair value of plan assets	1,217	1,542	1,547	10	12	14
Provisions - Provisions for pensions	**1,674**	**1,877**	**3,947**	**1,188**	**1,695**	**1,321**
Of which:						
Internal provisions for pensions	*1,560*	*1,707*	*3,759*	*1,188*	*1,695*	*1,321*
Net pension assets	*(30)*	*—*	*—*	*—*	*—*	*—*
Insurance contracts linked to pensions (note 14)	*149*	*174*	*192*	*—*	*—*	*—*
Unrecognised net assets for pensions	*(5)*	*(4)*	*(4)*	*—*	*—*	*—*

The amounts recognised in the consolidated income statements in relation to the aforementioned defined benefit obligations are as follows:

EUR million

	Post-employment plans			Other similar obligations		
	2021	2020	2019	2021	2020	2019
Current service cost	5	10	12	1	1	1
Interest cost (net)	24	26	53	11	9	15
Expected return on insurance contracts linked to pensions	(1)	(1)	(2)	—	—	—
Provisions or reversion of provisions						
Actuarial (gains)/losses recognised in the year	*—*	*—*	*—*	*(15)*	*(3)*	*7*
Past service cost	*13*	*2*	*3*	*—*	*—*	*1*
Pre-retirement cost	*—*	*—*	*1*	*139*	*772*	*687*
*Other**	*(39)*	*(372)*	*(29)*	*(55)*	*(15)*	*(2)*
	2	**(335)**	**38**	**81**	**764**	**709**

*Including reduction/settlement effect

In addition, in 2021 'Other comprehensive income – Items not reclassified to profit or loss – Actuarial gains or (-) losses on defined benefit pension plans' has decreased by EUR 37 million with respect to defined benefit obligations (increase of EUR 84 and EUR 278 million in 2020 and 2019, respectively).

The changes in the present value of the accrued defined benefit obligations were as follows:

EUR million

	Post-employment plans			Other similar obligations		
	2021	2020	2019	2021	2020	2019
Present value of the obligations at beginning of year	3,419	5,494	5,427	1,707	1,335	1,204
Incorporation of Group companies, net	6	—	—	—	—	(1)
Current service cost	5	10	12	1	1	1
Interest cost	36	39	72	11	9	15
Pre-retirement cost	—	—	1	139	772	687
Effect of curtailment/settlement	(61)	(372)	(29)	(55)	(15)	(2)
Benefits paid	(248)	(359)	(400)	(589)	(392)	(599)
Benefits paid due to settlements	(166)	(1,551)	—	—	—	—
Past service cost	13	2	3	—	—	1
Actuarial (gains)/losses	(121)	163	407	(15)	(3)	7
Demographic actuarial (gains)/losses	*9*	*91*	*15*	*(8)*	*(8)*	*(9)*
Financial actuarial (gains)/losses	*(130)*	*72*	*392*	*(7)*	*5*	*16*
Exchange differences and other items	8	(7)	1	(1)	—	22
Present value of the obligations at end of year	**2,891**	**3,419**	**5,494**	**1,198**	**1,707**	**1,335**

The changes in the fair value of plan assets and of insurance contracts linked to pensions were as follows:

Plan Assets

EUR million

	Post-employment plans			Other similar obligations		
	2021	2020	2019	2021	2020	2019
Fair value of plan assets at beginning of year	1,542	1,547	1,500	12	14	15
Incorporation of Group companies, net	6	—	—	—	—	—
Expected return on plan assets	12	13	19	—	—	—
Gains/(losses) on settlements	(22)	—	—	—	—	—
Benefits paid	(263)	(94)	(108)	(2)	(2)	(2)
Contributions/(surrenders)	15	5	8	—	—	—
Actuarial gains/(losses)	(76)	76	128	—	—	—
Exchange differences and other items	3	(5)	—	—	—	1
Fair value of plan assets at end of year	**1,217**	**1,542**	**1,547**	**10**	**12**	**14**

Insurance Contracts linked to pensions

EUR million

	Post-employment plans			Other similar obligations		
	2021	2020	2019	2021	2020	2019
Fair value of insurance contracts linked to pensions at beginning of year	174	192	210	—	—	—
Incorporation of Group companies, net	—	—	—	—	—	—
Expected return on insurance contracts linked to pensions	1	1	2	—	—	—
Benefits paid	(19)	(21)	(24)	—	—	—
Paid premiums	1	—	—	—	—	—
Actuarial gains/(losses)	(8)	2	4	—	—	—
Fair value of insurance contracts linked to pensions at end of year	**149**	**174**	**192**	**—**	**—**	**—**

In view of the conversion of the defined-benefit obligations to defined-contribution obligations, the Group has not made material current contributions in Spain in 2021 to fund its defined-benefit pension obligations.

The plan assets and the insurance contracts linked to pensions are instrumented mainly through insurance policies.

The following table shows the estimated benefits payable at 31 December 2021 for the next ten years:

EUR million	
2022	606
2023	466
2024	402
2025	333
2026	284
2027 to 2031	904

ii. United Kingdom

At the end of each of the last three years, the businesses in the United Kingdom had post-employment benefit obligations under defined contribution and defined benefit plans. The expenses incurred in respect of contributions to defined contribution plans amounted to EUR 89 million in 2021 (EUR 91 million in 2020 and EUR 93 million in 2019).

The amount of the defined benefit obligations was determined on the basis of the work performed by independent actuaries using the following actuarial techniques:

1. Valuation method: projected unit credit method, which sees each period of service as giving rise to an additional unit of benefit entitlement and measures each unit separately.

2. Actuarial assumptions used: unbiased and mutually compatible. Specifically, the most significant actuarial assumptions used in the calculations were as follows:

	2021	2020	2019
Annual discount rate	1.90%	1.28%	2.11%
Mortality tables	The S3 Middle tables weighted at 84% of the CMI_2020 projection with an initial addition of 0.15%, smoothing parameter 7 and improving 1.25%.	The S3 Middle tables weighted at 84% of the CMI_2018 projection with an initial addition of 0.15%, smoothing parameter 7 and improving 1.25%.	The S3 Middle tables weighted at 84% of the CMI_2018 projection with an initial addition of 0.15%, smoothing parameter 7 and improving 1.25%.
Cumulative annual CPI growth	3.37%	2.95%	3.01%
Annual salary increase rate	1.00%	1.00%	1.00%
Annual pension increase rate	3.21%	2.85%	2.91%

The discount rate used for the flows was determined by reference to high-quality corporate bonds (at least AA in pounds sterling) that coincide with the terms of the obligations.

Any changes in the main assumptions could affect the calculation of the obligations. At 31 December 2021, if the discount rate used had been decreased or increased by 50 basis points, there would have been an increase or decrease in the present value of the obligations of 9.74% (-50 bp) and -8.67% (+50 bp), respectively. If the inflation assumption had been increased or decreased by 50 basis points, there would have been an increase or decrease in the present value of the obligations of 6.19% (+50 bp) and -6.00% (-50 bp), respectively. These changes would be offset in part by increases or decreases in the fair value of the assets.

The funding status of the defined benefit obligations in 2021 and the two preceding years is as follows:

EUR million	2021	2020	2019
Present value of the obligations	15,392	15,472	14,297
Less-			
Fair value of plan assets	17,244	15,575	14,755
Provisions - Provisions for pensions	**(1,852)**	**(103)**	**(458)**
Of which:			
Internal provisions for pensions	*44*	*449*	*329*
Net assets for pensions	*(1,896)*	*(552)*	*(787)*

The amounts recognised in the consolidated income statements in relation to the aforementioned defined benefit obligations are as follows:

EUR million	2021	2020	2019
Current service cost	33	30	27
Interest cost (net)	(6)	(12)	(24)
Provisions or reversal of provisions, net			
Cost of services provided	6	—	—
Others	—	(1)	—
	33	**17**	**3**

In addition, in 2021 'Other comprehensive income – Items not reclassified to profit or loss – Actuarial gains or (-) losses on defined benefit pension plans' decreased by EUR 1,475 million with respect to defined benefit obligations (increase of EUR 568 million and decrease of EUR 601 million at 31 December 2020 and 2019, respectively).

The changes in the present value of the accrued defined benefit obligations were as follows:

EUR million	2021	2020	2019
Present value of the obligations at beginning of year	15,472	14,297	12,079
Current service cost	33	30	27
Interest cost	219	284	352
Benefits paid	(465)	(445)	(441)
Contributions made by employees	18	17	18
Past service cost	6	—	—
Actuarial (gains)/losses	(933)	2,060	1,594
Demographic actuarial (gains)/losses	*(17)*	*34*	*48*
Financial actuarial (gains)/losses	*(916)*	*2,026*	*1,546*
Exchange differences and other items	1,042	(771)	668
Present value of the obligations at end of year	**15,392**	**15,472**	**14,297**

The changes in the fair value of the plan assets were as follows:

EUR million	2021	2020	2019
Fair value of plan assets at beginning of year	15,575	14,755	12,887
Expected return on plan assets	225	296	376
Benefits paid	(463)	(443)	(441)
Contributions	285	274	244
Actuarial gains/(losses)	541	1,492	993
Exchange differences and other items	1,081	(799)	696
Fair value of plan assets at end of year	**17,244**	**15,575**	**14,755**

In 2022 the Group expects to make current contributions to fund these obligations for amounts similar to those made in 2021.

The main categories of plan assets as a percentage of total plan assets are as follows:

	2021	2020	2019
Equity instruments	10%	9%	12%
Debt instruments	51%	55%	46%
Properties	10%	10%	11%
Other	29%	26%	31%

The following table shows the estimated benefits payable at 31 December 2021 for the next ten years:

EUR million	
2022	462
2023	367
2024	393
2025	408
2026	433
2027 to 2031	2,481

iii. Other foreign subsidiaries

Certain of the consolidated foreign entities have acquired commitments to their employees similar to post-employment benefits.

At 31 December 2021, 2020 and 2019, these entities had defined-contribution and defined-benefit post-employment benefit obligations. The expenses incurred in respect of contributions to defined contribution plans amounted to EUR 106 million in 2021 (EUR 103 million at 31 December 2020 and EUR 110 million at 31 December 2019).

The actuarial assumptions used by these entities (discount rates, mortality tables and cumulative annual CPI growth) are consistent with the economic and social conditions prevailing in the countries in which they are located.

Specifically, the discount rate used for the flows was determined by reference to high-quality corporate bonds, except in the case of Brazil where there is no extensive corporate bond market and, accordingly the discount rate was determined by reference to the series B bonds issued by the Brazilian National Treasury Secretariat for a term coinciding with that of the obligations. In Brazil the discount rate used was between 8.39% and 8.44%, the CPI 3.00% and the mortality table the AT - 2000 Basic.

Any changes in the main assumptions could affect the calculation of the obligations. At 31 December 2021, if the discount rate used had been decreased or increased by 50 basis points, there would have been an increase or decrease in the present value of the obligations of 4.78% and -4.40%, respectively. These changes would be offset in part by increases or decreases in the fair value of the assets.

The funding status of the obligations similar to post-employment benefits and other long-term benefits in 2021 and the two preceding years is as follows:

EUR million

	2021	Of which business in Brazil	2020	2019
Present value of the obligations	8,018	*5,111*	8,434	10,717
Less-				
Of which: with a charge to the participants	*106*	*106*	*112*	*176*
Fair value of plan assets	7,167	*5,288*	7,182	8,826
Provisions - Provisions for pensions	**745**	***(283)***	**1,140**	**1,715**
Of which:				
Internal provisions for pensions	*1,478*	*432*	*1,694*	*2,129*
Net assets for pensions	*(64)*	*(46)*	*(83)*	*(116)*
Unrecognised net assets for pensions	*(669)*	*(669)*	*(471)*	*(298)*

The amounts recognised in the consolidated income statements in relation to these obligations are as follows:

EUR million

	2021	2020	2019
Current service cost	34	35	32
Interest cost (net)	62	72	101
Provisions or reversion of provisions			
(Actuarial gains)/losses recognised in the year	11	11	12
Past service cost	3	5	6
Pre-retirement cost	(24)	—	—
Other	(3)	(5)	(1)
	83	**118**	**150**

In addition, in 2021 'Other comprehensive income – Items not reclassified to profit or loss – Actuarial gains or (-) losses on defined benefit pension plans' decreased by EUR 193 million with respect to defined benefit obligations (decreased EUR 105 million and increased EUR 641 million in 2020 and 2019, respectively).

The changes in the present value of the accrued obligations were as follows:

EUR million

	2021	2020	2019
Present value of the obligations at beginning of year	8,434	10,717	9,116
Incorporation of Group companies, net	(5)	(84)	—
Current service cost	34	35	32
Interest cost	429	465	651
Pre-retirement cost	(24)	—	—
Effect of curtailment/settlement	(3)	(5)	(1)
Benefits paid	(538)	(544)	(666)
Contributions made by employees	3	3	5
Past service cost	3	5	6
Actuarial (gains)/losses	(486)	176	1,652
Demographic actuarial (gains)/losses	*16*	*23*	*3*
Financial actuarial (gains)/losses	*(502)*	*153*	*1,649*
Exchange differences and other items	171	(2,334)	(78)
Present value of the obligations at end of year	**8,018**	**8,434**	**10,717**

The changes in the fair value of the plan assets were as follows:

EUR million

	2021	2020	2019
Fair value of plan assets at beginning of year	7,182	8,826	7,743
Incorporation of Group companies, net	(6)	(86)	—
Expected return on plan assets	411	410	573
Benefits paid	(478)	(488)	(613)
Contributions	152	63	214
Actuarial gains/(losses)	(155)	536	1,021
Exchange differences and other items	61	(2,079)	(112)
Fair value of plan assets at end of year	**7,167**	**7,182**	**8,826**

In 2022 the Group expects to make contributions to fund these obligations for amounts similar to those made in 2021.

The main categories of plan assets as a percentage of total plan assets are as follows:

	2021	2020	2019
Equity instruments	12%	11%	8%
Debt instruments	83%	84%	84%
Properties	1%	1%	1%
Other	4%	4%	7%

The following table shows the estimated benefits payable at 31 December 2021 for the next ten years:

EUR million	
2022	538
2023	544
2024	550
2025	555
2026	560
2027 to 2031	2,870

d) Provisions for taxes and other legal contingencies and Other provisions

'Provisions - Provisions for taxes and other legal contingencies' and 'Provisions - Other provisions', which include, inter alia, provisions for restructuring costs and tax-related and non-tax-related proceedings, were estimated using prudent calculation procedures in keeping with the uncertainty inherent to the obligations covered. The definitive date of the outflow of resources embodying economic benefits for the Group depends on each obligation. In certain cases, these obligations have no fixed settlement period and, in other cases, depend on the legal proceedings in progress.

The detail, by geographical area, of Provisions for taxes and other legal contingencies and Other provisions is as follows:

EUR million			
	2021	2020	2019
Recognised by Spanish companies	1,595	1,647	1,381
Recognised by other EU companies	779	539	1,100
Recognised by other companies	2,049	2,239	3,027
Of which:			
Brazil	*1,339*	*1,475*	*2,484*
	4,423	**4,425**	**5,508**

Set forth below is the detail, by type of provision, of the balance at 31 December 2021, 2020 and 2019 of Provisions for taxes and other legal contingencies and Other provisions.

The types of provision were determined by grouping together items of a similar nature:

EUR million			
	2021	2020	2019
Provisions for taxes	564	600	759
Provisions for employment-related proceedings (Brazil)	328	437	776
Provisions for other legal proceedings	1,104	1,163	1,522
Provision for customer remediation	745	395	725
Regulatory framework-related provisions	36	69	67
Provision for restructuring	749	810	641
Other	897	951	1,018
	4,423	**4,425**	**5,508**

Relevant information is set forth below in relation to each type of provision shown in the preceding table:

The provisions for taxes include provisions for tax-related proceedings.

The provisions for employment-related proceedings (Brazil) relate to claims filed by trade unions, associations, the prosecutor's office and ex-employees claiming employment rights to which, in their view, they are entitled, particularly the payment of overtime and other employment rights, including litigation concerning retirement benefits. The number and nature of these proceedings, which are common for banks in Brazil, justify the classification of these provisions in a separate category or as a separate type from the rest. The Group calculates the provisions associated with these claims in accordance with past experience of payments made in relation to claims for similar items. When claims do not fall within these categories, a case-by-case assessment is performed and the amount of the provision is calculated in accordance with the status of each proceeding and the risk assessment carried out by the legal advisers.

The provisions for other legal proceedings include provisions for court, arbitration or administrative proceedings (other than those included in other categories or types of provisions disclosed separately) brought against Santander Group companies.

The provisions for customer remediation include mainly the estimated cost of payments to remedy errors relating to the sale of certain products in the UK, as well as the impact of Swiss franc (CHF) mortgage portfolios in Poland and the estimated amount related to the floor clauses of Banco Popular Español, S.A.U. To calculate the provision for customer remediation, the best estimate of the provision made by management is used, which is based on the estimated number of claims to be received and, of these, the number that will be accepted, as well as the estimated average payment per case.

The regulatory framework-related provisions include mainly the provisions relating to the FSCS (Financial Services Compensation Scheme), the Bank Levy in the UK and in Poland the provision related to the Banking Tax.

The provisions for restructuring include only the costs arising from restructuring processes carried out by the various Group companies.

Lastly, the 'Other' heading contains very atomized and individually insignificant provisions, such as the provisions to cover the operational risk.

Qualitative information on the main litigation is provided in note 25.e to the consolidated financial statements.

The group's general policy is to record provisions for tax and legal proceedings in which we assess the chances of loss to be probable and we do not record provisions when the chances of loss are possible or remote. We determine the amounts to be provided for as our best estimate of the expenditure required to settle the corresponding claim based, among other factors, on a case-by-case analysis of the facts and the legal opinion of internal and external counsel or by considering the historical average amount of the loss incurred in claims of the same nature. The definitive date of the outflow of resources embodying economic benefits for the Group depends on each obligation. In certain cases, the obligations do not have a fixed settlement term and, in others, they depend on legal proceedings in progress.

The main movements during the 2021 of the breakdown provisions are shown below:

With respect to provisions for labor and other legal proceedings, in Brazil, provisions of EUR 155 million and EUR 168 million were recorded, making payments of EUR 289 million and EUR 205 million, respectively.

With respect to provisions for customer compensation an amount of EUR 319 million was provided in Poland to cover the CHF mortgage portfolio in the year.

On the regulatory framework side, EUR 69 million was provisioned in the United Kingdom and a utilization of EUR 104 million was made in the year (Bank Levy). In addition, in Poland, EUR 131 million were recorded under the regulatory framework and paid during the year.

In addition, the restructuring provision includes provisions of EUR 598 million mainly in the UK and Portugal, as well as the payments made by the Group during the year.

e) Litigation and other matters

i. Tax-related litigation

At 31 December 2021 the main tax-related proceedings concerning the Group were as follows:

- Legal actions filed by Banco Santander (Brasil) S.A. and other Group entities to avoid the application of Law 9.718/98, which modifies the basis to calculate PIS and COFINS social contribution, extending it to all the entities income, and not only to the income from the provision of services. In relation of Banco Santander (Brasil) S.A. process, in May 2015 the Federal Supreme Court (FSC) admitted the extraordinary appeal filed by the Federal Union regarding PIS, and dismissed the extraordinary appeal lodged by the Brazilian Public Prosecutor's Office regarding COFINS contribution, confirming the decision of Federal Regional Court favourable to Banco Santander (Brasil) S.A. of August 2007. The appeals filed by the other entities before the Federal Supreme Court, both for PIS and COFINS, are still pending. These claims are fully provisioned.

- Banco Santander (Brasil) S.A. and other Group companies in Brazil have appealed against the assessments issued by the Brazilian tax authorities questioning the deduction of loan losses in their income tax returns (IRPJ and CSLL) in relation to different administrative processes of various years on the ground that the requirements under the applicable legislation were not met. The appeals are pending decision in CARF. No provision was recognised in connection with the amount considered to be a contingent liability.

- Banco Santander (Brasil) S.A. and other Group companies in Brazil are involved in administrative and legal proceedings against several municipalities that demand payment of the Service Tax on certain items of income from transactions not classified as provisions of services. There are several cases in different judicial instances. A provision was recognised in connection with the amount of the estimated loss.

- Banco Santander (Brasil) S.A. and other Group companies in Brazil are involved in administrative and legal proceedings against the tax authorities in connection with the taxation for social security purposes of certain items which are not considered to be employee remuneration. There are several cases in different judicial instances. A provision was recognised in connection with the amount of the estimated loss.

- In May 2003 the Brazilian tax authorities issued separate infringement notices against Santander Distribuidora de Títulos e Valores Mobiliarios, Ltda. (DTVM, actually Santander Brasil Tecnologia S.A.) and Banco Santander (Brasil) S.A. in relation to the Provisional Tax on Financial Movements (CPMF) of the years 2000 to 2002. The administrative discussion ended unfavourably for both companies, and on July 3, 2015, filed a lawsuit requesting the cancellation of both tax assessments. The lawsuit was judged unfavourably in first instance. Therefore, both plaintiffs appealed to the court of second instance. On December 2020, the appeal was decided unfavourably. Against the judgment, the bank filed a motion for clarification which has not been accepted. Currently it is appealed to higher courts. There is a provision recognized for the estimated loss.

- In December 2010 the Brazilian tax authorities issued an infringement notice against Santander Seguros S.A. (Brazil), currently Zurich Santander Brasil Seguros e Previdência S.A., as the successor by merger to ABN AMRO Brasil dois Participações S.A., in relation to income tax (IRPJ and CSLL) for 2005, questioning the tax treatment applied to a sale of shares of Real Seguros, S.A. The administrative discussion ended unfavourably, and the CARF decision has been appealed at the Federal Justice. As the former parent of Santander Seguros S.A. (Brasil), Banco Santander (Brasil) S.A. is liable in the event of any adverse outcome of this proceeding. No provision was recognised in connection with this proceeding as it is considered to be a contingent liability.

- In November 2014 the Brazilian tax authorities issued an infringement notice against Banco Santander (Brasil) S.A. in relation to corporate income tax (IRPJ and CSLL) for 2009 questioning the tax-deductibility of the amortisation of the goodwill of Banco ABN AMRO Real S.A. performed prior to the absorption of this bank by Banco Santander (Brasil) S.A., but accepting the amortisation performed after the merger. Actually it is appealed before the Higher Chamber of CARF. No provision was recognised in connection with this proceeding as it was considered to be a contingent liability.

- Banco Santander (Brasil) S.A. has also appealed against infringement notices issued by the tax authorities questioning the tax deductibility of the amortisation of the goodwill arising on the acquisition of Banco Comercial e de Investimento Sudameris S.A from years 2007 to 2012. No provision was recognised in connection with this matter as it was considered to be a contingent liability.

- Banco Santander (Brasil) S.A. and other companies of the Group in Brazil are undergoing administrative and judicial procedures against Brazilian tax authorities for not admitting tax compensation with credits derived from other tax concepts, not having registered a provision for the amount considered to be a contingent liability.

- Banco Santander (Brasil) S.A. is involved in appeals in relation to infringement notices initiated by tax authorities regarding the offsetting of tax losses in the CSLL ('Social Contribution on Net Income') of year 2009. The appeal is pending decision in CARF. No provision was recognised in connection with this matter as it is considered to be a contingent liability.

- Brazilian tax authorities have issued infringement notices against Getnet Adquirência e Serviços para Meios de Pagamento S.A and Banco Santander (Brasil) S.A. as jointly liable in relation to corporate income tax (IRPJ and CSLL) for 2014 to 2018 questioning the tax-deductibility of the amortization of the goodwill from the acquisition of Getnet Tecnologia Proces S.A., considering that the company would not have complied with the legal requirements for such amortization. A defense against the tax assessment notices were submitted, and the appeal is pending decision in CARF. No provision was recognized as it is considered to be a contingent liability.

  The total amount for the aforementioned Brazil lawsuits that are fully provisioned is EUR 848 million, and for lawsuits that qualify as contingent liabilities is EUR 3,690 million.

- Legal action brought by Sovereign Bancorp, Inc. (currently Santander Holdings USA, Inc.) claiming its right to take a foreign tax credit for taxes paid outside the United States in fiscal years 2003 to 2005 as well as the related issuance and financing costs. On 17 July 2018, the District Court finally ruled against Santander Holdings USA, Inc. On September 5, 2019 the Federal District Court in Massachusetts entered a judgement resolving the Company's tax liability for fiscal years 2003 to 2005, which had no effect on income. The Company has agreed to resolve the treatment of the same transactions for 2006 and 2007, consistent with the September 5, 2019 judgment. The Congressional Joint Committee on Taxation has completed its review of the proposed resolution of the 2006 and 2007 tax years, with no objection. The IRS finalized its administrative process to close-out the issue, which resulted in no impact on net income.

- Banco Santander appealed before European Courts the Decisions 2011/5/CE of 28 October 2009 (First Decision), and 2011/282/UE of 12 January 2011 (Second Decision) of the European Commission, ruling that the deduction of the financial goodwill regulated pursuant to Article 12.5 of the Corporate Income Tax Law constituted illegal State aid. On October 2021 the Court of Justice has definitively confirmed these Decisions. The dismissal of the appeal, that only affects these two decisions, has no effect on equity.

At the date of approval of these interim financial statements certain other less significant tax-related proceedings are also in progress.

ii. Non-tax-related proceedings

At 31 December 2021 the main non-tax-related proceedings concerning the Group were as follows:

- Payment Protection Insurance (PPI): In recent years Santander UK plc has processed customer claims associated with the sale of payment protection insurance (PPI), derived from the Financial Conduct Authority guidelines. As of 31 December 2021 there is no provision related to those claims as the deadline for presenting them has already expired. However, customers can still commence in-court litigation for the mis-sale of PPI and a provision for the best estimate of any obligation to pay compensation in respect of current and future claims is recognized for this purpose.

  In addition, there is a legal dispute regarding allocation of liability for pre-2005 PPI policies underwritten by two entities (Axa France) that Axa Group acquired from Genworth Financial International Holdings, Inc. in September 2015. The dispute involves Santander Cards UK Limited (formerly known as GE Capital Bank Limited which was acquired by Banco Santander, S.A. from GE Capital group in 2008) which was the distributor of the policies in dispute and Santander Insurance Services UK Limited (the Santander Entities).

  In July 2017, the Santander Entities notified Axa France that they did not accept liability for losses on PPI policies relating to the referred period. Santander UK plc entered in a Complaints Handling Agreement –that included a standstill agreement- agreeing to handle complaints on Axa France, whilst Axa France accepted paying redress assessed to be due to relevant policyholders on a without prejudice basis.

  After the termination of the Complaints Handling Agreement, on 30 December 2020 Axa France provided written notice to the Santander Entities to terminate the standstill agreement. On 5 March 2021, the Santander Entities were served with a Claim Form and Brief Details of Claim by Axa France, claiming that the Santander Entities are liable to reimburse Axa France for pre-2005 PPI mis-selling losses, currently estimated at GBP 636 million (EUR 739 million). On 22 March 2021, the Santander Entities acknowledged service of the claim and notified the court of their intention to defend the claim in full and issued an application for Axa Frances's claim to be struck out/summarily dismissed, which is being heard by the Commercial Court on 22 and 23 February 2022. Decision is not expected until second quarter 2022.

  In the event the claim is not dismissed, there are still ongoing factual issues to be resolved during the trial, which may have legal consequences including in relation to liability. These issues create uncertainties which mean that it is difficult to reliably predict the outcome or the timing of the resolution of the matter. The provision includes our best estimate of the Santander Entities' liability for this matter.

- Delforca: dispute arising from equity swaps entered into by Gaesco (now Delforca 2008, S.A.) on shares of Inmobiliaria Colonial, S.A. Banco Santander, S.A. is claiming to Delforca before the Court of Barcelona in charge of the bankruptcy proceedings, a total of EUR 66 million from the liquidation resulting from the early termination of financial transactions due to Delforca's non-payment of the equity swaps. In the same bankruptcy proceedings, Delforca and Mobiliaria Monesa have in turn claimed the Bank to repay EUR 57 million, which the Bank received for the enforcement of the agreed guarantee, as a result of the aforementioned liquidation. On 16 September 2021 the Commercial Court Number 10 of Barcelona has ordered Delforca to pay the Bank EUR 66 million plus EUR 11 million in interest and has dismissed the claims filed by Delforca. This decision has been appealed by Delforca, Mobiliaria Monesa and the bankruptcy administrator. The appeal which the Bank has already opposed to will be resolved by the Provincial Court of Barcelona.

  Separately, Mobiliaria Monesa, S.A. (parent of Delforca) filed in 2009 a civil procedure with the Courts of Santander against the Bank claiming damages that have not been specified to date. The procedure is suspended.

- Former employees of Banco do Estado de São Paulo S.A., Santander Banespa, Cia. de Arrendamiento Mercantil: claim initiated in 1998 by the association of retired Banespa employees (AFABESP) requesting the payment of a half-yearly bonus contemplated in the by-laws of Banespa in the event that Banespa obtained a profit and that the distribution of this profit were approved by the Board of Directors. The bonus was not paid in 1994 and 1995 since Banespa had not made a profit during those years. Partial payments were made from 1996 to 2000, as approved by the Board of Directors. The relevant clause was eliminated in 2001. The Tribunal Regional do Trabalho (Regional Labour Court) and the High Employment Court (TST) ordered Santander Brazil, as successor to Banespa, to pay this half-yearly bonus for the period from 1996 to the present. On 20 March 2019, the Supreme Federal Court (STF) rejected the extraordinary appeal filed by Santander Brazil.

  Santander Bank Brazil filed a rescissory action before the TST to nullify the decisions of the main proceedings and suspend the execution of the judgment, which was deemed inadmissible, therefore its execution was suspended. The rescissory action was dismissed and a motion for clarification was filed, due to the absence of an explicit argument to deny the rescissory action filed by Santander Brazil. After the decision of the motion for clarification, Santander Brazil filed an extraordinary appeal in the rescissory action in February 2021, which was denied in an interlocutory decision in June 2021 by the TST. As Santander Brazil understands there is a conflict between the TST decision and the doctrine set by the STF, Santander Brazil has appealed this decision. This appeal is pending.

  In August 2021, a first instance court has ruled that the enforcement of the TST decision shall be carried out individually, at the jurisdiction pertaining to each person. AFABESP appealed this decision. In December 2021, the Regional Labor Court denied the appeal filed by AFABESP. This decision has not been appealed by AFABESP, and therefore it has become firm.

  Santander Brazil external advisers have classified the risk as probable. The recorded provisions are considered sufficient to cover the risks associated with the legal claims that are being substantiated as of 31 December 2021.

- 'Planos Económicos': like the rest of the banking system in Brasil, Santander Brazil has been the target of customer complaints and collective civil suits stemming mainly from legislative changes and its application to bank deposits ('economic plans'). At the end of 2017, an agreement between regulatory entities and the Brazilian Federation of Banks (Febraban) with the purpose of closing the lawsuits was reached and was approved by the Supremo Tribunal Federal. Discussions focused on specifying the amount to be paid to each affected client according to the balance in their notebook at the time of the Plan. Finally, the total value of the payments will depend on the number of adhesions there may be and the number of savers who have demonstrated the existence of the account and its balance on the date the indexes were changed. In November 2018, the STF ordered the suspension of all economic plan proceedings for two years from May 2018. On 29 May 2020, the STF approved the extension of the agreement for 5 additional years starting from 3 June 2020. Condition for this extension was to include in the agreement actions related to the "Collor I Plan". On 31 December 2021, the provision recorded for the economic plan proceedings amounts to EUR 277 million.

- Floor clauses: as a consequence of the acquisition of Banco Popular Español, S.A.U. the Group has been exposed to a material number of transactions with floor clauses. The so-called "floor clauses" are those under which the borrower accepts a minimum interest rate to be paid to the lender, regardless of the applicable reference interest rate. Banco Popular Español, S.A.U. included "floor clauses" in certain asset-side transactions with customers. In relation to this type of clauses, and after several rulings made by the Court of Justice of the European Union and the Spanish Supreme Court, and the extrajudicial process established by the Spanish Royal Decree-Law 1/2017, of 20 January, Banco Popular Español, S.A.U. made provisions that were updated in order to cover the effect of the potential return of the excess interest charged for the application of the floor clauses between the contract date of the corresponding mortgage loans and May 2013. At 31 December 2021, after having processed most of the customer requests, the potential residual loss associated with ongoing court proceedings is estimated at EUR 46 million, amount which is fully covered by provisions.

- Banco Popular´s acquisition: considering the declaration setting out the resolution of Banco Popular Español, S.A.U., the redemption and conversion of its capital instruments and the subsequent transfer to Banco Santander, S.A. of the shares resulting from this conversion in exercise of the resolution instrument involving the sale of the institution's business, in application of the single resolution framework regulation, some investors have filed claims against the EU's Single Resolution Board decision, the FROB's resolution executed in accordance to the aforementioned decision, and claims have been filed and may be filed in the future against Banco Santander, S.A. or other Santander Group companies deriving from or related to the acquisition of Banco Popular Español, S.A.U..

At this stage, it is not possible to foresee the total number of claims that could be filed by the former holders of shares and capital instruments (arising from the acquisition by investors of such shares and capital instruments of Banco Popular prior to resolution, including in particular, without limitation, the shares acquired in the context of the capital increase with pre-emptive subscription rights carried out in 2016), and their economic implications (especially considering that the decision to resolve in application of the new regulation has no precedent, and that it may be possible that future claims do not specify a specific amount, put forward new legal interpretations or involve a large number of parties).

In this respect, on 2 September 2020, the Provincial Court of La Coruña has referred a preliminary ruling to the Court of Justice of the European Union ("CJEU") asking for the correct interpretation of Article 60(2) of Directive 2014/59/EU of the European Parliament and of the Council, dated 15 May 2014, which establishes a framework for the restructuring and resolution of credit institutions and investment firms. This article establishes that, in cases of redemption of capital instruments in a bank resolution, no liability shall remain in relation to the amount of the instrument that has been redeemed. On 2 December 2021, the CJEU Advocate General issued his opinion, considering that the Directive precludes former Banco Popular shareholders from bringing claims for compensation against Banco Santander. The judgement of the CJEU in this case is still pending and is likely to condition the outcome on the judicial proceedings that are currently ongoing.

Likewise, the Central Court of Instruction 4 is currently conducting preliminary proceedings 42/2017, in which, amongst other things, is being investigated the following: (i) the accuracy of the prospectus for the capital increase with subscription rights carried out by Banco Popular in 2016; and (ii) the alleged manipulation of the share price of Banco Popular until the resolution of the bank, in June 2017. During the course of the proceedings, on 30 April 2019, the Spanish National Court, ruled in favour of Banco Santander, S.A. declaring that Banco Santander, S.A. cannot inherit Banco Popular's potential criminal liability. This ruling was appealed before the Supreme Court, which rejected it. In this proceedings, Banco Santander, S.A. could potentially be subsidiarily liable for the civil consequences.

The estimated cost of any compensation to shareholders and bondholders of Banco Popular recognized in the 2017 accounts amounted to EUR 680 million, of which EUR 535 million were applied to the commercial loyalty program. At 31 December 2021, the provisions recorded are considered sufficient to cover the risks associated with the court claims that can be estimated to date. However, if additional amounts have to be paid for claims already raised with an undetermined economic interest or for new claims which cannot be reliably estimated because of their specific circumstances, this could have a significant adverse effect on the Santander Group's results and financial situation.

- German shares investigation: the Cologne Public Prosecution Office is conducting an investigation against the Bank, and other group entities based in UK - Santander UK plc, Santander Financial Services Plc and Cater Allen International Limited -, in relation to a particular type of tax dividend linked transactions known as cum-ex transactions.

  The Group is cooperating with the German authorities. According to the state of the investigations, the result and the effects for the Group, which may potentially include the imposition of material financial penalties, cannot be anticipated. For this reason, the Bank has not recognized any provisions in relation to the potential imposition of financial penalties.

- Banco Santander, S.A. has been sued in a legal proceeding in which the plaintiff alleges that a contract was concluded whereby he would be entrusted with the functions of CEO of the Bank. In the complaint, the claimant mainly requests a declaratory ruling that affirms the validity and conclusion of such contract and its enforcement together with the payment of certain amounts. If the main request is not granted, the claimant sought a compensation for a total amount of approximately EUR 112 million or, an alternative relief for other minor amounts. Banco Santander, S.A. answered to the complaint stating that the conditions to which the appointment was subject to were not met and that the contract required by law was not concluded. On 17 May 2021, the plaintiff reduced his claims for compensation to EUR 61.9 million.

  On 9 December 2021, the Court has rendered its decision ordering the Bank to compensate the plaintiff in the amount of EUR 67.8 million. On 13 January 2022, the Court has corrected and supplemented its judgment, reducing the total amount to EUR 51.4 million and establishing that part of this amount (EUR 18.6 million) would have to be paid in shares of Banco Santander and subject to the application of the same terms provided in the applicable Santander executives' remuneration program (on a deferred basis, and in accordance with the applicable plan in the offer). The Bank will file appeal against the judgment before the Provincial Court of Madrid. The provisions recorded are considered to be sufficient to cover the risks deriving from this claim.

- Universalpay Entidad de Pago, S.L. has filed a lawsuit against Banco Santander, S.A. for breach of the marketing alliance agreement (MAA) and claim payment (EUR 1,050 million). The claim is being processed in the Court of First Instance no. 81 of Madrid. The MAA was originally entered into by Banco Popular Español, S.A.U. and its purpose is the rendering of acquiring services (point of sale payment terminals) for businesses in the Spanish market. The lawsuit is mainly based on the potential breach of clause 6 of the MAA, which establishes certain obligations of exclusivity, non-competition and customer referral. The claim is at a very early stage, and there are factual issues pending resolution, which may have legal consequences and affect any potential liability. This uncertainty makes it impossible to reliably predict the resolution of the issue, the timing or the significance of the potential economic impact. The Bank has answered the complaint. The pretrial hearing could not take place on 16 December 2021 and has been rescheduled on 11 March 2022.

- CHF Polish Mortgage Loans: On 3 October 2019, the Court of Justice of the European Union (CJEU) rendered its decision in relation to a judicial proceeding against an unrelated bank in Poland considering that certain contractual clauses in CHF-indexed loan agreements were abusive. The CJEU has left to Polish courts the decision on whether the whole contract can be maintained once the abusive terms have been removed, which should in turn decide whether the effects of the annulment of the contract are prejudicial to the consumer. In case of maintenance of the contract, the court may only integrate the contract with subsidiary provisions of national law and decide, in accordance with those provisions, on the applicable rate.

On 2 September 2021, the Supreme Court was expected to take a position regarding the key issues in disputes concerning loans based on foreign currency, clarifying the discrepancies and unifying case law. The resolution was not adopted and instead, the Supreme Court referred questions to the CJEU on constitutional issues of the Polish judiciary system. No new date for consideration of the issue has been set and no comprehensive decision by the Supreme Court on CHF of the issue is expected in the near future. In the absence of a comprehensive position of the Supreme Court, it is difficult to expect a full unification of judicial decisions, and decisions of the Supreme Court and CJEU issued on particular issues may be important for shaping further case law on CHF matters.

As of 31 December 2021, Santander Bank Polska S.A. and Santander Consumer Bank S.A. maintain a portfolio of mortgages denominated in or indexed to CHF for an approximate amount of 9,265 million zlotys (EUR 2,083 million). During the year, provisions recorded amounted to 1,453 million zlotys (EUR 319 million), leaving the provision fund as of 31 December 2021 at 2,056 million zlotys (EUR 447 million). This provision represents the best estimate at 31 December 2021 given the difficulty to predict the financial impact, as it is for national courts to decide the relevant issues and the process of analyzing and deciding on the KNF proposal described below has not yet been completed. Santander Bank Polska and Santander Consumer Bank Poland will continue to monitor and assess appropriateness of those provisions.

In December 2020, the Chairman of the Polish Financial Supervision Authority (KNF) presented a proposal for voluntary settlements between banks and borrowers under which CHF loans would be retrospectively settled as PLN loans bearing an interest rate based on WIBOR plus margin. This proposal is currently under analysis within Santander Bank Polska S.A. and Santander Consumer Bank S.A., depending on the results of this analysis, Santander Bank Polska and Santander Consumer Bank Poland will decide whether to adhere to this proposal and will proceed to include additional scenarios in the models for calculating provisions and reflect the estimated impact on their level.

While the above referred events could lead to significant changes in the level of expected provisions, in the opinion of Santander Bank Polska S.A. and Santander Consumer Bank S.A., it is not possible to reliably estimate the value of their impact on their financial position at 31 December 2021.

- Banco Santander Mexico. Dispute regarding a testamentary trust constituted in 1994 by Mr. Roberto Garza Sada in Banca Serfin (currently Santander Mexico) in favor of his four sons in which he affected shares of Alfa, S.A.B. de C.V. (respectively, "Alfa" and the "Trust"). During 1999, Mr. Roberto Garza Sada instructed Santander México in its capacity as trustee to transfer 36,700,000 shares from the Trust's assets to his sons and daughters and himself. These instructions were ratified in 2004 by Mr. Roberto Garza Sada before a Notary Public.

Mr. Roberto Garza Sada, passed away on 14 August 2010 and subsequently, in 2012, his daughters filed a complaint against Santander Mexico alleging it had been negligent in its trustee role. The lawsuit was dismissed at first instance in April 2017 and on appeal in 2018. In May 2018, the plaintiffs filed an appeal (recurso de amparo) before the First Collegiate Court of the Fourth Circuit based in Nuevo León, which ruled in favor of the plaintiffs on 7 May 2021, annulling the 2018 appeal judgment and condemning Santander Mexico to the petitions claimed, consisting of the recovery of the amount of 36,700,000 Alfa shares, together with dividends, interest and damages.

On 7 June 2021, Santander México filed an appeal for constitutional review against the decision of the Collegiate Court before the Supreme Court of Justice of the Nation, considering that this court was not empowered to resolve substantive issues that had not been raised by the parties, lack of procedural standing, and the absence of a decision imposing the plaintiffs to pay costs. This appeal was rejected by the President of the Supreme Court of Justice of the Nation on 1 October 2021 on the grounds that the matter, although it refers to constitutional matters, is not of exceptional interest.

On 6 October 2021, Santander México filed an appeal against this decision before the Supreme Court itself, which was rejected *in limine* by the President of the Court by order dated 11 October 2021, considering that against the dismissal of the appeal for constitutional review, there is no possible appeal pursuant to the Constitutional Reform of March 2021. Against this decision, on 8 December 2021, a new appeal was filed for this matter to be reviewed by the First Chamber of the Supreme Court of Justice of the Nation, considering that the failure to accept the appeal constitutes a retroactive application of the law, and that this violates the transitory fifth article of the reform of the "Ley de Amparo" published on 7 June 2021.

In compliance with the aforementioned ruling of 7th May 2021, the Seventh Civil Chamber of the Superior Court of Justice of Nuevo León has issued a judgement imposing Santander Mexico to pay the benefits claimed by the plaintiffs. As a result of this judgement, Santander Mexico has filed a new appeal (recurso de amparo) and will request that it be resolved by the Supreme Court of Justice of the Nation.

Santander México estimates that the actions taken should prevail and reverse the decision against it. However, given the procedural stage of the case, Santander México has classified this risk as possible. The impact of a potential unfavorable resolution for Santander México will be determined in a subsequent proceeding and will also depend on the additional actions that Santander México may take in its defense, so it is not possible to determine it at this time.

- URO Property Holdings, SOCIMI SA: In December 2021, BNP Paribas Trust Corporation UK Limited ("BNP") informed Uro Property Holdings SOCIMI, SA ("Uro") – subsidiary from Banco Santander, S.A.-, that it is considering taking legal action against Uro. On 16 February 2022, BNP commenced legal proceedings against Uro in the Commercial Court in London. On 31 December 2021, Uro lost its status as a SOCIMI (Sociedad Anónima Cotizada de Inversión Inmobiliaria). The potential litigation concerns certain terms of a financing granted to Uro which was supported by a bond issue in 2015. BNP, acting as trustee on behalf of the bondholders, claims that based on those terms, and in relation to the loss of SOCIMI status, Uro would be obliged to pay an additional premium above the nominal value of the financing repayment. Uro denies being liable to pay that additional premium and intends to defend the claim. It is estimated that the maximum loss associated with this possible contingency, amounts to approximately EUR 250 million. There is no date for trial hearing yet.

Banco Santander and the other Group companies are subject to claims and, therefore, are party to certain legal proceedings incidental to the normal course of their business including those in connection with lending activities, relationships with employees and other commercial or tax matters additional to those referred to here.

With the information available to it, the Group considers that, at 31 December 2021, it had reliably estimated the obligations associated with each proceeding and had recognized, where necessary, sufficient provisions to cover reasonably any liabilities that may arise as a result of these tax and legal risks. Disputes in which provisions have been registered but are not disclosed is justified on the basis that it would be prejudicial to the proper defense of the Group. Subject to the qualifications made, it also believes that any liability arising from such claims and proceedings will not have, overall, a material adverse effect on the Group's business, financial position, or results of operations.

26. Other liabilities

The detail of Other liabilities in the consolidated balance sheets is as follows:

EUR million

	2021	2020	2019
Transactions in transit	545	498	663
Accrued expenses and deferred income	7,084	6,309	6,909
Other	5,069	5,529	5,220
	12,698	**12,336**	**12,792**

27. Tax matters

a) Consolidated Tax Group

Pursuant to current legislation, the Consolidated Tax Group includes Banco Santander, S.A. (as the parent) and the Spanish subsidiaries that meet the requirements provided for in Spanish legislation regulating the taxation of the consolidated profits of corporate groups (as the controlled entities).

The other Group companies file income tax return in accordance with the tax regulations applicable to them.

b) Years open for review by the tax authorities

In June and November 2021 acts with agreement, conformity and non-conformity relating to the corporate income tax financial years 2012 to 2015 were formalised. The adjustments signed in conformity and with agreement had not impact on results and, in relation to the concepts signed in disconformity both in this year and in previous years (corporate income tax 2003 to 2011), Banco Santander, S.A., as the Parent of the Consolidated Tax Group, considers, in accordance with the advice of its external lawyers, that the adjustments made should not have a significant impact on the consolidated financial statements, as there are sound arguments as proof in the appeals filed against them pending at the National Appellate Court (tax years 2003 to 2011) and at different administrative instances (tax years 2012-2015). Consequently, no provision has been recorded for this concept. It should also be noted that, in those cases where it has been considered appropriate, the mechanisms available to avoid international double taxation have been used. At the date of approval of these accounts, the Corporate Income Tax and other taxes audit for periods 2017 to 2019 are ongoing, and subsequent years up to and including 2021, are subject to review.

Likewise, relating the Consolidated Tax Group of which Banco Popular Español, S.A.U. was the parent, during 2019, a certificate of disconformity was drawn up for 2017 corporate income tax, with no impact on profit, and the final assessment was appealed. In relation to this Consolidated Tax Group, the years 2016 and 2017 inclusive are subject to review. On 1 January 2018 those entities that were part of the aforementioned Consolidated Tax Group were integrated in the Consolidate Tax Group which parent company is Banco Santander.

The other entities have the corresponding years open for review, pursuant to their respective tax regulations.

Because of the possible different interpretations which can be made of the tax regulations, the outcome of the tax audits of the rest of years subject to review might give rise to contingent tax liabilities which cannot be objectively quantified. However, the Group's tax advisers consider that it is unlikely that such tax liabilities will materialize, and that in any event the tax charge arising therefrom would not materially affect the Group's consolidated financial statements.

c) Reconciliation

The reconciliation of the income tax expense calculated at the tax rate applicable in Spain (30%) to the income tax expense recognised and the detail of the effective tax rate are as follows:

EUR million

	2021	2020	2019
Consolidated profit (loss) before tax:			
From continuing operations	14,547	(2,076)	12,543
From discontinued operations	—	—	—
	14,547	(2,076)	12,543
Income tax at tax rate applicable in Spain (30%)	4,364	(623)	3,763
By the effect of application of the various tax rates applicable in each country*	210	362	243
Of which:			
Brazil	*634*	*560*	*502*
United Kingdom	*(158)*	*(43)*	*(80)*
United States	*(179)*	*(71)*	*(71)*
Chile	*(34)*	*(24)*	*(35)*
Effect of profit or loss of associates and joint ventures	(130)	29	(97)
Effect of reassessment of deferred taxes	9	2,500	(612)
Permanent differences and other **	441	3,364	1,130
Current income tax	**4,894**	**5,632**	**4,427**
Effective tax rate	33.64%	—	35.29%
Of which:			
Continuing operations	*4,894*	*5,632*	*4,427*
Discontinued operations (note 37)	—	—	—
Of which:			
Current taxes	*3,799*	*4,214*	*3,962*
Deferred taxes	*1,095*	*1,418*	*465*
Income tax (receipts)/payments	4,012	2,946	2,593

* Calculated by applying the difference between the tax rate applicable in Spain and the tax rate applicable in each jurisdiction to the profit or loss contributed to the Group by the entities which operate in each jurisdiction.

** In 2020 and 2019 it includes mainly the impairment of goodwill.

d) Tax recognised in equity

In addition to the income tax recognised in the consolidated income statement, the Group recognised the following amounts in consolidated equity in 2021, 2020 and 2019:

EUR million

	2021	2020	2019
Other comprehensive income			
Items not reclassified to profit or loss	**(510)**	**(82)**	**500**
Actuarial gains or (-) losses on defined benefit pension plans	(530)	(165)	499
Changes in the fair value of equity instruments measured at fair value through other comprehensive income	(13)	92	(42)
Financial liabilities at fair value with changes in results attributable to changes in credit risk	33	(9)	43
Items that may be reclassified to profit or loss	**1,136**	**208**	**(832)**
Cash flow hedges	278	5	(17)
Changes in the fair value of debt instruments through other comprehensive income	857	195	(811)
Other recognised income and expense of investments in subsidiaries, joint ventures and associates	1	8	(4)
Total	**626**	**126**	**(332)**

e) Deferred taxes

'Tax assets' in the consolidated balance sheets includes debit balances with the Public Treasury relating to deferred tax assets. 'Tax liabilities' includes the liability for the Group's various deferred tax liabilities.

On 26 June 2013, the Basel III legal framework was included in European law through Directive 2013/36 (CRD IV) and Regulation 575/2013 on prudential requirements for credit institutions and investment firms (CRR), directly applicable in every member State as from 1 January 2014, albeit with a gradual timetable with respect to the application of, and compliance with, various requirements.

This legislation establishes that deferred tax assets, the use of which relies on future profits being obtained, must be deducted from regulatory capital.

In this regard, pursuant to Basel III, in recent years several countries have amended their tax regimes with respect to certain deferred tax assets so that they may continue to be considered regulatory capital since their use does not rely on the future profits of the entities that generate them (referred to hereinafter as 'monetizable tax assets'). Italy had a very similar regime to that described above, which was introduced by Decree-Law no. 225, of 29 December 2010, and amended by Law no. 10, of 26 February 2011. In addition, in 2013 in Brazil, by means of Provisional Measure no. 608, of 28 February 2013, that become Ordinary Law 12838/2013, and, in Spain, through Royal Decree Law 14/2013, of 29 November confirmed by Law 27/2014, of 27 November, tax regimes were established whereby certain deferred tax assets (arising from provisions to allowances for loan losses in Brazil and provisions to allowances for loan losses, provisions to allowances for foreclosed assets and provisions for pension and pre-retirement obligations in Spain) may be converted into tax receivables in specific circumstances. As a result, their use does not rely on the entities obtaining future profits and, accordingly, they are exempt from deduction from regulatory capital.

In 2015 Spain completed its regulations on monetizable tax assets with the introduction of a financial contribution which involves the payment of 1.5% per annum, in order to maintain the right to monetise which applies to the portion of the deferred tax assets that qualify under the legal requirements as monetizable assets generated prior to 2016.

In a similar manner, Italy, by decree of 3 May 2016 has introduced a fee of 1.5% annually to maintain the monetizable of part of the deferred tax assets.

The detail of deferred tax assets, by classification as monetizable or non-monetizable assets, and of deferred tax liabilities at 31 December 2021, 2020 and 2019 is as follows:

EUR million

	2021		2020		2019	
	Monetizable*	Other	Monetizable*	Other	Monetizable*	Other
Tax assets	**10,473**	**8,967**	**10,721**	**8,525**	**11,233**	**11,525**
Tax losses and tax credits	—	1,249	—	1,093	—	3,428
Temporary differences	10,473	7,718	10,721	7,432	11,233	8,097
Of which:						
Non-deductible provisions	—	*2,256*	—	*2,139*	—	*2,751*
Valuation of financial instruments	—	*600*	—	*483*	—	*400*
Loan losses	*6,888*	*988*	*7,134*	*1,007*	*7,645*	*1,086*
Pensions	*3,585*	*669*	*3,587*	*875*	*3,587*	*1,009*
Valuation of tangible and intangible assets	—	*1,509*	—	*1,373*	—	*1,317*
Tax liabilities	**—**	**6,462**	**—**	**5,933**	**—**	**6,522**
Temporary differences	—	6,462	—	5,933	—	6,522
Of which:						
Valuation of financial instruments	—	*1,419*	—	*1,791*	—	*2,073*
Valuation of tangible and intangible assets	—	*3,081*	—	*2,311*	—	*1,962*
Investments in Group companies	—	*337*	—	*440*	—	*831*

* Banco Popular Español, S.A.U. considered that part of its monetizable assets were converted into credit against the Tax Administration in 2017 Income Tax return, as the circumstances of the aforementioned regulations were met at the end of that year (EUR 995 million). The Spanish tax authorities have expressly confirmed the nature of these assets as monetizable, but they consider that conditions for conversion are not met at the end of 2017, without prejudice to the conversion in future years. Likewise, Grupo Santander, due to losses incurred in 2020, converted EUR 642 million of monetizable tax assets into credit against the Tax Administration in its Corporate Income Tax return. This tax return is subject to review by the Tax Authorities.

Grupo Santander only recognises deferred tax assets for temporary differences or tax loss and tax credit carryforwards where it is considered probable that the consolidated entities that generated them will have sufficient future taxable profits against which they can be utilised.

The deferred tax assets and liabilities are reassessed at the reporting date in order to ascertain whether any adjustments need to be made on the basis of the findings of the analyses performed.

These analyses take into consideration all evidence, both positive and negative, of the recoverability of such deferred tax assets, among which we can find, (i) the results generated by the different entities in previous years, (ii) the projections of results of each entity or fiscal group, (iii) the estimation of the reversal of the different temporary differences according to their nature and (iv) the period and limits established under the applicable legislation of each country for the recovery of the different deferred tax assets, thus concluding on the ability of each entity or fiscal group to recover the deferred tax assets registered.

The projections of results used in this analysis are based on the financial budgets approved by both the local directions of the corresponding units and by the Group's administrators. The Group's budget estimation process is common for all units. The Group's management prepares its financial budgets based on the following key assumptions:

a) Microeconomic variables of the entities that make up the fiscal group in each location: the existing balance structure, the mix of products offered and the commercial strategy at each moment defined by local directions are taken into account, based on the competition, regulatory and market environment.

b) Macroeconomic variables: estimated growths are based on the evolution of the economic environment considering the expected evolution in the gross domestic product of each location, and the forecasts of interest rates, inflation and exchange rates fluctuations. These data is provided by the Group's Studies Service, based on external sources of information.

Additionally, the Group performs retrospective contrasts (backtesting) on the variables projected in the past. The differential behaviour of these variables with respect to the real market data is considered in the projections estimated in each fiscal year. Thus, and in relation to Spain, the deviations identified by the Directors in recent past years are due to non-recurring events outside the operation of the business, such as the impacts due to the first application of new regulations, the costs assumed for the acceleration of the restructuring plans and the changing effect of the current macroeconomic environment.

During 2020, taking into account the uncertainties about the economic impacts derived from the covid-19 health crisis, the Group reassessed the ability to generate future taxable income in relation to the recoverability of deferred tax assets recorded in the main Group companies. Management considered that the recovery period of these assets would not be affected and that it was not necessary to make adjustments to the deferred tax assets recognised in the Group on the basis of the results of the analyses performed, except in Spain, where the changes in the key assumptions on which the projected results of its tax group are based, arising from the impact of covid-19, resulted in the recognition of an impairment of EUR 2,500 million of deferred tax assets under 'Income Tax' in the income statement.

Finally, and given the degree of uncertainty of these assumption on the referred variables, the Group conducts a sensitivity analysis of the most significant assumptions considered in the deferred tax assets' recoverability analysis, considering any reasonable change in the key assumptions on which the projections of results of each entity or fiscal group and the estimation of the reversal of the different temporary differences are based.

In relation to Spain, the sensitivity analysis has consisted of adjusting 50 basis points for growth (gross domestic product) and adjusting 50 basis points for inflation. Following the sensitivity analysis performed, the Group estimate that the maximum recovery period of the deferred tax assets recognized as of 31 December 2021 would be 15 years.

Relevant information is set forth below for the main countries which have recognised deferred tax assets:

Spain

The deferred tax assets recognised at the Consolidated Tax Group total EUR 9,954 million, of which EUR 7,420 million were for monetizable temporary differences with the right to conversion into a credit against the Public Finance, EUR 1,902 million for other temporary differences and EUR 632 million for tax losses and credits.

The Group estimates that the recognised deferred tax assets for temporary differences will be recovered in a maximum period of 15 years. This period would also apply to the recovery of the recognised tax loss and tax credit carryforwards.

Brazil

The deferred tax assets recognised in Brazil total EUR 5,204 million, of which EUR 2,909 million were for monetizable temporary differences, EUR 1,984 million for other temporary differences and EUR 311 million for tax losses and credits.

Grupo Santander estimates that the recognised deferred tax assets for temporary differences, tax losses and credits will be recovered in approximately 10 years.

United States

The deferred tax assets recognised in the United States total EUR 1,503 million, of which EUR 1,215 million were for temporary differences and EUR 288 million for tax losses and credits. The Group estimates that the recognised deferred tax assets for temporary differences, tax losses and credits will be recovered in a period of 15 years.

The changes in Tax assets - Deferred and Tax liabilities - Deferred in the last three years were as follows:

EUR million

	Balances at 31 December 2020	(Charge)/ Credit to income	Foreign currency balance translation differences and other items	(Charge)/Credit to asset and liability valuation adjustments	Acquisition for the year (net)	Balances at 31 December 2021
Deferred tax assets	**19,246**	**(209)**	**193**	**209**	**1**	**19,440**
Tax losses and tax credits	1,093	129	28	—	—	1,250
Temporary differences	18,153	(338)	165	209	1	18,190
Of which monetizable	*10,721*	*(273)*	*25*	—	—	*10,473*
Deferred tax liabilities	**(5,933)**	**(886)**	**(170)**	**528**	**(1)**	**(6,462)**
Temporary differences	(5,933)	(886)	(170)	528	(1)	(6,462)
	13,313	**(1,095)**	**23**	**737**	**0**	**12,978**

EUR million

	Balance at 31 December 2019	(Charge)/ Credit to income	Foreign currency balance translation differences and other items	(Charge)/Credit to asset and liability valuation adjustments	Acquisition for the year (net)	Balance at 31 December 2020
Deferred tax assets	**22,758**	**(1,016)**	**(2,465)**	**38**	**(69)**	**19,246**
Tax losses and tax credits	3,427	(2,065)	(266)	—	(3)	1,093
Temporary differences	19,331	1,049	(2,199)	38	(66)	18,153
Of which monetizable	*11,233*	*613*	*(1,125)*	—	—	*10,721*
Deferred tax liabilities	**(6,522)**	**(402)**	**851**	**156**	**(16)**	**(5,933)**
Temporary differences	(6,522)	(402)	851	156	(16)	(5,933)
	16,236	**(1,418)**	**(1,614)**	**194**	**(85)**	**13,313**

EUR million

	Balances at 31 December 2018	(Charge)/ Credit to income	Foreign currency balance translation differences and other items	(Charge)/Credit to asset and liability valuation adjustments	Acquisition for the year (net)	Balance at 31 December 2019
Deferred tax assets	**23,258**	**215**	**(610)**	**(92)**	**(13)**	**22,758**
Tax losses and tax credits	4,276	(301)	(548)	—	—	3,427
Temporary differences	18,982	516	(62)	(92)	(13)	19,331
Of which monetizable	*10,866*	*427*	*(60)*	—	—	*11,233*
Deferred tax liabilities	**(5,568)**	**(680)**	**92**	**(366)**	**0**	**(6,522)**
Temporary differences	(5,568)	(680)	92	(366)	—	(6,522)
	17,690	**(465)**	**(518)**	**(458)**	**(13)**	**16,236**

Also, the Group did not recognise deferred tax assets relating to tax losses and deductions and other incentives amounting to approximately EUR 9,800 million, the use of which EUR 375 million is subject, among other requirements, to time limits.

f) Tax reforms

The following significant tax reforms were approved in 2021 and previous years:

In Spain, Royal Decree-Law 3-2016 was approved in December 2016, which meant the reduction of the limits for the integration of deferred monetizable tax assets and for the set-off of negative tax bases and deductions in order to avoid double taxation as well as the compulsory impairment reversion for deductible participations in previous years in five years, and the non deductibility of the losses generated from the transmission of participations. In 2020 the General State Budget Law for 2021 established, among other tax measures, the non deductibility in Corporation Tax of management fees on participations whose dividends or capital gains are exempt, determining the amount of these expenses as a 5% of the dividends or capital gains. Likewise in 2021 the General State Budget Law for 2022 was approved. This law establishes a minimum effective tax rate of 15% (18% for financial entities) on Corporation Tax base.

In the United Kingdom, in March 2021 it was announced that the main Corporation Tax rate will increase from 1 April 2023 to 25% from 19%. This increase was enacted in Finance Act 2021.

In Brazil, the Constitutional Amendment 103/19 was adopted on 12 November 2019, modifying the social security system, including, among other measures, an increase in the CSLL tax rate for banks from 15% to 20%, effective 1 March 2020. This increase lifted the aggregate tax rate -sum of CSLL and the corporate income tax (Imposto de Renda Pessoa Jurídica; IRPJ)- for banks from 40% to 45%. In addition, in 2021, the provisional measure (Medida Provisoria) 1,034/2021, temporarily increases, from 1 July 2021 to 31 December 2021, the rate of a Social Contribution on the Net Income (CSLL) of the banks to 25% from 20%, and for other financial institutions to 20% from 15%, being the joint taxation for banks 50% (25% IR and 25% CSLL), and 45% for other financial institutions. In the IOF (Tax on financial operations) on credit operations, as of 1 January 2021 the rate of 0,38% (0% for part of 2020) is reinstated, and for settled transactions from 20 September to 31 December 2021, a temporary increase in the IOF rates applicable for credit transactions was approved (annual rate 1.5%% to 2.04%% for legal persons and 3% to 4.8% for natural persons).

In Argentina, Law n.º 27630 (BOE of 16 June 2021) amended, with retroactive effect to 1 January 2021, the rate applicable to the Corporate Income Tax, establishing a progressive rate scale which for Banco Santander Río S.A. represents an increase from 30% to 35%. In addition, the 7% withholding on dividend distribution is maintained (however, the distribution of pre-2018 reserves is not subject to withholding tax). In addition, during the first quarter of the year, there was an increase in the tax on gross income to financial institutions in both, the City of Buenos Aires (from 7% to 8%) and the Province of Buenos Aires (from 7% to 9%). Additionally, the adjustment for tax inflation that was to be applied on a transitional basis in 1/3 of 2019, has been lowered to 1/6 in 2019, with the rest being deferred over the next five years

On 27 November 2019 entered into force the Protocol amending the Convention between the United States of America and the kingdom of Spain for the Avoidance of Double Taxation (DTT). The revision of the Convention introduces substantial reductions in the withholding rates that apply to different types of income, highlighting the reduction of the withholding rate on dividends to 5% for shareholdings of more than 10%, the elimination of withholding for shareholdings greater than 80% and elimination of withholding at source on interests and royalties. Build Back Better Act, approved in the House of Representatives on November 19, 2021, includes significant tax increases and measures impacting large corporations and other high-income taxpayers, such as the introduction of a 15% Minimum Tax on Financial Statement Pre-Tax Book Income, changes to the Base Erosion Anti-Abuse Tax and a new excise tax on Share Buy-Backs. Build Back Better Act is pending to be passed by the Senate

In Chile, Law n.º 21,210 on modernization of Chilean tax law was enacted in 2020. It includes several modifications to different tax laws in force in Chile. Among the aspects included, it is worth highlighting the substitute tax that on a temporary basis until 30 April 2022 allows taxing at 30% (instead of the generally applicable 35%) with a credit of the first category tax paid, the tax profits generated up to the 31 December 2016, reducing the fiscal cost of its distribution and other measures about asset depreciation and indirect taxes.

On 22 December 2021, the European Commission has proposed a Directive ensuring a minimum effective tax rate for the global activities of large multinational groups. The proposal follows closely the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting and sets out how the principles of the 15% effective tax rate – agreed by 137 countries – will be applied in practice within the European Union (EU). It includes a common set of rules (GloBe Rules) on how to calculate this effective tax rate, so that it is properly and consistently applied across the EU.

g) Other information

In compliance with the disclosure requirement established in the listing rules instrument 2005 published by the UK Financial Conduct Authority, it is hereby stated that shareholders of the Bank resident in the United Kingdom will be entitled to a tax credit for taxes paid abroad in respect of withholdings that the Bank has to pay on the dividends to be paid to such shareholders if the total income of the dividend exceeds the amount of exempt dividends of GBP 2,000 for the year 2021/22. The shareholders of the Bank resident in the United Kingdom who hold their ownership interest in the Bank through Santander Nominee Service will be informed directly of the amount thus withheld and of any other data they may require to complete their tax returns in the United Kingdom. The other shareholders of the Bank resident in the United Kingdom should contact their bank or securities broker.

Banco Santander, S.A., is part of the Large Business Forum and has adhered since 2010 to the Code of Good Tax Practices in Spain. Also Santander UK is a member of the HMRC's Code of Practice on Taxation in the United Kingdom, actively participating in both cases in the cooperative compliance programs being developed by these Tax Administrations.

28. Non-controlling interests

Non-controlling interests include the net amount of the equity of subsidiaries attributable to equity instruments that do not belong, directly or indirectly, to the Bank, including the portion attributed to them of profit for the year.

a) Breakdown

The detail, by Group company, of 'Equity - Non-controlling interests' is as follows:

EUR million	2021	2020	2019
Santander Bank Polska S.A.	1,559	1,676	1,597
Grupo PSA	1,543	1,622	1,569
Santander Consumer USA Holdings Inc.	1,255	986	1,565
Banco Santander - Chile	1,042	1,218	1,101
Banco Santander (Brasil) S.A.	1,023	1,014	1,167
Banco Santander México, S.A. Institución de Banca Múltiple, Grupo Financiero Santander México	202	461	333
Other companies*	1,970	1,806	1,655
	8,594	**8,783**	**8,987**
Profit/(Loss) for the year attributable to non-controlling interests	1,529	1,063	1,601
Of which:			
Santander Consumer USA Holdings Inc.	*494*	*201*	*230*
Grupo PSA	*311*	*255*	*266*
Banco Santander - Chile	*292*	*198*	*283*
Banco Santander (Brasil) S.A.	*251*	*233*	*373*
Santander Bank Polska S.A.	*75*	*81*	*162*
Banco Santander México, S.A. Institución de Banca Múltiple, Grupo Financiero Santander México	*62*	*61*	*195*
Other companies	*44*	*34*	*92*
TOTAL	**10,123**	**9,846**	**10,588**

* Includes a Santander UK plc issuance of perpetual convertible equity instruments, at the option of Santander UK plc, into preference shares of Santander UK itself for a nominal amount of GBP 2,200 million (the Group having acquired GBP 1,050 million). Carrying amount of EUR 1,363 million in 2021 (EUR 1,275 million and EUR 1,346 million in 2020 and 2019, respectively).

b) Changes

The changes in Non-controlling interests are summarised as follows:

EUR million	2021	2020	2019
Balance at the end of the previous year	9,846	10,588	10,889
Balance at beginning of year	9,846	10,588	10,889
Other comprehensive income*	(304)	(818)	310
Other	581	76	(611)
Profit attributable to non-controlling interests	*1,529*	*1,063*	*1,601*
*Modification of participation rates***	*(390)*	*(632)*	*(1,623)*
Change of perimeter	*(5)*	*(54)*	*110*
Dividends paid to minority shareholders	*(648)*	*(465)*	*(895)*
*Changes in capital and other concepts**	*95*	*164*	*196*
Balance at end of year	**10,123**	**9,846**	**10,588**

* Mainly due to exchange differences.

** Includes the effect of the Public Offers for the acquisition of shares of Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México in 2021 and 2019 (see note 3.c).

The foregoing changes are shown in the consolidated statement of changes in total equity.

c) Other information

The financial information on the subsidiaries with significant non-controlling interests at 31 December 2021 is summarised below:

EUR million*

	Santander Bank Polska S.A.	Banco Santander (Brasil) S.A.	Banco Santander (Chile), S.A.	Grupo Financiero Santander México, S.A.B. de C.V.	Santander Consumer USA
Total assets	49,788	159,447	71,987	78,383	43,966
Total liabilities	45,071	146,662	67,282	71,162	35,064
Net assets	**4,717**	**12,785**	**4,705**	**7,221**	**8,902**
Total income	1,646	10,884	2,457	3,579	4,725
Total profit	**230**	**2,589**	**928**	**896**	**2,510**

* Information prepared in accordance with the segment reporting criteria described in note 51 and, therefore, it may not coincide with the information published separately by each entity.

29. Other comprehensive income

The balances of 'Other comprehensive income' include the amounts, net of the related tax effect, of the adjustments to assets and liabilities recognised in equity through the consolidated statement of recognised income and expense. The amounts arising from subsidiaries are presented, on a line by line basis, in the appropriate items according to their nature.

Respect to items that may be reclassified to profit or loss, the consolidated statement of recognised income and expense includes changes in other comprehensive income as follows:

- Revaluation gains (losses): includes the amount of the income, net of the expenses incurred in the year, recognised directly in equity. The amounts recognised in equity in the year remain under this item, even if in the same year they are transferred to the income statement or to the initial carrying amount of the assets or liabilities or are reclassified to another line item.
- Amounts transferred to income statement: includes the amount of the revaluation gains and losses previously recognised in equity, even in the same year, which are recognised in the income statement.
- Amounts transferred to initial carrying amount of hedged items: includes the amount of the revaluation gains and losses previously recognised in equity, even in the same year, which are recognised in the initial carrying amount of assets or liabilities as a result of cash flow hedges.
- Other reclassifications: includes the amount of the transfers made in the year between the various valuation adjustment items.

a) Breakdown of Other comprehensive income - Items that will not be reclassified in results and Items that can be classified in results

EUR million

	2021	2020	2019
Other comprehensive income	**(32,719)**	**(33,144)**	**(24,168)**
Items that will not be reclassified to profit or loss	**(4,241)**	**(5,328)**	**(4,288)**
Actuarial gains and losses on defined benefit pension plans	(3,986)	(5,002)	(4,764)
Non-current assets held for sale	—	—	—
Share in other income and expenses recognised in investments, joint ventures and associates	(8)	(2)	1
Other valuation adjustments	—	—	—
Changes in the fair value of equity instruments measured at fair value with changes in other comprehensive income	(157)	(308)	514
Inefficiency of fair value hedges of equity instruments measured at fair value with changes in other comprehensive income	—	—	—
Changes in the fair value of equity instruments measured at fair value with changes in other comprehensive income (hedged item)	275	159	44
Changes in the fair value of equity instruments measured at fair value with changes in other comprehensive income (hedging instrument)	(275)	(159)	(44)
Changes in the fair value of financial liabilities measured at fair value through profit or loss attributable to changes in credit risk	(90)	(16)	(39)
Items that may be reclassified to profit or loss	**(28,478)**	**(27,816)**	**(19,880)**
Hedges of net investments in foreign operations (Effective portion)	(4,283)	(3,124)	(5,464)
Exchange differences	(23,887)	(26,911)	(16,701)
Hedging derivatives. Cash flow hedges (Effective portion)	(276)	295	300
Changes in the fair value of debt instruments measured at fair value with changes in other comprehensive income	436	2,411	2,321
Hedging instruments (items not designated)	—	—	—
Non-current assets classified as held for sale	—	—	—
Share in other income and expenses recognised in investments, joint ventures and associates	(468)	(487)	(336)

b) Other comprehensive income- Items not reclassified to profit or loss – Actuarial gains or (-) losses on defined benefit pension plans

'Other comprehensive income —Items not reclassified to profit or loss— Actuarial gains or (-) losses on defined benefit pension plans' include the actuarial gains and losses and the return on plan assets, less the administrative expenses and taxes inherent to the plan, and any change in the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liability (asset).

Its variation (decrease of EUR 1,567 million in the year) is shown in the consolidated statement of recognised income.

The release against equity in 2021 amounts to EUR 1,705 million - see note 25.b -, with the following breakdown:

- Reduction of EUR 37 million in the accumulates actuarial losses relating to the Group´s entities in Spain, mainly due to the evolution experienced by the discount rate -increase from 0.60% to 0.90%.
- Reduction of EUR 1,475 million in the cumulative actuarial losses relating to the Group´s businesses in the UK, mainly due to the evolution experienced by the discount rate– increase from 1.28% to 1.90%.
- Reduction of EUR 91 million in accumulated actuarial losses corresponding to the Group's business in Brazil, mainly due to the increase in the discount rate -from 6.82% to 8.39% in pension benefits and 7.14% to 8.44% in medical benefits-.
- Reduction of EUR 102 million in the accumulated actuarial losses corresponding to the Group's businesses in other geographical areas.

The other modification in accumulated actuarial profit or losses is an increase of EUR 138 million as a result of the evolution of exchange rates, mainly in United Kingdom (appreciation of the pound sterling).

c) Other comprehensive income - Items that will not be reclassified in results - Changes in the fair value of equity instruments measured at fair value with changes in other comprehensive income

Since the entry into force of IFRS 9, no impairment analysis is performed of equity instruments recognised under 'Other comprehensive income'. IFRS 9 eliminates the need to carry out the impairment estimate on this class of equity instruments and the reclassification to profit and loss on the disposal of these assets, being recognised at fair value with changes in equity.

The following is a breakdown of the composition of the balance as of 31 December 2021, 2020 and 2019 under 'Other comprehensive income - Items that will not be reclassified to profit or loss - Changes in the fair value of equity instruments measured at fair value with changes in other global result' depending on the geographical origin of the issuer:

EUR million

	2021			
	Capital gains by valuation	Capital losses by valuation	Net gains/losses by valuation	Fair Value
Equity instruments				
Domestic				
Spain	*25*	*(663)*	*(638)*	*759*
International				
Rest of Europe	*39*	*(58)*	*(19)*	*170*
United States	*13*	*(4)*	*9*	*31*
Latin America and rest	*496*	*(5)*	*491*	*1,493*
	573	**(730)**	**(157)**	**2,453**
Of which:				
Publicly listed	*500*	*(44)*	*456*	*1,521*
Non publicly listed	*73*	*(686)*	*(613)*	*932*

EUR million

	2020			
	Capital gains by valuation	Capital losses by valuation	Net gains/losses by valuation	Fair Value
Equity instruments				
Domestic				
Spain	*28*	*(849)*	*(821)*	*1,032*
International				
Rest of Europe	*65*	*(76)*	*(11)*	*314*
United States	*7*	*(4)*	*3*	*25*
Latin America and rest	*525*	*(4)*	*521*	*1,412*
	625	**(933)**	**(308)**	**2,783**
Of which:				
Publicly listed	*525*	*(31)*	*494*	*1,424*
Non publicly listed	*100*	*(902)*	*(802)*	*1,359*

EUR million

	2019			
	Capital gains by valuation	Capital losses by valuation	Net gains/losses by valuation	Fair Value
Equity instruments				
Domestic				
Spain	*21*	*(445)*	*(424)*	*184*
International				
Rest of Europe	*68*	*(72)*	*(4)*	*379*
United States	*15*	*(3)*	*12*	*44*
Latin America and rest	*934*	*(4)*	*930*	*2,256*
	1,038	**(524)**	**514**	**2,863**
Of which:				
Publicly listed	*936*	*(14)*	*922*	*2,283*
Non publicly listed	*102*	*(510)*	*(408)*	*580*

d) Other comprehensive income - Items that may be reclassified to profit or loss - Hedge of net investments in foreign operations (effective portion) and exchange differences

The change in 2021 reflects the positive effect of the generalized appreciation of some currencies, especially the pound sterling and the US dollar, whereas the change in 2020 reflected the negative effect of the generalized depreciation of the main currencies, especially the Brazilian real, the pound sterling and the US dollar. The change in 2019 showed the positive effect of the appreciation of the pound sterling and the US dollar and the negative effect of the depreciation of the Brazilian real.

Of the change in the balance in these years, a profit of EUR 167 million, a loss of EUR 2,104 million and a profit of EUR 230 million in 2021, 2020 and 2019, respectively relate to the measurement of goodwill.

The detail, by country is as follows:

EUR million

	2021	2020	2019
Net balance at end of year*	(28,170)	(30,035)	(22,165)
Of which:			
Brazilian real	*(17,440)*	*(17,417)*	*(13,579)*
Pound sterling	*(3,415)*	*(4,205)*	*(3,135)*
Mexican peso	*(3,088)*	*(3,091)*	*(2,439)*
*Argentine peso**	*(2,109)*	*(2,288)*	*(2,094)*
Chilean peso	*(2,039)*	*(1,776)*	*(1,560)*
US dollar	*1,536*	*387*	*1,654*
Polish zloty	*(809)*	*(788)*	*(501)*
Other	*(806)*	*(857)*	*(511)*

* Grupo Santander changed its accounting policy in relation to the presentation of exchange differences and the effects of hyperinflation of the operations generated in Argentina, reclassifying at 1 January 2019 an amount of EUR -1,984 million from the heading 'Other reserves' to 'Accumulated other comprehensive income' (see note 2.a and 33.b).

The breakdown of translation differences by currency is as follows:

EUR million

2021				Of which:		
Currency	Balance at the beginning of the year	Balance at the end of the year	Movement	From goodwill	From results*	From net assets
Brazilian real	(16,032)	(15,913)	119	30	19	70
Pound sterling	(4,602)	(3,504)	1,098	41	38	1,019
Mexican peso	(2,393)	(2,012)	381	26	29	326
Argentine peso	(2,287)	(2,109)	178	—	—	178
Chilean peso	(1,450)	(1,852)	(402)	(55)	(43)	(304)
US dollar	1,253	2,775	1,522	125	102	1,295
Polish zloty	(638)	(678)	(40)	(9)	(1)	(30)
Other	(762)	(594)	168	9	11	148
Total Group	**(26,911)**	**(23,887)**	**3,024**	**167**	**155**	**2,702**

* Profit and loss items are translated into euros at the average exchange rate for the year as described in note 2 a) ii.

EUR million

2020				Of which:		
Currency	Balance at the beginning of the year	Balance at the end of the year	Movement	From goodwill	From results*	From net assets
Brazilian real	(10,704)	(16,032)	(5,328)	(1,280)	(190)	(3,858)
Pound sterling	(3,329)	(4,602)	(1,273)	(455)	(4)	(814)
Mexican peso	(1,547)	(2,393)	(846)	(59)	(2)	(785)
Argentine peso	(2,094)	(2,287)	(193)	—	—	(193)
Chilean peso	(1,181)	(1,450)	(269)	(18)	15	(266)
US dollar	2,833	1,253	(1,580)	(143)	(58)	(1,379)
Polish zloty	(249)	(638)	(389)	(133)	(5)	(251)
Other	(430)	(762)	(332)	(16)	(10)	(306)
Total Group	**(16,701)**	**(26,911)**	**(10,210)**	**(2,104)**	**(254)**	**(7,852)**

* Profit and loss items are translated into euros at the average exchange rate for the year as described in note 2 a) ii.

e) Other comprehensive income -Items that may be reclassified to profit or loss - Hedging derivatives – Cash flow hedges (Effective portion)

Other comprehensive income – Items that may be reclassified to profit or loss - Cash flow hedges includes the gains or losses attributable to hedging instruments that qualify as effective hedges. These amounts will remain under this heading until they are recognised in the consolidated income statement in the periods in which the hedged items affect it (see note 11).

f) Other comprehensive income - Items that may be reclassified to profit or loss – Changes in the fair value of debt instruments measured at fair value with changes in other comprehensive income

Includes the net amount of unrealised changes in the fair value of assets classified as Changes in the fair value of debt instruments measured at fair value with changes in other comprehensive income (see note 7).

The breakdown, by type of instrument and geographical origin of the issuer, of 'Other comprehensive income – Items that may be reclassified to profit or loss - Changes in the fair value of debt instruments measured at fair value with changes in other comprehensive income' at 31 December 2021, 2020 and 2019 is as follows:

EUR million

	31 December 2021			
	Revaluation gains	Revaluation losses	Net revaluation gains/ (losses)	Fair value
Debt instruments				
Government debt securities and debt Instruments issued by central banks				
Spain	*271*	*—*	*271*	*12,917*
Rest of Europe	*544*	*(118)*	*426*	*20,397*
Latin America and rest of the world	*334*	*(438)*	*(104)*	*49,847*
Private-sector debt securities	80	(237)	(157)	22,424
	1,229	**(793)**	**436**	**105,585**

EUR million

	31 December 2020			
	Revaluation gains	Revaluation losses	Net revaluation gains/ (losses)	Fair value
Debt instruments				
Government debt securities and debt Instruments issued by central banks				
Spain	*693*	*—*	*693*	*19,314*
Rest of Europe	*915*	*(69)*	*846*	*23,116*
Latin America and rest of the world	*785*	*(73)*	*712*	*51,026*
Private-sector debt securities	181	(21)	160	24,714
	2,574	**(163)**	**2,411**	**118,170**

EUR million

	31 December 2019			
	Revaluation gains	Revaluation losses	Net revaluation gains/ (losses)	Fair value
Debt instruments				
Government debt securities and debt Instruments issued by central banks				
Spain	*947*	*(2)*	*945*	*32,413*
Rest of Europe	*664*	*(38)*	*626*	*19,052*
Latin America and rest of the world	*839*	*(121)*	*718*	*51,284*
Private-sector debt securities	81	(49)	32	20,096
	2,531	**(210)**	**2,321**	**122,845**

Since the entry into force of IFRS 9, the Group estimates the expected losses on debt instruments measured at fair value with changes in other comprehensive income. These losses are recorded with a charge to the consolidated income statement for the period.

At the end of the years 2021, 2020 and 2019, the Group recorded under 'Impairment or reversal of impairment on financial assets not measured at fair value through profit or loss', net due to modification of the consolidated income statement, in the line of financial assets at fair value with changes in other comprehensive income a provision of EUR 19 million, EUR 19 million and EUR 12 million in 2021, 2020 and 2019, respectively.

g) Other comprehensive income - Items that may be reclassified to profit or loss and Items not reclassified to profit or loss - Other recognised income and expense of investments in subsidiaries, joint ventures and associates

The changes in other comprehensive income - Entities accounted for using the equity method were as follows:

EUR million

	2021	2020	2019
Balance at beginning of year	(489)	(335)	(320)
Revaluation gains/(losses)	7	(170)	(22)
Net amounts transferred to profit or loss	6	16	7
Balance at end of year	**(476)**	**(489)**	**(335)**
Of which:			
Zurich Santander Insurance América, S.L.	*(332)*	*(298)*	*(171)*

30. Shareholders' equity

The changes in Shareholders' equity are presented in the consolidated statement of changes in total equity. Significant information on certain items of Shareholders' equity and the changes during the year are set forth below.

31. Issued capital

a) Changes

At 31 December 2018, Banco Santander's share capital consisted of 16,236,573,942 shares with a total par value of EUR 8,118 million.

On 10 September 2019, a capital increase of EUR 191 million was carried out with the issuance of 381,540,640 shares (2.35% of the Bank's share capital), to meet the takeover bid for 16.69% of the share capital of Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México. (see Note 3.a).

Therefore, Banco Santander's new capital consisted of EUR 8,309 million at 31 December 2019, represented by 16,618,114,582 shares of EUR 0.50 of nominal value each one and all of them from a unique class and series.

On 3 December 2020, a capital increase of EUR 361 million was made, with a charge to the share premium, through the issue of 722,526,720 shares (4.35% of the share capital).

Therefore, Banco Santander's share capital at 31 December 2020 consisted of EUR 8,670 million, represented by 17,340,641,302 shares of EUR 0.50 of nominal value each and all of them of a unique class and series.

Equally, Banco Santander's share capital at 31 December 2021 consisted of EUR 8,670 million, represented by 17,340,641,302 shares of EUR 0.50 of nominal value each and all of them of a unique class and series. Includes 259,930,273 shares corresponding to the first share repurchase program for which it has been agreed (together with the shares that are finally to be acquired under the second share repurchase program) to submit their redemption to the general shareholders meeting subject to the pertinent regulatory authorizations (see notes 4 and 34).

Banco Santander's shares are listed on the Spanish Stock Market Interconnection System and on the New York, London, Mexico and Warsaw Stock Exchanges, and all of them have the same features and rights. Santander shares are listed on the London Stock Exchange under Crest Depository Interest (CDI), each CDI representing one Bank's share. They are also listed on the New York Stock Exchange under American Depositary Receipts (BDR), each BDR representing one share. During 2019 and 2018 the number of markets where the Bank is listed was reduced; the Bank's shares was delisted from Buenos Aires, Milan, Lisboa and São Paulo's markets.

At 31 December 2021, no shareholder held more than 3% of Banco Santander's total share capital (which is the threshold generally provided under Spanish regulations for a significant holding in a listed company to be disclosed). Even though at 31 December 2021, certain custodians appeared in our shareholder registry as holding more than 3% of our share capital, we understand that those shares were held in custody on behalf of other investors, none of whom exceeded that threshold individually. These custodians were State Street Bank (13.35%), Chase Nominees Limited (9.15%), The Bank of New York Mellon Corporation (5.21%), Citibank New York (3.74%) and EC Nominees Limited (3.34%).

On 24 October 2019, BlackRock Inc. reported to the CNMV its significant holding of voting rights in Banco Santander (5.426%). It also specified that it was holding shares on behalf of a number of funds or other investment entities, none of which exceeded 3% individually. No changes have been communicated since then. There may be some overlap in the holdings declared by the above mentioned custodians and asset manager.

At 31 December 2021, neither Banco Santander's shareholder registry nor the CNMV's registry showed any shareholder residing in a non-cooperative jurisdiction with a shareholding equal to, or greater than, 1% of our share capital (which is the other threshold applicable under Spanish regulations).

b) Other considerations

Under Spanish law, only shareholders at the general meeting have the authority to increase share capital. However, they may delegate the authority to approve or execute capital increases to the board of directors. Banco Santander´s Bylaws are fully aligned with Spanish law and do not establish any different conditions for share capital increases.

At 31 December 2021 the shares of the following companies were listed on official stock markets: Banco Santander Río S.A.; Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México; Banco Santander - Chile; Banco Santander (Brasil) S.A., Santander Bank Polska S.A. (former Bank Zachodni WBK S.A.) and Santander Consumer USA Holdings Inc. and Getnet Adquirência e Serviços para Meios de Pagamento S.A.

At 31 December 2021 the number of Banco Santander shares owned by third parties and managed by Group management companies (mainly portfolio, collective investment undertaking and pension fund managers) or jointly managed was 45 million shares, which represented 0.26% of Banco Santander's share capital (39 and 40 million shares, representing 0.22% and 0.24% of the share capital in 2020 and 2019, respectively). In addition, the number of Banco Santander shares owned by third parties and received as security was 231 million shares (equal to 1.33% of the Bank's share capital).

At 31 December 2021 the capital increases in progress at Group companies and the additional capital authorised by their shareholders at the respective general meetings were not material at Group level (see appendix V).

32. Share premium

Share premium includes the amount paid up by the Bank's shareholders in capital issues in excess of the par value.

The Corporate Enterprises Act expressly permits the use of the share premium account balance to increase capital at the entities at which it is recognised and does not establish any specific restrictions as to its use.

The change in the balance of share premium corresponds to the capital increases detailed in note 31.a).

The increased produced in 2019 was a consequence of the increase of EUR 1,491 million to cope with the capital increase for the acquisition of Banco Santander México, S.A, Institución de Banca Múltiple, Grupo Financiero Santander México shares on 10 September 2019.

The decrease in 2020 was due to the reduction of EUR 361 million to cover the capital increase on 3 December (see note 31).

The decreased produced in 2021 for an amount of EUR 4,034 million has been the consequence of applying the result obtained by Banco Santander during the financial year 2020, consisting of losses of EUR 3,557 million, as reflected in the consolidated statements of changes in total equity, and the charge of the dividend for the fiscal year 2020 for an amount of EUR 477 million (see note 4.a and consolidated statements of changes in total equity).

Also, in 2020 and 2019 an amount of EUR 72 million and EUR 38 million, respectively, were transferred from the Share premium account to the Legal reserve (see note 33.b.i).

33. Accumulated retained earnings

a) Definitions

The balance of 'Equity - Accumulated gains and Other reserves' includes the net amount of the accumulated results (profits or losses) recognised in previous years through the consolidated income statement which in the profit distribution were allocated in equity, the expenses of own equity instrument issues, the differences between the amount for which the treasury shares are sold and their acquisition price, as well as the net amount of the results accumulated in previous years, generated by the result of non-current assets held for sale, recognised through the consolidated income statement.

b) Breakdown

The detail of Accumulated retained earnings and Reserves of entities accounted for using the equity method is as follows:

EUR million

	2021	2020	2019
Restricted reserves	**2,543**	**2,460**	**2,595**
Legal reserve	1,734	1,734	1,662
Own shares	755	672	879
Revaluation reserve Royal Decree-Law 7/1996	43	43	43
Reserve for retired capital	11	11	11
Unrestricted reserves	**4,243**	**10,422**	**10,664**
Voluntary reserves*	6,123	6,128	4,603
Consolidation reserves attributable to the Bank	(1,880)	4,294	6,061
Reserves of subsidiaries	**47,438**	**47,601**	**43,449**
Reserves of entities accounted for using the equity method	**1,572**	**1,504**	**1,210**
	55,796	**61,987**	**57,918**

* In accordance with the commercial regulations in force in Spain.

i. Legal reserve

Under the Consolidated Spanish Corporate Enterprises Act, 10% of net profit for each year must be transferred to the legal reserve. These transfers must be made until the balance of this reserve reaches 20% of the share capital. The legal reserve can be used to increase capital provided that the remaining reserve balance does not fall below 10% of the increased share capital amount.

In 2020 and 2019, Banco Santander transferred EUR 72 million and EUR 38 million, respectively, from the Share premium account to the Legal reserve.

Consequently, once again, after the capital increases described in note 31 had been carried out, the balance of the legal reserve reached 20% of the share capital, and at 31 December 2021 the Legal reserve was of the stipulated level.

ii. Reserve for treasury shares

According to the Consolidated Text of the Corporate Enterprises Act, an unavailable reserve equivalent to the amount for which Banco Santander's shares owned by subsidiaries are recorded. This reservation shall be freely available when the circumstances which have obliged its constitution disappear. In addition, this reserve covers the outstanding balance of loans granted by the Group with Banco Santander's share guarantee and the amount equivalent to the credits granted by the Group companies to third parties for the acquisition of own shares.

iii. Revaluation reserve Royal Decree Law 7/1996, of 7 June

The balance of Revaluation reserve Royal Decree-Law 7/1996 can be used, free of tax, to increase share capital. From 1 January 2007, the balance of this account can be taken to unrestricted reserves, provided that the monetary surplus has been realised. The surplus will be deemed to have been realised in respect of the portion on which depreciation has been taken for accounting purposes or when the revalued assets have been transferred or derecognised.

If the balance of this reserve were used in a manner other than that provided for in Royal Decree law 7/1996, of 7 June, it would be subject to taxation.

iv. Reserves of subsidiaries

The detail, by company, of Reserves of subsidiaries, based on the companies' contribution to the Group (considering the effect of consolidation adjustments) is as follows:

EUR million

	2021	2020	2019
Banco Santander (Brasil) S.A. (Consolidated Group)	14,325	14,067	12,400
Santander UK Group	8,558	8,447	8,079
Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México	4,913	4,230	3,810
Santander Consumer Finance Group	4,753	4,186	4,012
Banco Santander - Chile	3,502	3,404	3,116
Banco Santander Totta, S.A. (Consolidated Group)	3,194	2,960	2,823
Group Santander Holdings USA	2,940	4,793	4,528
Banco Santander Río S.A.	2,318	2,161	1,895
Santander Bank Polska S.A.	1,990	1,748	1,738
Santander Investment, S.A.	1,307	1,335	146
Santander Seguros y Reaseguros, Compañía Aseguradora, S.A.	869	695	823
Banco Santander International SA (former Banco Santander (Suisse) SA)	277	247	348
Other companies and consolidation adjustments	(1,508)	(672)	(269)
	47,438	**47,601**	**43,449**
Of which, restricted	*3,392*	*3,155*	*3,193*

34. Other equity instruments and own shares

a) Equity instruments issued not capital and other equity instruments

Other equity instruments includes the equity component of compound financial instruments, the increase in equity due to personnel remuneration, and other items not recognised in other "Shareholders' equity" items.

On 8 September 2017, Banco Santander, S.A. issued contingent redeemable perpetual bonds (the fidelity bonds) amounting to EUR 981 million nominal value -EUR 686 million fair value. On 31 December 2021 amounted to EUR 658 million.

Additionally, at 31 December 2021 the Group had other equity instruments amounting to EUR 152 million.

b) Own shares

'Shareholders' equity - Own shares' includes the amount of own equity instruments held by all the Group entities.

Transactions involving own equity instruments, including their issuance and cancellation, are recognised directly in equity, and no profit or loss may be recognised on these transactions. The costs of any transaction involving own equity instruments are deducted directly from equity, net of any related tax effect.

At December 31, 2020, the number of treasury shares held by the Group was 28,439,022 (0.164% of the issued share capital).

During 2021, 524,312,848 shares of the Bank were acquired at an average price of EUR 3.14 per share, of which 259,930,273 shares (1.499% of the issued share capital) relate to the First Share Buyback Program at a weighted average price of EUR 3.235 per share (note 4); and 275,159,930 shares were transferred at an average price of EUR 3.10 per share - of which 55,750,000 shares correspond to two extraordinary donations made by Banco Santander to the Banco Santander Foundation.

As of December 31, 2021, the Group holds 277,591,940 shares of the Bank's issued share capital (1.60%).

The effect on equity, net of tax, arising from the purchase and sale of Bank shares is of EUR 23 million profit in 2021 (EUR 1 million profit and EUR 6 million loss in 2020 and 2019, respectively).

35. Memorandum items

Memorandum items relates to balances representing rights, obligations and other legal situations that in the future may have an impact on net assets, as well as any other balances needed to reflect all transactions performed by the consolidated entities although they may not impinge on their net assets.

a) Guarantees and contingent commitments granted

Contingent liabilities includes all transactions under which an entity guarantees the obligations of a third party and which result from financial guarantees granted by the entity or from other types of contract. The detail is as follows:

	2021	2020	2019
Loans commitment granted	**262,737**	**241,230**	**241,179**
Of which doubtful	*615*	*274*	*352*
Financial guarantees granted	**10,758**	**12,377**	**13,650**
Of which doubtful	*188*	*124*	*154*
Financial guarantees	10,715	12,358	13,619
Credit derivatives sold	43	19	31
Other commitments granted	**75,733**	**64,538**	**68,895**
Of which doubtful	*781*	*548*	*747*
Technical guarantees	40,158	33,526	33,890
Other	35,575	31,012	35,005

The breakdown as at 31 December 2021 of the exposures and the provision fund (see note 25) out of balance sheet by impairment stage is EUR 337,113 million and EUR 372 million (EUR 310,435 million and EUR 377 million in 2020 and EUR 316,116 million and EUR 417 million in 2019) in stage 1, EUR 10,531 million and EUR 200 million (EUR 6,764 million and EUR 182 million in 2020 and EUR 6,355 million and EUR 145 million in 2019) in stage 2 and EUR 1,584 million and EUR 161 million (EUR 946 million and EUR 141 million in 2020 and EUR 1,253 million and EUR 177 million in 2019) in stage 3, respectively.

Income from guarantee instruments is recognised under 'Fee and commission income' in the consolidated income statements and is calculated by applying the rate established in the related contract to the nominal amount of the guarantee.

i. Loan commitments granted

Loan commitments granted: firm commitments of grating of credit under predefined terms and conditions, except for those that comply with the definition of derivatives as these can be settled in cash or through the delivery of issuance of another financial instrument. They include stand-by credit lines and long-term deposits.

ii. Financial guarantees granted

Financial guarantees includes, inter alia, financial guarantee contracts such as financial bank guarantees, credit derivatives sold, and risks arising from derivatives arranged for the account of third parties.

iii. Other commitments granted

Other contingent liabilities include all commitments that could give rise to the recognition of financial assets not included in the above items, such as technical guarantees and guarantees for the import and export of goods and services.

b) Memorandum items

i. Off-balance-sheet funds under management

The detail of off-balance-sheet funds managed by the Group and by joint ventures is as follows:

EUR million

	2021	2020	2019
Investment funds	145,987	131,965	142,988
Pension funds	16,078	15,577	11,843
Assets under management	24,862	20,712	22,079
	186,927	**168,254**	**176,910**

ii. Non-managed marketed funds

At 31 December 2021 there are non-managed marketed funds totalling EUR 48,385 million (EUR 38,563 million and EUR 49,490 million at 31 December 2020 and 2019, respectively).

c) Third-party securities held in custody

At 31 December 2021 the Group held in custody debt securities and equity instruments totalling EUR 236,153 million (EUR 209,269 million and EUR 229,381 million at 31 December 2020 and 2019, respectively) entrusted to it by third parties.

36. Hedging derivatives

Grupo Santander, within its financial risk management strategy, and in order to reduce asymmetries in the accounting treatment of its operations, enters into hedging derivatives on interest, exchange rate, credit risk or variation of stock prices, depending on the nature of the risk covered.

Based on its objective, Grupo Santander classifies its hedges in the following categories:

- Cash flow hedges: cover the exposure to the variation of the cash flows associated with an asset, liability or a highly probable forecast transaction. This cover the variable-rate issues in foreign currencies, fixed-rate issues in non-local currency, variable-rate interbank financing and variable-rate assets (bonds, commercial loans, mortgages, etc.).
- Fair value hedges: cover the exposure to the variation in the fair value of assets or liabilities, attributable to an identified and hedged risk. This covers the interest risk of assets or liabilities (bonds, loans, bills, issues, deposits, etc.) with coupons or fixed interest rates, interests in entities, issues in foreign currencies and deposits or other fixed rate liabilities.
- Hedging of net investments abroad: cover the exchange rate risk of the investments in subsidiaries domiciled in a country with a different currency from the functional one of the Group.

Due to the replacement of the current rates by the alternative rates defined in the note 1 of this report, in the section 'Amendments to IFRS 9, IAS 9 and IFRS 7 on reference interest rates (IBOR Reform Phase I and II)',the nominal amount of hedging instruments corresponding to the hedging relationships directly affected by the uncertainties related to the IBOR reforms is shown below. The percentage of the nominal amount of derivatives affected with a maturity date after the transition date of the reform represents 4.85% of the total hedging derivatives:

EUR million

	USD LIBOR
Total hedging instruments affected	
Fair value hedges	14,223
Interest rate risk	*14,223*
Cash flow hedges	12,034
Interest rate risk	*12,034*
	26,257
Post-transition date agreement	
Fair value hedges	11,241
Interest rate risk	*11,241*
Cash flow hedges	7,830
Interest rate risk	*7,830*
	19,071

As for the hedged items directly affected by the uncertainties related to the IBOR reforms, their nominal amount is shown below, which represents 2.02% of the total notional amount hedged:

EUR million

	USD LIBOR
Total hedge items directly affected	
Fair value hedges	190
Interest rate risk	*190*
Cash flow hedges	11926
Interest rate risk	*11,926*
	12,116
Post-transition date agreement	
Fair value hedges	190
Interest rate risk	*190*
Cash flow hedges	7732
Interest rate risk	*7,732*
	7,922

The following tables contains the detail of the hedging derivatives according to the type of hedging, the hedge risk and the main products used as of 31 December 2021, 2020 and 2019:

Million euros

	2021				
		Carrying amount			
	Nominal value	Assets	Liabilities	Changes in fair value used for calculating hedge ineffectiveness	Balance sheet line items
Fair value hedges	**206,957**	**2,528**	**2,656**	**1,079**	
Interest rate risk	**176,176**	**2,227**	**1,778**	**591**	**Hedging derivatives**
Of which:					
Interest rate swap	*66,904*	*1,668*	*920*	*(377)*	
Call money swap	*97,321*	*1*	*734*	*714*	
Exchange rate risk	**21,238**	**7**	**423**	**287**	**Hedging derivatives**
Fx forward	*13,909*	*7*	*423*	*22*	
Future interest rate	*7,329*	*—*	*—*	*265*	
Interest rate and exchange rate risk	**9,326**	**294**	**452**	**200**	**Hedging derivatives**
Of which:					
Interest rate swap	*1,650*	*12*	*9*	*(7)*	
Currency swap	*7,397*	*281*	*443*	*192*	
Inflation risk	**44**	**—**	**1**	**—**	**Hedging derivatives**
Credit risk	**173**	**—**	**2**	**1**	**Hedging derivatives**
Cash flow hedges	**160,397**	**2,034**	**2,157**	**(1,703)**	
Interest rate risk	**99,648**	**156**	**420**	**(526)**	**Hedging derivatives**
Of which:					
Future interest rate	*7,652*	*—*	*—*	*(155)*	
Interest rate swap	*69,471*	*70*	*155*	*(212)*	
Call money swap	*16,846*	*20*	*182*	*(409)*	
Exchange rate risk	**27,343**	**396**	**657**	**(112)**	**Hedging derivatives**
Of which:					
FX forward	*8,381*	*280*	*42*	*26*	
Currency swap	*15,004*	*100*	*606*	*(133)*	
Interest rate and exchange rate risk	**21,609**	**1,425**	**400**	**(815)**	**Hedging derivatives**
Of which:					
Interest rate swap	*3,604*	*95*	*2*	*(112)*	
Currency swap	*17,005*	*1,330*	*393*	*(702)*	
Inflation risk	**11,741**	**52**	**679**	**(247)**	**Hedging derivatives**
Of which:					
Currency swap	*10,503*	*51*	*678*	*(232)*	
Equity risk	**56**	**5**	**1**	**(3)**	**Hedging derivatives**
Hedges of net investments in foreign operations	**25,594**	**199**	**650**	**—**	
Exchange rate risk	**25,594**	**199**	**650**	**—**	**Hedging derivatives**
FX forward	*25,594*	*199*	*650*	*—*	
	392,948	**4,761**	**5,463**	**(624)**	

EUR million

	2020				
		Carrying amount			
	Nominal value	Assets	Liabilities	Changes in fair value used for calculating hedge ineffectiveness	Balance sheet line items
Fair value hedges	**199,260**	**4,199**	**4,671**	**(451)**	
Interest rate risk	**181,582**	**3,528**	**3,850**	**(456)**	**Hedging derivatives**
Of which:					
Interest rate swap	*94,713*	*2,985*	*2,747*	*(27)*	
Call money swap	*69,740*	*184*	*886*	*(486)*	
Exchange rate risk	**9,037**	**293**	**47**	**11**	**Hedging derivatives**
Of which:					
FX forward	*8,422*	*210*	*47*	*11*	
Interest rate and exchange rate risk	**8,434**	**378**	**771**	**(11)**	**Hedging derivatives**
Of which:					
Currency swap	*7,704*	*370*	*757*	*(4)*	
Credit risk	**207**	**—**	**3**	**5**	**Hedging derivatives**
Cash flow hedges	**139,156**	**3,436**	**1,739**	**232**	
Interest rate risk	**74,731**	**478**	**522**	**75**	**Hedging derivatives**
Of which:					
Future interest rate	*7,492*	*—*	*322*	*(208)*	
Interest rate swap	*46,547*	*237*	*108*	*135*	
Call money swap	*12,123*	*204*	*7*	*145*	
Exchange rate risk	**23,483**	**555**	**802**	**(401)**	**Hedging derivatives**
Of which:					
FX forward	*9,151*	*265*	*195*	*(155)*	
Currency swap	*13,425*	*283*	*600*	*(103)*	
Interest rate and exchange rate risk	**27,021**	**2,362**	**275**	**679**	**Hedging derivatives**
Of which:					
Currency swap	*19,682*	*2,100*	*264*	*550*	
Inflation risk	**13,907**	**36**	**140**	**(129)**	**Hedging derivatives**
Of which:					
Interest rate swap	*5,218*	*262*	*—*	*129*	
Currency swap	*10,206*	*26*	*136*	*(132)*	
Equity risk	**14**	**5**	**—**	**8**	**Hedging derivatives**
Hedges of net investments in foreign operations	**22,210**	**690**	**459**	**3**	
Exchange rate risk	**22,210**	**690**	**459**	**3**	**Hedging derivatives**
FX forward	*22,210*	*690*	*459*	*—*	
	360,626	**8,325**	**6,869**	**(216)**	

EUR million

	2019				
		Carrying amount			
	Nominal value	Assets	Liabilities	Changes in fair value used for calculating hedge ineffectiveness	Balance sheet line items
Fair value hedges	**202,548**	**3,570**	**3,649**	**(1,522)**	
Interest rate risk	**183,586**	**3,032**	**3,160**	**(1,346)**	**Hedging derivatives**
Of which:					
Future interest rate	*12,325*	*—*	*32*	*(476)*	
Interest rate swap	*117,439*	*2,651*	*2,297*	*(429)*	
Call money swap	*44,791*	*91*	*472*	*(295)*	
Exchange rate risk	**10,006**	**73**	**55**	**(60)**	**Hedging derivatives**
Of which:					
Fx forward	*9,722*	*49*	*54*	*(60)*	
Interest rate and exchange rate risk	**8,698**	**465**	**428**	**(116)**	**Hedging derivatives**
Of which:					
Currency swap	*7,552*	*449*	*423*	*(67)*	
Inflation risk	**0**	**—**	**0**	**5**	**Hedging derivatives**
Credit risk	**258**	**—**	**6**	**(5)**	**Hedging derivatives**
Cash flow hedges	**135,439**	**3,398**	**1,618**	**(1,540)**	
Interest rate risk	**55,810**	**277**	**261**	**(267)**	**Hedging derivatives**
Of which:					
Futures	*21,655*	*33*	*147*	*(93)*	
Interest rate swap	*21,492*	*99*	*97*	*(105)*	
Call money swap	*6,164*	*30*	*12*	*8*	
Exchange rate risk	**31,803**	**463**	**660**	**(405)**	**Hedging derivatives**
Of which:					
FX forward	*10,595*	*237*	*216*	*(145)*	
Currency swap	*11,030*	*214*	*433*	*(365)*	
Futures	*9,290*	*—*	*—*	*113*	
Interest rate and exchange rate risk	**38,938**	**2,625**	**640**	**(826)**	**Hedging derivatives**
Of which:					
Interest rate swap	*7,347*	*133*	*5*	*201*	
Currency swap	*27,044*	*2,492*	*622*	*(1,020)*	
Inflation risk	**8,830**	**33**	**53**	**(44)**	**Hedging derivatives**
Of which:					
FX forward	*2,230*	*5*	*4*	*4*	
Currency swap	*6,511*	*28*	*42*	*(44)*	
Equity risk	**58**	**—**	**4**	**2**	**Hedging derivatives**
Hedges of net investments in foreign operations	**24,477**	**248**	**781**	**0**	
Exchange rate risk	**24,477**	**248**	**781**	**0**	**Hedging derivatives**
FX forward	*24,477*	*248*	*781*	*—*	
	362,464	**7,216**	**6,048**	**(3,062)**	

Considering the main entities or groups within the Group by the weight of their hedging, the main types of hedging that are being carried out in Santander UK Group Holdings plc group and Banco Santander, S.A.

Santander UK Group Holdings plc group enters into fair value and cash flow hedging derivatives depending on the exposure of the underlying. Only designated risks are hedged and therefore other risks, such as credit risk, are managed but not hedged.

Within fair value hedges, Santander UK Group Holdings plc group has portfolios of assets and liabilities at fixed rate that are exposed to changes in fair value due to changes in market interest rates. These positions are managed by contracting mainly interest rate swaps. Effectiveness is assessed by comparing the changes in the fair value of these portfolios generated by the hedged risk with the changes in the fair value of the derivatives contracted.

Santander UK Group Holdings plc group also has access to international markets to obtain financing by issuing fixed-rate debt in its functional currency and other currencies. As such, they are exposed to changes in interest rates and exchange rates, mainly in EUR and USD. This risk is mitigated with cross currency swaps e interest rate swaps in which they pay a fixed rate and receive a variable rate. Effectiveness is evaluated using linear regression techniques to compare changes in the fair value of the debt at interest and exchange rates with changes in the fair value of interest rate swaps o loss cross currency swaps.

Within the cash flow hedges, Santander UK Group Holdings plc group has portfolios of assets and liabilities at variable rates, normally at SONIA or LIBOR. To mitigate this market rate variability risk, it contracts interest rate swaps.

As Santander UK Group Holdings plc group obtains financing in the international markets, it assumes a significant exposure to currency risk mainly USD and EUR. In addition, it also holds debt securities for liquidity purposes which assume exposure mainly in JPY. To manage this exchange rate risk, spot, forward y cross currency swap are contracted to match the cash flow profile and the maturity of the estimated interest and principal repayments of the hedged item.

Effectiveness is assessed by comparing changes in the fair value of the derivatives with changes in the fair value of the hedged item attributable to the hedged risk by applying a hypothetical derivative method using linear regression techniques.

In addition, within the hedges that cover equity risk, Santander UK Group Holdings plc group offers employees the opportunity to purchase shares of the Bank at a discount under the sharesave scheme, exposing the Bank to share price risk. As such, options are purchased allowing them to purchase shares at a pre-set price.

Banco Santander, S.A. covers the risks of its balance sheet in a variety of ways. On the one hand, documented as fair value hedges, it covers the interest rate, foreign currency and credit risk of fixed-income portfolios at a fixed rate (REPOs are included in this category). Resulting, in an exposure to changes in their fair value due to variations in market conditions based on the various risks hedged, which has an impact on Banco Santander's income statement. To mitigate these risks, Banco Santander contracts derivatives, mainly interest rate swaps, cross currency swaps, cap&floors, forex forward y credit default swaps.

On the other hand, the interest and exchange rate risk of loans granted to corporate clients at a fixed rate is generally covered. These hedges, are carried out through interest rate swaps, cross currency swaps and exchange rate derivatives (forex swaps and forex forward).

In addition, Banco Santander, S.A. manages the interest and exchange risk of debt issues in its various categories (issuing covered bonds, perpetual, subordinated and senior bond) and in different currencies, denominated at fixed rates, and therefore subject to changes in their fair value. These issues are covered through interest rate swaps, cross currency swaps or a mix of both by applying differentiated fair value hedging strategies for interest rate risk and cash flow hedging strategies to hedge foreign exchange risk.

The methodology used by Banco Santander, S.A. to measure the effectiveness of fair value hedges is based on comparing the market values of the hedged items (based on the objective risk of the hedge) and of the hedging instruments in order to analyse whether the changes in the market value of the hedged items are offset by the market value of the hedging instruments, thereby mitigating the hedged risk and minimizing volatility in the income statement. Prospectively, the same analysis is performed, measuring the theoretical market values in the event of parallel variations in the market curves of a positive basis point.

There is a macro hedge of structured loans in which the interest rate risk of fixed-rate loans (mortgage, personal or with other guarantees) granted to legal entities in commercial or corporate banking and wealth clients in the medium-long term is hedged. This hedge is instrumented as a macro hedge of fair value, the main hedging instruments being interest rate swap and cap&floors. In case of total or partial cancellation or early repayment, the customer is obliged to pay/receive the cost/income of the cancellation of the interest rate risk hedge managed by the Bank.

Regarding cash flow hedges, the objective is to hedge the cash flow exposure to changes in interest rates and exchange rates.

For retrospective purposes, the hypothetical derivative methodology is used to measure effectiveness. By means of this methodology, the hedged risk is modelled as a derivative instrument -not real-, created exclusively for the purpose of measuring the effectiveness of the hedge, and which must comply with the fact that its main characteristics coincide with the critical terms of the hedged item throughout the period for which the hedging relationship is designated. This hypothetical derivative does not incorporate characteristics that are exclusive to the hedging instrument. Additionally, it is worth mentioning that any risk component not associated with the hedged objective risk and effectively documented at the beginning of the hedge is excluded for the purpose of calculating the effectiveness. The market value of the hypothetical derivative that replicates the hedged item is compared with the market value of the hedging instrument, verifying that the hedged risk is effectively mitigated and that the impact on the income statement due to potential ineffectiveness is residual.

Prospectively, the variations in the market values of the hedging instrument and the hedged item (represented by the hypothetical derivative) are measured in the event of parallel shifts of a positive basis point in the affected market curves.

There is another macro-hedge, this time of cash flows, the purpose of which is to actively manage the risk-free interest rate risk (excluding credit risk) of a portion of the floating rate assets of Banco Santander, S.A., through the arrangement of interest rate derivatives whereby the bank exchanges floating rate interest flows for others at a fixed rate agreed at the time the transactions are arranged. The items affected by the Macro-hedging have been designated as those in which their cash flows are exposed to interest rate risk, specifically the floating rate mortgages of the Banco Santander, S.A. network referenced to Euribor 12 Months or Euribor Mortgage, with annual renewal of rates, classified as sound risk and which do not have a contractual floor (or, if not, this floor is not activated). The hedged position affecting the Macro Cash Flow Hedge at the present time is EUR 7,000 million.

Regarding net foreign investments hedges, basically, they are allocated in Banco Santander, S.A. and Santander Consumer Finance Group. Grupo Santander assumes as a priority risk management objective to minimize -to the limit determined by the Group's Financial Management- the impact on the calculation of the capital ratio of its permanent investments included within the Group's consolidation perimeter, and whose shares or equity interests are legally denominated in a currency other than that of the Group's parent company. For this purpose, financial instruments (generally derivatives) are contracted to hedge the impact on the capital ratio of changes in forward exchange rates. Grupo Santander mainly hedges the risk for the following currencies: BRL, CLP, MXN, CAD, COP, CNY, GBP, CHF, NOK, USD, and PLN. The instruments used to hedge the risk of these investments are forex swaps, forex forward and spot currency purchases/sales.

For this type of hedges, ineffectiveness scenarios are considered to be of low probability, given that the hedging instrument is designated considering the position determined and the spot rate at which the position is located.

The following table sets out the maturity profile of the hedging instruments used in Grupo Santander non-dynamic hedging strategies:

EUR million

	31 December 2021					
	Up to one month	One to three months	Three months to one year	One year to five years	More than five years	Total
Fair value hedges	**5,546**	**11,786**	**45,119**	**114,828**	**29,678**	**206,957**
Interest rate risk	**4,324**	**9,978**	**33,873**	**103,216**	**24,785**	**176,176**
Of which:						
Interest rate swap	*267*	*2,138*	*4,189*	*42,398*	*17,912*	*66,904*
Call money swap	*3,716*	*7,527*	*25,588*	*56,120*	*4,370*	*97,321*
Exchange rate risk	**598**	**1,712**	**11,013**	**5,550**	**2,365**	**21,238**
Fx forward	*598*	*1,712*	*11,013*	*586*	*—*	*13,909*
Future interest rate	*—*	*—*	*—*	*4,964*	*2,365*	*7,329*
Interest rate and exchange rate risk	**624**	**77**	**199**	**5,898**	**2,528**	**9,326**
Of which:						
Interest rate swap	*—*	*—*	*—*	*1,232*	*418*	*1,650*
Currency swap	*624*	*72*	*198*	*4,437*	*2,066*	*7,397*
Inflation risk	**—**	**—**	**—**	**44**	**—**	**44**
Credit risk	**—**	**19**	**34**	**120**	**—**	**173**
Cash flow hedges	**17,674**	**3,208**	**20,459**	**102,833**	**16,223**	**160,397**
Interest rate risk	**13,047**	**1,061**	**9,875**	**68,867**	**6,798**	**99,648**
Of which:						
Future interest rate	*7,097*	*—*	*244*	*311*	*—*	*7,652*
Interest rate swap	*2,336*	*310*	*7,759*	*58,930*	*136*	*69,471*
Call money swap	*1,202*	*751*	*858*	*7,920*	*6,115*	*16,846*
Exchange rate risk	**3,438**	**1,348**	**3,195**	**15,506**	**3,856**	**27,343**
Of which:						
FX forward	*2,406*	*1,309*	*1,947*	*2,719*	*—*	*8,381*
Currency swap	*1,032*	*39*	*1,248*	*9,885*	*2,800*	*15,004*
Interest rate and exchange rate risk	**860**	**336**	**5,924**	**11,165**	**3,324**	**21,609**
Of which:						
Interest rate swap	*—*	*—*	*—*	*2,505*	*1,099*	*3,604*
Currency swap	*860*	*336*	*5,924*	*7,660*	*2,225*	*17,005*
Inflation risk	**329**	**463**	**1,463**	**7,246**	**2,240**	**11,741**
Of which:						
Currency swap	*82*	*339*	*597*	*7,245*	*2,240*	*10,503*
Equity risk	**—**	**—**	**2**	**49**	**5**	**56**
Hedges of net investments in foreign operations:	**4,097**	**5,346**	**13,235**	**2,916**	**—**	**25,594**
Exchange rate risk	**4,097**	**5,346**	**13,235**	**2,916**	**—**	**25,594**
FX forward	*4,097*	*5,346*	*13,235*	*2,916*	*—*	*25,594*
	27,317	**20,340**	**78,813**	**220,577**	**45,901**	**392,948**

EUR million

	31 December 2020					
	Up to one month	One to three months	Three months to one year	One year to five years	More than five years	Total
Fair value hedges	**7,132**	**14,221**	**44,897**	**95,343**	**37,667**	**199,260**
Interest rate risk	**5,616**	**9,667**	**39,921**	**90,913**	**35,465**	**181,582**
Of which:						
Interest rate swap	*3,943*	*4,804*	*24,807*	*33,333*	*27,826*	*94,713*
Call money swap	*1,021*	*4,662*	*11,241*	*49,624*	*3,192*	*69,740*
Exchange rate risk	**1,516**	**4,264**	**3,257**	**—**	**—**	**9,037**
Of which:						
Fx forward	*901*	*4,264*	*3,257*	*—*	*—*	*8,422*
Interest rate and exchange rate risk	**—**	**282**	**1,711**	**4,239**	**2,202**	**8,434**
Of which:						
Currency swap	*—*	*282*	*1,711*	*3,607*	*2,104*	*7,704*
Credit risk	**—**	**8**	**8**	**191**	**—**	**207**
Cash flow hedges	**10,489**	**11,629**	**44,127**	**61,186**	**11,725**	**139,156**
Interest rate risk	**6,019**	**6,707**	**33,070**	**26,959**	**1,976**	**74,731**
Of which:						
Future interest rate	*5,213*	*—*	*—*	*2,279*	*—*	*7,492*
Interest rate swap	*806*	*4,626*	*29,511*	*11,219*	*385*	*46,547*
Call money swap	*—*	*1,502*	*1,550*	*7,890*	*1,181*	*12,123*
Exchange rate risk	**1,746**	**2,336**	**4,616**	**13,071**	**1,714**	**23,483**
Of which:						
FX forward	*1,532*	*2,243*	*3,040*	*2,336*	*—*	*9,151*
Currency swap	*214*	*93*	*1,576*	*9,828*	*1,714*	*13,425*
Interest rate and exchange rate risk	**1,691**	**972**	**5,634**	**15,687**	**3,037**	**27,021**
Of which:						
Interest rate swap	*816*	*—*	*981*	*2,402*	*1,019*	*5,218*
Currency swap	*875*	*972*	*4,653*	*11,164*	*2,018*	*19,682*
Inflation risk	**1,033**	**1,614**	**807**	**5,456**	**4,997**	**13,907**
Of which:						
Currency swap	*33*	*181*	*229*	*4,766*	*4,997*	*10,206*
Equity risk	**—**	**—**	**—**	**13**	**1**	**14**
Hedges of net investments in foreign operations:	**2,435**	**5,086**	**12,831**	**1,858**	**—**	**22,210**
Exchange rate risk	**2,435**	**5,086**	**12,831**	**1,858**	**—**	**22,210**
FX forward	*2,435*	*5,086*	*12,831*	*1,858*	*—*	*22,210*
	20,056	**30,936**	**101,855**	**158,387**	**49,392**	**360,626**

EUR million

	31 December 2019					
	Up to one month	One to three months	Three months to one year	One year to five years	More than five years	Total
Fair value hedges	**5,816**	**14,591**	**43,236**	**90,707**	**48,198**	**202,548**
Interest rate risk	**5,468**	**9,055**	**37,627**	**86,119**	**45,317**	**183,586**
Of which:						
Future interest rate	*16*	*—*	*606*	*6,066*	*5,637*	*12,325*
Interest rate swap	*734*	*3,532*	*24,382*	*62,474*	*26,317*	*117,439*
Call money swap	*4,674*	*5,318*	*12,085*	*14,653*	*8,061*	*44,791*
Exchange rate risk	**333**	**4,090**	**5,172**	**411**	**—**	**10,006**
Of which:						
Fx forward	*329*	*4,090*	*5,082*	*221*	*—*	*9,722*
Interest rate and exchange rate risk	**15**	**1,432**	**437**	**3,933**	**2,881**	**8,698**
Credit risk	**—**	**14**	**—**	**244**	**0**	**258**
Cash flow hedges	**16,506**	**5,912**	**38,678**	**62,119**	**12,224**	**135,439**
Interest rate risk	**13,023**	**2,179**	**13,011**	**26,332**	**1,265**	**55,810**
Of which:						
Futures	*12,304*	*385*	*3,196*	*5,770*	*—*	*21,655*
Interest rate swap	*460*	*864*	*7,441*	*12,585*	*142*	*21,492*
Call money swap	*—*	*398*	*1,253*	*3,925*	*588*	*6,164*
Exchange rate risk	**2,300**	**2,572**	**14,324**	**11,753**	**854**	**31,803**
Of which:						
Future interest rate	*—*	*—*	*9,290*	*—*	*—*	*9,290*
FX forward	*2,173*	*1,746*	*3,404*	*3,272*	*—*	*10,595*
Currency swap	*127*	*826*	*1,630*	*7,593*	*854*	*11,030*
Interest rate and exchange rate risk	**1,086**	**308**	**9,221**	**20,782**	**7,541**	**38,938**
Of which:						
Interest rate swap	*—*	*—*	*1,917*	*2,880*	*2,550*	*7,347*
Currency swap	*1,086*	*308*	*5,553*	*15,106*	*4,991*	*27,044*
Inflation risk	**97**	**853**	**2,114**	**3,204**	**2,562**	**8,830**
Of which:						
FX forward	*—*	*117*	*1,205*	*908*	*—*	*2,230*
Currency swap	*97*	*736*	*909*	*2,207*	*2,562*	*6,511*
Equity risk	**—**	**—**	**8**	**48**	**2**	**58**
Hedges of net investments in foreign operations	**2,735**	**4,191**	**14,192**	**3,359**	**—**	**24,477**
Exchange rate risk	**2,735**	**4,191**	**14,192**	**3,359**	**—**	**24,477**
FX forward	*2,735*	*4,191*	*14,192*	*3,359*	*—*	*24,477*
	25,057	**24,694**	**96,106**	**156,185**	**60,422**	**362,464**

Additionally, for Santander UK Group Holdings plc and Banco Santander, S.A., both the maturity profile, the average interest and exchange rate of hedging instruments by maturity buckets are shown:

Santander UK Group Holdings plc group

	31 December 2021					
	EUR million					
	Up to one month	One to three months	Three months to one year	One year to five years	More than five years	Total
Fair value hedges						
Interest rate risk						
Interest rate instruments						
Nominal	*3,716*	*7,408*	*25,525*	*53,427*	*5,942*	*96,018*
Average fixed interest rate (%) GBP	*0.590*	*0.420*	*0.090*	*0.910*	*3.130*	
Average fixed interest rate (%) EUR	*0.510*	*1.740*	*1.080*	*0.810*	*2.610*	
Average fixed interest rate (%) USD	*1.910*	*0.960*	*1.440*	*2.760*	*4.050*	
Interest rate and foreign exchange rate risk						
Exchange and interest rate instruments						
Nominal	*—*	*—*	*127*	*683*	*165*	*975*
Average GBP/EUR exchange rate	*—*	*—*	*1.205*	*1.159*	*1.171*	
Average fixed interest rate (%) EUR	*—*	*—*	*3.290*	*2.030*	*2.620*	
Cash flow hedges						
Interest rate risk						
Interest rate instruments						
Nominal	*1,203*	*572*	*1,036*	*8,967*	*6,115*	*17,893*
Average fixed interest rate (%) GBP	*1.970*	*0.440*	*0.080*	*1.290*	*0.970*	
Foreign exchange risk						
Exchange and interest rate instruments						
Nominal	*3,218*	*1,114*	*2,448*	*10,897*	*3,584*	*21,261*
Average GBP/JPY exchange rate	*—*	*142.905*	*148.856*	*—*	*—*	
Average GBP/EUR exchange rate	*1.165*	*—*	*1.185*	*1.159*	*1.174*	
Average GBP/USD exchange rate	*1.344*	*1.342*	*1.332*	*1.339*	*1.388*	
Interest rate and foreign exchange rate risk						
Exchange and interest rate instruments						
Nominal	*739*	*—*	*1,000*	*8,112*	*2,860*	*12,711*
Average GBP/EUR exchange rate	*1.277*	*—*	*1.386*	*1.202*	*1.200*	
Average GBP/USD exchange rate	*—*	*—*	*—*	*1.609*	*1.381*	
Average fixed interest rate (%) GBP	*2.260*	*—*	*1.170*	*2.720*	*3.410*	

	31 December 2020					
	EUR million					
	Up to one month	One to three months	Three months to one year	One year to five years	More than five years	Total
Fair value hedges						
Interest rate risk						
Interest rate instruments						
Nominal	*2,704*	*8,481*	*30,946*	*53,170*	*9,050*	*104,351*
Average fixed interest rate (%) GBP	*0.690*	*0.650*	*0.820*	*0.730*	*3.720*	
Average fixed interest rate (%) EUR	*1.180*	*0.230*	*3.020*	*0.980*	*2.340*	
Average fixed interest rate (%) USD	*1.870*	*1.720*	*2.890*	*2.490*	*4.160*	
Interest rate and foreign exchange rate risk						
Exchange and interest rate instruments						
Nominal	*—*	*—*	*147*	*776*	*260*	*1,183*
Average GBP/EUR exchange rate	*—*	*—*	*1.141*	*1.170*	*1.167*	
Average fixed interest rate (%) EUR	*—*	*—*	*4.640*	*1.780*	*3.560*	
Cash flow hedges						
Interest rate risk						
Interest rate instruments						
Nominal	*—*	*999*	*2,815*	*8,869*	*1,180*	*13,863*
Average fixed interest rate (%) GBP	*—*	*0.460*	*0.570*	*1.450*	*1.330*	
Foreign exchange risk						
Exchange and interest rate instruments						
Nominal	*1,602*	*2,244*	*4,317*	*8,328*	*1,246*	*17,737*
Average GBP/JPY exchange rate	*—*	*137.977*	*135.607*	*132.271*	*—*	
Average GBP/EUR exchange rate	*—*	*—*	*—*	*1.163*	*1.179*	
Average GBP/USD exchange rate	*1.293*	*1.316*	*1.323*	*1.304*	*—*	
Interest rate and foreign exchange rate risk						
Exchange and interest rate instruments						
Nominal	*1,630*	*—*	*3,858*	*11,816*	*2,792*	*20,096*
Average GBP/EUR exchange rate	*—*	*—*	*1.354*	*1.253*	*1.197*	
Average GBP/USD exchange rate	*1.465*	*—*	*—*	*1.609*	*1.381*	
Average fixed interest rate (%) GBP	*2.010*	*—*	*3.180*	*2.480*	*3.390*	

	31 December 2019					
	EUR million					
	Up to one month	One to three months	Three months to one year	One year to five years	More than five years	Total
Fair value hedges						
Interest rate risk						
Interest rate instruments						
Nominal	*5,118*	*6,822*	*32,210*	*51,307*	*15,397*	*110,854*
Average fixed interest rate (%) GBP	*0.770*	*0.900*	*0.880*	*1.330*	*3.000*	
Average fixed interest rate (%) EUR	*(0.410)*	*0.290*	*2.210*	*1.360*	*2.360*	
Average fixed interest rate (%) USD	—	*1.540*	*1.990*	*2.690*	*4.560*	
Interest rate and foreign exchange rate risk						
Exchange and interest rate instruments						
Nominal	—	*887*	—	*394*	*738*	*2,019*
Average GBP/EUR exchange rate	—	—	—	*1.178*	*1.160*	
Average GBP/USD exchange rate	—	*1.511*	—	—	—	
Average fixed interest rate (%) EUR	—	—	—	*3.520*	*2.120*	
Average fixed interest rate (%) USD	—	*2.380*	—	—	—	
Cash flow hedges						
Interest rate risk						
Interest rate instruments						
Nominal	—	*398*	*1,253*	*5,490*	*588*	*7,729*
Average fixed interest rate (%) GBP	—	*0.760*	*0.820*	*1.460*	*0.400*	
Foreign exchange risk						
Exchange and interest rate instruments						
Nominal	*1,395*	*2,491*	*4,417*	*7,019*	—	*15,322*
Average GBP/JPY exchange rate	—	*145.928*	*143.086*	*140.815*	—	
Average GBP/EUR exchange rate	—	*1.144*	*1.117*	*1.153*	—	
Average GBP/USD exchange rate	*1.286*	*1.252*	*1.293*	*1.299*	—	
Interest rate and foreign exchange rate risk						
Exchange and interest rate instruments						
Nominal	*954*	—	*7,626*	*15,089*	*7,291*	*30,960*
Average GBP/EUR exchange rate	1.274	—	1.169	1.311	1.209	
Average GBP/USD exchange rate	—	—	*1.536*	*1.581*	*1.450*	
Average fixed interest rate (%) GBP	*2.490*	—	*2.160*	*2.870*	*2.960*	

Banco Santander, S.A.

	31 December 2021					
	EUR million					
	Up to one month	One to three months	Three months to one year	One year to five years	More than five years	Total
Fair value hedges						
Interest rate risk						
Interest rate instruments						
Nominal	14	1,822	3,038	21,507	10,031	36,412
Average fixed interest rate (%) GBP	—	—	—	2.139	1.750	
Average fixed interest rate (%) EUR	3.859	0.989	(0.031)	1.212	1.532	
Average fixed interest rate (%) CHF	—	—	—	0.828	0.403	
Average fixed interest rate (%) JPY	—	—	—	0.465	—	
Average fixed interest rate (%) USD	4.746	1.449	3.459	2.737	3.374	
Average fixed interest rate (%) RON	—	—	—	4.211	3.200	
Foreign exchange risk						
Exchange and interest rate instruments						
Nominal	503	1,634	10,350	586	—	13,073
Average GBP/EUR exchange rate	—	0.882	0.865	0.876	—	
Average USD/EUR exchange rate	1.187	1.172	1.180	—	—	
Average CNY/EUR exchange rate	7.859	7.717	7.412	—	—	
Average PEN/USD exchange rate	—	4.003	—	—	—	
Average JPY/EUR exchange rate	132.688	130.741	—	—	—	
Interest rate and foreign exchange rate risk						
Exchange and interest rate instruments						
Nominal	116	1,109	53	3,255	1,279	5,812
Average fixed interest rate (%) AUD/EUR	—	—	—	4.000	4.661	
Average fixed interest rate (%) CZK/EUR	—	—	—	0.860	—	
Average fixed interest rate (%) RON/EUR	—	—	—	4.849	—	
Average fixed interest rate (%) HKD/EUR	—	—	—	2.580	—	
Average fixed interest rate (%) JPY/EUR	—	—	—	0.730	1.144	
Average fixed interest rate (%) NOK/EUR	—	—	—	—	3.605	
Average fixed interest rate (%) CHF/EUR	—	—	—	0.760	1.243	
Average fixed interest rate (%) USD/COP	—	5.140	9.470	6.789	7.153	
Average fixed interest rate (%) COP/USD	—	—	—	(0.140)	—	
Average fixed interest rate (%) USD/CLP	—	—	—	3.450	—	
Average AUD/EUR exchange rate	—	—	—	1.499	1.529	
Average CZK/EUR exchange rate	—	—	—	25.506	—	
Average EUR/GBP exchange rate	—	1.176	—	—	—	
Average EUR/USD exchange rate	—	—	—	0.891	—	
Average HKD/EUR exchange rate	—	—	—	8.782	—	
Average JPY/EUR exchange rate	—	—	—	132.966	126.605	
Average MXN/EUR exchange rate	—	—	14.696	—	—	
Average NOK/EUR exchange rate	—	—	—	—	9.606	
Average RON/EUR exchange rate	—	—	—	4.815	4.927	
Average CHF/EUR exchange rate	—	—	—	1.092	1.105	
Average USD/CLP exchange rate	—	—	—	0.001	—	
Average NZD/EUR exchange rate	—	—	—	—	1.666	
Average USD/MXN exchange rate	—	—	—	0.050	—	
Credit risk						
Credit risk instruments						
Nominal	—	19	34	120	—	173

	31 December 2021					
	EUR million					
	Up to one month	One to three months	Three months to one year	One year to five years	More than five years	Total
Cash flow hedges						
Interest rate and foreign exchange rate risk						
Interest rate and foreign exchange rate instruments						
Nominal	—	9	1,169	1,848	408	3,434
Average fixed interest rate (%) EUR/PEN	—	—	3.441	—	—	
Average fixed interest rate (%) EUR/AUD	—	1.632	—	—	—	
Average fixed interest rate (%) AUD/EUR	—	—	—	0.305	—	
Average EUR/GBP exchange rate	—	—	1.102	1.113	—	
Average EUR/USD exchange rate	—	—	—	0.882	—	
Average AUD/EUR exchange rate	—	—	—	1.604	1.562	
Average RON/EUR exchange rate	—	—	—	4.885	—	
Average JPY/EUR exchange rate	—	—	—	120.568	—	
Average CHF/EUR exchange rate	—	—	—	—	1.102	
Average NOK/EUR exchange rate	—	—	—	—	10.242	
Average CZK/EUR exchange rate	—	—	—	26.131	—	
Average EUR/PEN exchange rate	—	—	0.208	—	—	
Average EUR/AUD exchange rate	—	0.624	—	—	—	
Interest rate risk						
Bond Forward instruments						
Nominal	4,279	—	5,191	38,314	—	47,784
Average fixed interest rate (%) EUR	—	—	(0.465)	(0.258)	—	
Average fixed interest rate (%) USD	—	—	1.765	—	—	
Average fixed interest rate (%) AUD	—	—	—	1.650	—	
Hedges of net investments in foreign operations						
Exchange rate risk						
Exchange and interest rate instruments						
Nominal	3,778	4,848	11,815	2,916	—	23,357
Average BRL/EUR exchange rate	6.663	6.758	6.841	—	—	
Average CLP/EUR exchange rate	943.354	929.690	949.615	—	—	
Average COP/EUR exchange rate	—	—	4,538.997	—	—	
Average GBP/EUR exchange rate	0.854	0.857	0.855	0.875	—	
Average MXN/EUR exchange rate	25.541	25.335	25.192	—	—	
Average PLN/EUR exchange rate	4.592	4.582	4.634	—	—	
Average USD/EUR exchange rate	—	—	1.167	1.233	—	

	31 December 2020					
	EUR million					
	Up to one month	One to three months	Three months to one year	One year to five years	More than five years	Total
Fair value hedges						
Interest rate risk						
Interest rate instruments						
Nominal	*2,073*	*409*	*2,165*	*17,430*	*14,294*	*36,371*
Average fixed interest rate (%) GBP	*—*	*—*	*—*	*1.375*	*4.072*	
Average fixed interest rate (%) EUR	*0.647*	*0.551*	*0.388*	*0.820*	*1.927*	
Average fixed interest rate (%) CHF	*—*	*—*	*—*	*0.800*	*0.403*	
Average fixed interest rate (%) JPY	*—*	*—*	*—*	*0.465*	*—*	
Average fixed interest rate (%) USD	*0.698*	*0.570*	*2.031*	*3.004*	*3.562*	
Average fixed interest rate (%) RON	*—*	*—*	*—*	*3.610*	*—*	
Foreign exchange risk						
Exchange and interest rate instruments						
Nominal	*833*	*4,149*	*3,008*	*—*	*—*	*7,990*
Average GBP/EUR exchange rate	*—*	*0.901*	*0.916*	*—*	*—*	
Average USD/EUR exchange rate	*1.165*	*1.171*	*1.178*	*—*	*—*	
Average COP/USD exchange rate	*3,628.140*	*3,603.595*	*—*	*—*	*—*	
Average CNY/EUR exchange rate	*8.108*	*8.102*	*7.997*	*—*	*—*	
Average SAR/EUR exchange rate	*4.484*	*4.514*	*—*	*—*	*—*	
Average PEN/USD exchange rate	—	3.609	—	—	—	
Average AUD/EUR exchange rate	—	1.609	—	—	—	
Average JPY/EUR exchange rate	—	124.612	—	—	—	
Interest rate and foreign exchange rate risk						
Exchange and interest rate instruments						
Nominal	*—*	*282*	*818*	*2,621*	*1,083*	*4,804*
Average fixed interest rate (%) AUD/EUR	*—*	*—*	*—*	*4.000*	*4.660*	
Average fixed interest rate (%) CZK/EUR	*—*	*—*	*—*	*0.860*	*—*	
Average fixed interest rate (%) EUR/COP	*—*	*—*	*4.380*	*—*	*—*	
Average fixed interest rate (%) RON/EUR	*—*	*—*	*—*	*4.849*	*—*	
Average fixed interest rate (%) HKD/EUR	*—*	*—*	*—*	*2.580*	*—*	
Average fixed interest rate (%) JPY/EUR	*—*	*—*	*2.195*	*0.568*	*1.281*	
Average fixed interest rate (%) NOK/EUR	*—*	*—*	*—*	*—*	*3.605*	
Average fixed interest rate (%) CHF/EUR	*—*	*—*	*—*	*—*	*1.243*	
Average fixed interest rate (%) USD/COP	*—*	*—*	*8.030*	*6.659*	*7.231*	
Average fixed interest rate (%) COP/USD	*—*	*—*	*6.000*	*—*	*—*	
Average fixed interest rate (%) USD/CLP	*—*	*—*	*0.930*	*—*	*—*	
Average AUD/EUR exchange rate	*—*	*—*	*—*	*1.499*	*1.508*	
Average COP/USD exchange rate	*—*	*—*	*3,437.200*	*—*	*—*	
Average CZK/EUR exchange rate	*—*	*—*	*—*	*25.539*	*—*	
Average EUR/GBP exchange rate	*—*	*1.113*	*—*	*—*	*—*	
Average EUR/USD exchange rate	*—*	*—*	*—*	*0.891*	*—*	
Average HKD/EUR exchange rate	*—*	*—*	*—*	*8.782*	*—*	
Average JPY/EUR exchange rate	*—*	*—*	*113.370*	*133.840*	*125.883*	
Average MXN/EUR exchange rate	*—*	*—*	*—*	*14.696*	*—*	
Average NOK/EUR exchange rate	*—*	*—*	*—*	*—*	*9.606*	
Average RON/EUR exchange rate	*—*	*—*	*—*	*4.727*	*—*	
Average CHF/EUR exchange rate	*—*	*—*	*—*	*1.092*	*1.105*	
Average USD/CLP exchange rate	*—*	*—*	*0.001*	*—*	*—*	
Average USD/MXN exchange rate	*—*	*—*	*0.050*	*—*	*—*	

	31 December 2020					
	EUR million					
	Up to one month	One to three months	Three months to one year	One year to five years	More than five years	Total
Credit risk						
Credit risk instruments						
Nominal	—	*8*	*8*	*191*	—	*207*
Cash flow hedges						
Interest rate and foreign exchange rate risk						
Interest rate and foreign exchange rate instruments						
Nominal	—	—	*1,247*	*3,242*	*208*	*4,697*
Average EUR/GBP exchange rate	—	—	*1.080*	*1.102*	—	
Average EUR/USD exchange rate	—	—	—	*0.882*	—	
Average AUD/EUR exchange rate	—	—	—	*1.625*	—	
Average RON/EUR exchange rate	—	—	—	*4.810*	—	
Average JPY/EUR exchange rate	—	—	—	*120.568*	—	
Average CHF/EUR exchange rate	—	—	—	—	*1.102*	
Interest rate risk						
Bond Forward instruments						
Nominal	*3,164*	*5,000*	*23,000*	*4,279*	—	*35,443*
Average fixed interest rate (%) EUR	—	*(0.258)*	*(0.250)*	*(0.236)*	—	
Hedges of net investments in foreign operations						
Exchange rate risk						
Exchange and interest rate instruments						
Nominal	*2,229*	*4,554*	*11,570*	*1,858*	—	*20,211*
Average BRL/EUR exchange rate	*5.270*	*5.308*	*6.332*	—	—	
Average CLP/EUR exchange rate	*869.633*	*861.546*	*864.339*	*932.215*	—	
Average COP/EUR exchange rate	—	—	*4.471*	—	—	
Average GBP/EUR exchange rate	*0.909*	*0.916*	*0.907*	—	—	
Average MXN/EUR exchange rate	*23.121*	*25.456*	*26.788*	—	—	
Average PLN/EUR exchange rate	*4.427*	*4.420*	*4.516*	—	—	

	31 December 2019					
	EUR million					
	Up to one month	One to three months	Three months to one year	One year to five years	More than five years	Total
Fair value hedges						
Interest rate risk						
Interest rate instruments						
Nominal	*8*	*106*	*1,406*	*16,707*	*10,219*	*28,446*
Average fixed interest rate (%) GBP	—	—	—	*1.430*	*6.820*	
Average fixed interest rate (%) EUR	*5.300*	*2.410*	*3.200*	0.790	2.580	
Average fixed interest rate (%) CHF	—	—	—	*0.800*	*0.400*	
Average fixed interest rate (%) JPY	—	—	—	*0.460*	—	
Average fixed interest rate (%) USD	—	—	*2.050*	*3.120*	*3.930*	
Foreign exchange risk						
Exchange and interest rate instruments						
Nominal	*211*	*3,903*	*4,777*	—	—	*8,891*
Average GBP/EUR exchange rate	—	*0.860*	*0.870*	—	—	
Average USD/EUR exchange rate	—	*1.120*	*1.120*	—	—	
Average USD/CLP exchange rate	747.720	*747.900*	*746.700*	—	—	
Average CNY/EUR exchange rate	—	*7.910*	*8.010*	—	—	
Average SAR/EUR exchange rate	*4.160*	*0.042*	—	—	—	
Interest rate and foreign exchange rate risk						
Exchange and interest rate instruments						
Nominal	*14*	*289*	*346*	*2,599*	*949*	*4,197*
Average fixed interest rate (%) AUD/EUR	—	—	—	*4.000*	*4.660*	
Average fixed interest rate (%) CZK/EUR	—	—	—	*0.860*	—	
Average fixed interest rate (%) EUR/COP	—	—	*6.160*	—	—	
Average fixed interest rate (%) RON/EUR	—	—	—	*4.850*	—	
Average fixed interest rate (%) HKD/EUR	—	—	*2.520*	*2.580*	—	
Average fixed interest rate (%) JPY/EUR	—	—	*0.540*	*0.660*	*1.280*	
Average fixed interest rate (%) NOK/EUR	—	—	—	—	*3.610*	
Average fixed interest rate (%) CHF/EUR	—	—	—	—	*1.240*	
Average fixed interest rate (%) USD/COP	*7.540*	—	*5.670*	*7.620*	*7.220*	
Average AUD/EUR exchange rate	—	—	—	*1.499*	*1.508*	
Average CZK/EUR exchange rate	—	—	—	*25.407*	26.030	
Average EUR/GBP exchange rate	—	*1.171*	—	—	—	
Average HKD/EUR exchange rate	—	—	*8.719*	*8.782*	—	
Average JPY/EUR exchange rate	—	—	130.470	132.461	125.883	
Average MXN/EUR exchange rate	—	—	—	*14.696*	—	
Average NOK/EUR exchange rate	—	—	—	—	*9.606*	
Average RON/EUR exchange rate	—	—	—	*4.727*	—	
Average CHF/EUR exchange rate	—	—	—	*1.092*	*1.105*	
Average USD/MXN exchange rate	—	—	—	*0.052*	—	

	31 December 2019					
	EUR million					
	Up to one month	One to three months	Three months to one year	One year to five years	More than five years	Total
Credit Risk						
Credit risk instruments						
Nominal	—	*13*	—	*244*	—	*257*
Cash flow hedges						
Interest rate and foreign exchange rate risk						
Interest rate and foreign exchange rate instruments						
Nominal	—	—	*353*	*4,410*	*207*	*4,970*
Interest rate risk						
Bond Forward instruments						
Nominal	*11,626*	—	*1,792*	*5,443*	—	*18,861*
Hedges of net investments in foreign operations						
Exchange rate risk						
Exchange and interest rate instruments						
Nominal	*2,592*	*3,838*	*13,595*	*3,359*	—	*23,384*
Average BRL/EUR exchange rate	*4.590*	*4.740*	*4.740*	*4.880*	—	
Average CLP/EUR exchange rate	*822.130*	*822.320*	*811.640*	*824.360*	—	
Average COP/EUR exchange rate	—	—	*3,828.610*	—	—	
Average GBP/EUR exchange rate	*0.890*	*0.910*	*0.940*	—	—	
Average MAD/EUR exchange rate	—	*10.770*	*10.870*	—	—	
Average MXN/EUR exchange rate	*23.490*	23.100	*23.270*	—	—	
Average PLN/EUR exchange rate	*4.370*	*4.380*	*4.390*	—	—	

Other geographies

Consumer Group entities mainly have loans portfolios at fixed interest rates and are therefore, exposed to changes in fair value due to movements in market interest rates. The entities manage this risk by contracting interest rate swaps in which they pay a fixed rate and receive a variable rate. Interest rate risk is the only one hedged and, therefore, other risks, such as credit risk, are managed but not hedged by the entities. The interest rate risk component is determined as the change in fair value of fixed rate loans arising solely from changes in a reference rate. This strategy is designated as a fair value hedge and its effectiveness is assessed by comparing changes in the fair value of loans attributable to changes in reference interest rates with changes in the fair value of interest rate swaps.

In addition, in order to access international markets with the aim of obtaining sources of financing, some Consumer Group´s entities issue fixed rate debt in their own currency and in other currencies that differ from their functional currency. Therefore, they are exposed to changes in both interest rates and exchange rates, which they mitigate with derivatives (interest rate swaps, fx forward and cross currency swaps) in which they receive a fixed interest rate and pay a variable interest rate, implemented with a fair value hedge.

The cash flow hedges of the Santander Group´s entities hedge the foreign currency risk of loans and financing.

Finally, it has hedges of net investments abroad to hedge the foreign exchange risk of the shareholding in NOK and CNY currencies.

Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México has mainly long-term loan portfolios at fixed interest rates, portfolios of short-term deposits in local currency, portfolios of Mexican Government bonds and corporate bonds in currencies other than the local currency and are therefore exposed to changes in fair value due to movements in market interest rates, as well as these latter portfolios also to variations in exchange rates. The entity manages this risk by contracting derivatives (interest rate swaps or cross currency swaps) in which they pay a fixed rate and receive a variable rate. Only the interest rate and exchange rate risk is hedged, if applicable, and therefore other risks, such as credit risk, are managed but not hedged by the entity.

The interest rate risk component is determined as the change in the fair value of fixed rate loans arising solely from changes in a reference rate. This strategy is designated as a fair value hedge and its effectiveness is assessed by comparing changes in the fair value of loans attributable to changes in benchmark interest rates with changes in the fair value of interest rate swaps.

Regarding cash flow hedges, Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México has a portfolio of unsecured bonds issued at a variable rate in its local currency, which it manages with an Interest Rate Swap in which it receives a variable rate and pays a fixed rate. On the other hand, it also has different items in currencies other than the local currency: unsecured fixed rate bonds, commercial bank loans at variable rates, fixed rate issues, Mexican and Brazilian government bonds at fixed rates. In all these portfolios, the Bank is exposed to exchange rate variations, which it mitigates by contracting cross currency swaps or fx forward.

Banco Santander (Brasil) S.A. has, on the one hand, fixed-rate government bond portfolios and, therefore, they are exposed to changes in fair value due to movements in market interest rates. The entity manages this risk by contracting derivatives (interest rate swaps or futures) in which they pay a fixed rate and receive a variable rate. The interest rate risk is the only one hedged and consequently other risks, such as credit risk, are managed but not hedged by the entity. This strategy is designated as a fair value hedge and its effectiveness is evaluated by comparing by linear regression the changes in the fair value of the bonds with the changes in the fair value of the derivatives.

On the other hand, as part of the fair value hedge strategy, it has corporate loans in different currencies than the local one and is therefore exposed to changes in fair value due to exchange rates. This risk is mitigated by contracting cross currency swaps. Its effectiveness is evaluated by comparing changes in the fair value of loans attributable to changes subject of hedge with changes in the fair value of derivatives.

Finally, it also holds a portfolio of long-term corporate bonds with inflation-indexed rates, thus exposed to changes in market value due to changes in market inflation rates. In order to achieve its mitigation, they contract futures in which they pay the indexed inflation and receive variable interest rates. Its effectiveness is assessed by comparing through lineal regression the changes in the fair value of the bonds to the changes in fair value of the derivatives.

In the hedge of cash flows, Banco Santander (Brasil) S.A. has portfolios of loans and government bonds in different currency than the entity's functional currency and, therefore, it is subject to the risk of changes in currency rates. This exposure will be mitigated by hiring cross currency swaps and futures. Its effectiveness is assessed by comparing changes in fair value of loans and bonds, caused by the hedge risk, to changes in fair value of such derivatives.

Finally, they have a portfolio of variable rate government bonds, so they are exposed to changes in the value due to changes in interest rates. In order to mitigate these changes, a future is hired in which a variable rate is paid and a fixed rate is received. Its effectiveness is assessed by comparing changes in the fair value loans and bonds to changes in the fair value of the futures.

Regarding the hedged items, the products that are being hedged are mainly: borrowed deposits, financial deposits, loans, government bonds as assets and financial bonds as liabilities. The following table shows the detail of the type of hedging, the risk that is hedged and which products are being hedged at 31 December 2021, 2020 and 2019:

EUR million

31 December 2021

	Carrying amount of hedged items		Accumulated amount of fair value adjustments on the hedged item			Change in fair value of hedged item for ineffectiveness assessment	Cash flow reserves or conversion reserves	
	Assets	Liabilities	Assets	Liabilities	Balance sheet line item		Continuing hedges	Discontinued hedges
Fair value hedges	**193,949**	**51,395**	**462**	**453**	**Loans and advances / Deposits and Debt securities / Debt securities issued**	**(1,061)**	**—**	**—**
Interest rate risk	125,479	47,347	727	366		(543)	—	—
Exchange rate risk	64,531	—	(282)	—		(343)	—	—
Interest and Exchange rate risk	3,714	4,048	15	87		(173)	—	—
Inflation risk	46	—	—	—		—	—	—
Credit risk	179	—	2	—		(2)	—	—
Cash flow hedges					**Deposits and loans and advances / Debt securities / Variable income portfolio / Rest of other assets and liabilities**	**1,538**	**(414)**	**(150)**
Interest rate risk						400	(540)	(54)
Exchange rate risk						440	81	8
Interest and Exchange rate risk						69	330	—
Inflation risk						628	(289)	(104)
Equity risk						1	4	0
Net foreign investments hedges	**3,282**	**—**	**—**	**—**	**Equity instruments**	**—**	**0**	**3**
Exchange rate risk	3,282	—	—	—		—	—	3
	197,231	**51,395**	**462**	**453**		**477**	**(414)**	**(147)**

EUR million

31 December 2020

	Carrying amount of hedged items		Accumulated amount of fair value adjustments on the hedged item			Change in fair value of hedged item for ineffectiveness assessment	Cash flow reserves or conversion reserves	
	Assets	Liabilities	Assets	Liabilities	Balance sheet line item		Continuing hedges	Discontinued hedges
Fair value hedges	**141,608**	**52,055**	**3,369**	**2,914**	**Loans and advances / Deposits and Debt securities / Debt securities issued**	**553**	**—**	**—**
Interest rate risk	128,279	48,137	3,183	2,727		469	—	—
Exchange rate risk	8,718	—	40	—		(13)	—	—
Interest and Exchange rate risk	4,391	3,918	143	187		100	—	—
Credit risk	220	—	3	—		(3)	—	—
Cash flow hedges					**Deposits and loans and advances / Debt securities / Variable income portfolio / Rest of other assets and liabilities**	**532**	**420**	**(43)**
Interest rate risk						314	(87)	(11)
Exchange rate risk						204	(68)	—
Interest and Exchange rate risk						(87)	680	—
Inflation risk						105	(111)	(32)
Equity risk						(4)	6	—
Net foreign investments hedges	**22,150**	**—**	**—**	**—**	**Equity instruments**	**—**	**(11)**	**14**
Exchange rate risk	22,150	—	—	—		—	(11)	14
	163,758	**52,055**	**3,369**	**2,914**		**1,085**	**409**	**(29)**

EUR million								
	31 December 2019							
	Carrying amount of hedged items		Accumulated amount of fair value adjustments on the hedged item			Change in fair value of hedged item for ineffectiveness assessment	Cash flow reserves or conversion reserves	
	Assets	Liabilities	Assets	Liabilities	Balance sheet line item		Continuing hedges	Discontinued hedges
Fair value hedges	**134,958**	**60,487**	**2,768**	**2,298**	**Loans and advances / Deposits and Debt securities / Debt securities issued**	**1,583**	**—**	**—**
Interest rate risk	122,560	55,538	2,764	2,099		1,370	—	—
Exchange rate risk	8,613	—	19	—		58	—	—
Interest and Exchange rate risk	3,532	4,949	(21)	199		154	—	—
Inflation risk	—	—	—	—		(4)	—	—
Credit risk	253	—	6	—		5	—	—
Cash flow hedges					**Deposits and loans and advances / Debt securities / Variable income portfolio / Rest of other assets and liabilities**	**(204)**	**522**	**(79)**
Interest rate risk						(128)	4	(74)
Exchange rate risk						(32)	130	(4)
Interest and Exchange rate risk						(169)	510	—
Inflation risk						20	(22)	—
Equity risk						7	(2)	(1)
Other risks						98	(98)	—
Net foreign investments hedges	**1,070**	**—**	**—**	**—**	**Equity instruments**	**—**	**—**	**—**
Exchange rate risk	1,070	—	—	—		—	—	—
	136,028	**60,487**	**2,768**	**2,298**		**1,379**	**522**	**(79)**

The cumulative amount of adjustments of the fair value hedging instruments that remain in the balance for hedges items that are no longer adjusted by profit and loss of coverage as at 31 December 2021 is EUR 460 million (EUR 729 million in 2020 and EUR 340 million in 2019).

The net impact of the hedges are shown in the following table:

	EUR million				
	31 December 2021				
	Earnings/ (losses) recognised in another cumulative overall result	Ineffective recognised in the income statement	Line of the income statement that includes the ineffectiveness of cash flows	Reclassified amount of reserves to the income statement due to:	
				Cover transaction affecting the income statement	Line of the income statement that includes reclassified items
Fair value hedges		**18**	**Gains or losses financial assests/liabilities**		
Interest rate risk		46			
Exchange rate risk		(55)			
Interest rate and exchange rate risk		27			
Cash flow hedges	**(941)**	**(63)**	**Gains or losses financial assests/liabilities**	**(801)**	**Interest margin/Gains or losses financial assests/liabilities**
Interest rate risk	(494)	(33)		269	
Exchange rate risk	155	2		(262)	
Interest rate and exchange rate risk	(350)	(35)		(350)	
Inflation risk	(249)	3		(458)	
Equity risk	(3)	—		—	
	(941)	**(45)**		**(801)**	

	EUR million				
	31 December 2020				
	Earnings/ (losses) recognised in another cumulative overall result	Ineffective coverage recognised in the income statement	Line of the income statement that includes the ineffectiveness of cash flows	Reclassified amount of reserves to the income statement due to:	
				Cover transaction affecting the income statement	Line of the income statement that includes reclassified items
Fair value hedges		**104**	**Gains or losses financial assests/liabilities**		
Interest rate risk		9			
Exchange rate risk		1			
Interest rate and exchange rate risk		92			
Credit risk		2			
Cash flow hedges	**(67)**	**(53)**	**Gains or losses financial assests/liabilities**	**851**	**Interest margin/Gains or losses financial assests/liabilities**
Interest rate risk	69	7		118	
Exchange rate risk	(194)	9		(132)	
Interest rate and exchange rate risk	170	(62)		844	
Inflation risk	(121)	(7)		21	
Equity risk	9	—		—	
Net foreign investments hedges	**3**	**—**	**Gains or losses financial assests/liabilities**	**—**	
Exchange rate risk	3	—		—	
	(64)	**51**		**851**	

	EUR million				
	31 December 2019				
	Earnings/ (losses) recognised in another cumulative overall result	Ineffective coverage recognised in the income statement	Line of the income statement that includes the ineffectiveness of cash flows	Reclassified amount of reserves to the income statement due to:	
				Cover transaction affecting the income statement	Line of the income statement that includes reclassified items
Fair value hedges		**58**	**Gains or losses financial assests/liabilities**		
Interest rate risk		5			
Risk of Exchange rate		(3)			
Risk of interest rate and exchange rate		56			
Inflation risks		—			
Cash flow hedges	**8**	**(86)**	**Gains or losses financial assests/liabilities**	**(1,112)**	**Interest margin/Gains or losses financial assests/liabilities**
Interest rate risk	(263)	1		8	
Exchange rate risk	145	(34)		(364)	
Interest rate and exchange rate risk	168	(53)		(769)	
Inflation risk	(44)	—		13	
Equity risk	2	—		—	
Net foreign investments hedges	**—**	**—**	**Gains or losses financial assests/liabilities**	**—**	
Exchange rate risk	—	—		—	
	8	**(28)**		**(1,112)**	

The following table shows the movement in the impact of equity for the year:

EUR million	2021	2020	2019
Balance at beginning of year	**295**	**300**	**277**
Cash flow hedges			
Interest rate risk	**(494)**	**67**	**(264)**
Amounts transferred to income statements	*(269)*	*(118)*	*(8)*
Gain or loss in value CFE - recognized in equity	*(225)*	*185*	*(256)*
Exchange rate risk	**155**	**(194)**	**146**
Amounts transferred to income statements	*262*	*132*	*364*
Gain or loss in value CFE - recognized in equity	*(107)*	*(326)*	*(218)*
Interest rate and exchange rate risk	**(350)**	**170**	**168**
Amounts transferred to income statements	*350*	*(844)*	*769*
Gain or loss in value CFE - recognized in equity	*(700)*	*1,014*	*(601)*
Inflation risk	**(249)**	**(121)**	**(44)**
Amounts transferred to income statements	*458*	*(21)*	*(13)*
Gain or loss in value CFE - recognized in equity	*(707)*	*(100)*	*(31)*
Equity risk	**(3)**	**9**	**2**
Amounts transferred to income statements	*—*	*—*	*—*
Gain or loss in value CFE - recognized in equity	*(3)*	*9*	*2*
Net foreign investments hedges			
Exchange rate risk	**—**	**3**	**—**
Amounts transferred to income statements	*—*	*—*	*—*
Gain or loss in value CFE - recognized in equity	*—*	*3*	*—*
Non-controlling interest	92	56	32
Taxes	278	5	(17)
Balance at end of year	**(276)**	**295**	**300**

37. Discontinued operations

No operations were discontinued in 2021, 2020 or 2019.

38. Interest income

Interest and similar income in the consolidated income statement comprises the interest accruing in the year on all financial assets with an implicit or explicit return, calculated by applying the effective interest method, irrespective of measurement at fair value; and the rectifications of income as a result of hedge accounting. Interest is recognised gross, without deducting any tax withheld at source.

The detail of the main interest and similar income items earned in 2021, 2020 and 2019 is as follows:

EUR million	2021	2020	2019
Loans and advances, central banks	476	431	1,314
Loans and advances, credit institutions	916	894	1,785
Debt instruments	5,724	5,022	6,378
Loans and advances, customers	38,649	38,788	46,180
Other interest	698	606	1,128
	46,463	**45,741**	**56,785**

Most of the interest and similar income was generated by the Group's financial assets that are measured either at amortised cost or at fair value through Other comprehensive income.

39. Interest expense

Interest expense and similar charges in the consolidated income statement includes the interest accruing in the year on all financial liabilities with an implicit or explicit return, including remuneration in kind, calculated by applying the effective interest method, irrespective of measurement at fair value; the rectifications of cost as a result of hedge accounting; and the interest cost attributable to provisions recorded for pensions.

The detail of the main items of interest expense and similar charges accrued in 2021, 2020 and 2019 is as follows:

EUR million	2021	2020	2019
Central banks deposits	338	366	468
Credit institution deposits	1,140	1,652	2,576
Customer deposits	5,452	5,599	10,137
Debt securities issued and subordinated liabilities	4,838	5,119	6,679
Marketable debt securities	*4,190*	*4,548*	*6,034*
Subordinated liabilities (note 23)	*648*	*571*	*645*
Provisions for pensions (note 25)	91	95	145
Lease Liabilities	125	186	273
Other interest expense	1,109	730	1,224
	13,093	**13,747**	**21,502**

Most of the interest expense and similar charges was generated by the Group's financial liabilities that are measured at amortised cost.

40. Dividend income

Dividend income includes the dividends and payments on equity instruments out of profits generated by investees after the acquisition of the equity interest.

The detail of Income from dividends as follows:

EUR million

	2021	2020	2019
Dividend income classified as:			
Financial assets held for trading	369	272	388
Non-trading financial assets mandatorily at fair value through profit or loss	32	31	34
Financial assets at fair value through other comprehensive income	112	88	111
	513	**391**	**533**

41. Commission income

Commission income comprises the amount of all fees and commissions accruing in favour of the Group in the year, except those that form an integral part of the effective interest rate on financial instruments.

The detail of fee and commission income is as follows:

EUR million

	2021	2020	2019
Coming from collection and payment services			
Bills	214	265	328
Demand accounts	1,408	1,284	1,382
Cards	3,138	2,986	3,858
Orders	503	484	478
Cheques and other	139	110	155
	5,402	**5,129**	**6,201**
Coming from non-banking financial products			
Investment funds	992	888	943
Pension funds	161	170	180
Insurance	2,467	2,289	2,631
	3,620	**3,347**	**3,754**
Coming from Securities services			
Securities underwriting and placement	431	394	364
Securities trading	319	316	281
Administration and custody	402	336	485
Asset management	369	316	293
	1,521	**1,362**	**1,423**
Other			
Foreign exchange	522	500	612
Financial guarantees	415	409	521
Commitment fees	442	366	293
Other fees and commissions	1,890	1,911	2,545
	3,269	**3,186**	**3,971**
	13,812	**13,024**	**15,349**

42. Commission expense

Commission expense shows the amount of all fees and commissions paid or payable by the Group in the year, except those that form an integral part of the effective interest rate on financial instruments.

The detail of commission expense is as follows:

EUR million

	2021	2020	2019
Commissions assigned to third parties	**1,993**	**1,856**	**2,350**
Cards	1,355	1,249	1,616
By collection and return of effects	16	12	12
Other fees assigned	622	595	722
Other commissions paid	**1,317**	**1,153**	**1,220**
Brokerage fees on lending and deposit transactions	60	26	27
Sales of insurance and pension funds	341	248	232
Other fees and commissions	916	879	961
	3,310	**3,009**	**3,570**

43. Gains or losses on financial assets and liabilities

The following information is presented below regarding the gains or losses recorded for financial assets or liabilities:

a) Breakdown

The detail, by origin, of Gains/losses on financial assets and liabilities:

EUR million

	2021	2020	2019
Gains or losses on financial assets and liabilities not measured at fair value through profit or loss, net	628	1,107	1,136
Financial assets at amortized cost	89	(31)	308
Other financial assets and liabilities	539	1,138	828
Of which debt instruments	*567*	*1,179*	*804*
Gains or losses on financial assets and liabilities held for trading, net*	1,141	3,211	1,349
Gains or losses on non-trading financial assets and liabilities mandatory at fair value through profit or loss	132	82	292
Gains or losses on financial assets and liabilities measured at fair value through profit or loss, net*	270	(171)	(286)
Gains or losses from hedge accounting, net	(46)	51	(28)
	2,125	**4,280**	**2,463**

* Includes the net result obtained by transactions with debt securities, equity instruments, derivatives and short positions included in this portfolio when the Group jointly manages its risk in these instruments.

As explained in note 44, the above breakdown should be analysed in conjunction with the 'Exchange differences, net':

EUR million	2021	2020	2019
Exchange differences, net	(562)	(2,093)	(932)

b) Financial assets and liabilities at fair value through profit or loss

The detail of the amount of the asset balances is as follows:

EUR million	2021	2020	2019
Loans and receivables:	34,812	46,589	59,624
Central banks	3,608	9,481	6,473
Credit institutions	13,549	12,139	21,649
Customers	17,655	24,969	31,502
Debt instruments	30,223	41,573	36,402
Equity instruments	19,119	12,849	15,787
Derivatives	54,292	67,137	63,397
	138,446	**168,148**	**175,210**

Grupo Santander mitigates and reduces this exposure as follows:

- With respect to derivatives, the Group has entered into framework agreements with a large number of credit institutions and customers for the netting-off of asset positions and the provision of collateral for non-payment.

  At 31 December 2021 the exposure to credit risk of the derivatives presented in the balance sheet is not significant because they are subject to netting and collateral agreements (see note 2.f).

- Loans and advances to credit institutions and Loans and advances includes reverse repos amounting to EUR 26,060 million at 31 December 2021.

  Also, mortgage-backed assets totalled EUR 1,299 million.

- Debt instruments include EUR 24,117 million of Spanish and foreign government securities.

  At 31 December 2021 the amount of the change in the year in the fair value of financial assets at fair value through profit or loss attributable to variations in their credit risk (spread) was not material.

The detail of the amount of the liability balances is as follows:

EUR million	2021	2020	2019
Deposits	40,946	43,598	57,111
Central banks	1,645	2,490	12,854
Credit institutions	7,552	6,765	9,340
Customer	31,749	34,343	34,917
Marketable debt securities	5,454	4,440	3,758
Short positions	12,236	16,698	14,123
Derivatives	53,566	64,469	63,016
Other financial liabilities	—	—	126
	112,202	**129,205**	**138,134**

At 31 December 2021, the amount of the change in the fair value of financial liabilities at fair value through profit or loss attributable to changes in their credit risk during the year is not material.

In relation to liabilities designated at fair value through profit or loss where it has been determined at initial recognition that the credit risk is recorded in accumulated 'Other comprehensive income' (see 'Statement of recognised income and expense') the amount that the Group would be contractually obliged to pay on maturity of these liabilities at 31 December 2021 is EUR 81 million lower than their carrying amount (EUR 119 million at 31 December 2020 and EUR 26 million at 31 December 2019).

Within Deposits, there are repurchase agreements amounting to EUR 14,057 million at 31 December 2021.

44. Exchange differences, net

Exchange differences shows basically the gains or losses on currency dealings, the differences that arise on translations of monetary items in foreign currencies to the functional currency.

Grupo Santander manages the currencies to which it is exposed together with the arrangement of derivative instruments and, accordingly, the changes in this line item should be analysed together with those recognised under 'Gains/losses on financial assets and liabilities' (see note 43).

45. Other operating income and expenses

Other operating income and Other operating expenses in the consolidated income statements include:

EUR million

	2021	2020	2019
Insurance activity	**211**	**210**	**120**
Income from insurance and reinsurance contracts issued	1,516	1,452	2,534
Of which:			
Insurance and reinsurance premium income	*1,381*	*1,349*	*2,404*
Reinsurance income (note 15)	*135*	*103*	*130*
Expenses of insurance and reinsurance contracts	(1,305)	(1,242)	(2,414)
Of which:			
Claims paid, other insurance-related expenses and net provisions for insurance contract liabilities	*(1,097)*	*(1,063)*	*(2,183)*
Reinsurance premiums paid	*(208)*	*(179)*	*(231)*
Other operating income	**2,255**	**1,920**	**1,797**
Non- financial services	291	362	379
Other operating income	1,964	1,558	1,418
Other operating expense	**(2,442)**	**(2,342)**	**(2,138)**
Non-financial services	(283)	(350)	(351)
Other operating expense:	(2,159)	(1,992)	(1,787)
Of which, credit institutions deposit guarantee fund and single resolution fund	*(1,016)*	*(1,005)*	*(911)*
	24	**(212)**	**(221)**

Most of Banco Santander's insurance activity is carried on in life insurance.

The amount of the Group recognises in relation to income from sub-leases of rights of use is not material.

46. Staff costs

a) Breakdown

The detail of Staff costs is as follows:

EUR million

	2021	2020	2019
Wages and salaries	8,466	8,070	8,987
Social Security costs	1,323	1,277	1,426
Additions to provisions for defined benefit pension plans (note 25)	73	76	72
Contributions to defined contribution pension funds	286	283	292
Other Staff costs	1,068	1,077	1,364
	11,216	**10,783**	**12,141**

b) Headcount

The average number of employees in the Group and Banco Santander, S.A., by professional category, was as follows:

Average number of employees	2021	2020	2019
Banco Santander, S.A.	24,512	27,503	30,009
Executive directors and Senior management	*19*	*21*	*20*
Other line personnel	*23,343*	*26,527*	*29,147*
Branches abroad	*1,150*	*955*	*842*
Rest of Spain	10,348	8,878	8,269
Santander UK plc	15,463	16,790	17,961
Santander Brasil	46,269	44,554	47,253
Other companies*	95,913	96,166	97,622
	192,505	**193,891**	**201,114**

* Does not include staff affected by discontinued operations.

The number of employees, at the end of 2021, 2020 and 2019, was 197,070, 191,189 and 196,419, respectively.

The functional breakdown (final employment), by gender, at 31 December 2021 is as follows:

FUNCTIONAL BREAKDOWN BY GENDER

	Senior executives		Other executives		Other personnel	
	Men	Women	Men	Women	Men	Women
Europe	1,039	390	6,865	3,926	29,934	37,773
North America	223	60	1,181	583	18,299	23,226
South America	318	115	2,955	1,934	29,137	39,112
	1,580	**565**	**11,001**	**6,443**	**77,370**	**100,111**

The same information, expressed in percentage terms at 31 December 2021 is as follows:

Functional breakdown by gender

	Senior executives		Other executives		Other personnel	
	Men	Women	Men	Women	Men	Women
Europe	73%	27%	64%	36%	44%	56%
North America	79%	21%	67%	33%	44%	56%
South America	73%	27%	60%	40%	43%	57%
	74%	**26%**	**63%**	**37%**	**44%**	**56%**

The labour relations between employees and the various Group companies are governed by the related collective agreements or similar regulations.

The number of employees in the Group with disabilities, distributed by professional categories, at 31 December 2021, is as follows:

Number of employees*

	2021
Senior management	10
Management	115
Collaborators	3,578
	3,703

* An employee with disabilities is considered to be a person who is recognised by the State or the company in each jurisdiction where the Group operates and that entitles them to receive direct monetary assistance, or other types of aid such as, for example, reduction of their taxes. In the case of Spain, employees with disabilities have been considered to be those with a degree of disabilities greater than or equal to 33%.

The number of Group employees with disabilities at 2020 and 2019, was 3,577 and 3,584, respectively.

Likewise, the average number of employees of Banco Santander, S.A. with disabilities, equal to or greater than 33%, during 2021 was 288 (319 and 318 employees during 2020 and 2019). At the end of fiscal year 2021, there were 307 employees (317 and 295 employees at 31 December, 2020 and 2019, respectively).

c) Share-based payments

The main share-based payments granted by the Group in force at 31 December, 2021, 2020 and 2019 are described below.

i. Bank

The variable remuneration policy for the Bank's executive directors and certain executive personnel of the Bank and of other Group companies includes Bank share-based payments, the implementation of which requires, in conformity with the law and the Bank's Bylaws, specific resolutions to be adopted by the general meeting.

Were it necessary or advisable for legal, regulatory or other similar reasons, the delivery mechanisms described below may be adapted in specific cases without altering the maximum number of shares linked to the plan or the essential conditions to which the delivery thereof is subject.

These adaptations may involve replacing the delivery of shares with the delivery of cash amounts of an equal value.

The plans that include share-based payments are as follows: (i) Deferred and Conditional Variable Remuneration Plan; (ii) Deferred Multiyear Objectives Variable Remuneration Plan; (iii) Digital Transformation Award. The characteristics of the plans are set forth below:

Deferred variable remuneration systems	Description and plan beneficiaries	Conditions	Calculation Base
(i) Deferred and conditional variable remuneration plan (2015, 2016, 2017, 2018, 2019, 2020 and 2021)	The purpose of these cycles is to defer a portion of the variable remuneration of the beneficiaries over a period of three years for the sixth cycles, and over three or five years for the fifth, seventh, eighth, ninth, tenth and eleventh cycles, for it to be paid, where appropriate, in cash and in Santander shares; the other portion of the variable remuneration is also to be paid in cash and Santander shares, upon commencement of the cycles, in accordance with the rules set forth below. Beneficiaries: • Executive directors and certain executives (including senior management) and employees who assume risk, who perform control functions or receive an overall remuneration which puts them on the same remuneration level as senior executives and employees who assume risks (fifth cycle) • In the case of the sixth, seventh, eighth, ninth, tenth and eleventh cycle, the beneficiaries are Material Risk Takers (Identified staff) that are not beneficiaries of the Deferred Multiyear Objectives Variable Remuneration Plan.	For the fifth and sixth cycles (2015 to 2016), the accrual of deferred compensation is conditioned, in addition to the requirement that the beneficiary remains in the Group's employ, with the exceptions included in the plan regulations upon none of the following circumstances existing during the period prior to each of the deliveries, pursuant to the provisions set forth in each case in the plan regulations: i. Poor financial performance of the Group. ii. breach by the beneficiary of internal regulations, including, in particular, those relating to risks. iii. material restatement of the Group's consolidated financial statements, except when it is required pursuant to a change in accounting standards. iv. Significant changes in the Group's economic capital or risk profile In the case of the seventh, eighth, ninth, tenth and eleventh cycles (2017 to 2021), the accrual of deferred compensation is conditioned, in addition to the permanence of the beneficiary in the Group, with the exceptions contained in the plan's regulations, to no assumptions in which there is a poor performance of the entity as a whole or of a specific division or area of the entity or of the exposures generated by the personnel, and at least the following factors must be considered: v. significant failures in risk management committed by the entity , or by a business unit or risk control unit. vi. the increase suffered by the entity or by a business unit of its capital needs, not foreseen at the time of generation of the exposures. vii. Regulatory sanctions or judicial sentences for events that could be attributable to the unit or the personnel responsible for those. Also, the breach of internal codes of conduct of the entity. viii. Irregular behaviours, whether individual or collective, considering in particular the negative effects derived from the marketing of inappropriate products and the responsibilities of the persons or bodies that made those decisions.	Fifth cycles (2015): • Executive directors and members of the Identified Staff with total variable remuneration higher than 2.6 million euros: 40% paid immediately and 60% deferred over3 years (fourth cycle) or 5 years (fifth cycle). • Division managers, country heads, other executives of the Group with a similar profile and members of the Identified Staff with total variable remuneration between 1.7 million euros (1.8 million in fourth cycle) and 2.6 million euros: 50% paid immediately and 50% deferred over 3 years(fourth cycle) or 5 years (fifth cycle) • Other beneficiaries: 60% paid immediately and 40% deferred over 3 years. Sixth cycle (2016): • 60% of bonus will be paid immediately and 40% deferred over a three years period. Seventh, eighth, ninth, tenth and eleventh cycle (2017, 2018, 2019, 2020 and 2021): • Beneficiaries of these plans with target total variable remuneration higher or equal to 2.7 million euros: 40% paid immediately and 60% deferred over 5 years • Beneficiaries of these plans with target total variable remuneration between 1.7 million euros and 2.7 million euros: 50% paid immediately and 50%paid over 5 years • Other beneficiaries of these plans: 60% paid immediately and 40% deferred over 3 years.

Deferred variable remuneration systems	Description and plan beneficiaries	Conditions	Calculation Base
(ii)Deferred Multiyear Objectives Variable Remuneration Plan (2016, 2017, 2018, 2019, 2020 and 2021)	The aim is simplifying the remuneration structure, improving the ex ante risk adjustment and increasing the impact of the long-term objectives on the Group's most relevant roles. The purpose of these cycles is to defer a portion of the variable remuneration of the beneficiaries over a period of three or five years, for it to be paid, where appropriate, in cash and in Santander shares; the other portion of the variable remuneration is also to be paid in cash and Santander shares, upon commencement of the cycles, in accordance with the rules set forth below. The accrual of the last third of the deferral (in the case of 3 years deferral) of the last three fifths (in the case of 5 years deferral) is also subject to long-term objectives. Beneficiaries Executive directors, senior managers and certain executives of the Group's first lines of responsibility.	In 2016 the accrual is conditioned, in addition to the permanence of the beneficiary in the Group, with the exceptions contained in the plan's regulations that none of The following circumstances during the period prior to each of the deliveries in the terms set forth in each case in the plan's regulations: i. Poor performance of the Group. ii. breach by the beneficiary of the internal regulations, including in particular that relating to risks. iii. material restatement of the Group's consolidated financial statements, except when appropriate under a change in accounting regulations. iv. Significant changes in the Group's economic capital or risk profile. In 2017, 2018, 2019, 2020 and 2021 the accrual is conditioned, in addition to the beneficiary permanence in the Group, with the exceptions contained in the plan's regulations, to the non-occurrence of instances of poor financial performance from the entity as a whole or of a specific division or area thereof or of the exposures generated by the personnel, at least the following factors must be considered: v. Significant failures in risk management committed by the entity, or by a business unit or risk control unit. vi. the increase suffered by the entity or by a business unit of its capital needs, not foreseen at the time of generation of the exposures. vii. Regulatory sanctions or court rulings for events that could be attributable to the unit or the personnel responsible for those. Also, the breach of internal codes of conduct of the entity. viii. Irregular behaviours, whether individual or collective, considering in particular negative effects derived from the marketing of inappropriate products and responsibilities of persons or bodies that made those decisions. Paid half in cash and half in shares. The maximum number of shares to be delivered is calculated by taking into account the weighted average daily volume of weighted average prices for the fifteen trading sessions prior to the previous Friday (excluding) on the date on which the board decides the bonus for the Executive directors of the Bank.	First cycle (2016): • Executive directors and members of the Identified Staff with total variable remuneration higher than or equal to 2.7 million euros: 40% paid immediately and 60% deferred over a 5 years period. • Senior managers, country heads of countries representing at least 1% of the Group's capital and other members of the identified staff whose total variable remuneration is between 1.7 million and 2.7 million euros: 50% paid immediately and 50% deferred over a 5 years period. • Other beneficiaries: 60% paid immediately and 40% deferred over a 3 years period. The second, third, fourth, fifth and sixth cycles (2017, 2018, 2019,2020 and 2021 respectively) are under the aforementioned deferral rules, except that the variable remuneration considered is the target for each executive and not the actual award. In 2016 the metrics for the deferred portion subject to long-term objectives (last third or last three fifths, respectively, for the cases of three years and five years deferrals) are: • Earnings per share (EPS) growth in 2018 over 2015. • Relative Total Shareholder Return (TSR) in the 2016-2018 period measured against a group of credit institutions. • Compliance with the fully-loaded common equity tier 1 ("CET1") ratio target for financial year 2018. • Compliance with Santander Group's underlying return on risk-weighted assets ("RoRWA") growth target for financial year 2018 compared to financial year 2015. In the second, third, fourth fifth and sixth cycle (2017, 2018, 2019, 2020 and 2021) the metrics for the deferred portion subject to long-term objectives (last third or last three fifths, respectively, for the cases of three years and five years deferrals) are: • EPS growth in 2019, 2020, 2021, 2022 and 2023 (over 2016, 2017, 2018, 2019 and 2020, for each respective cycle) • Relative Total Shareholder Return (TSR) measured against a group of 17 credit institutions (second and third cycles) in the periods 2017-2019 and 2018-2019, respectively, and against a group of 9 entities (fourth, fifth and sixth cycle) for the 2019-2021, 2020-2022 and 2010-2023 period. • Compliance with the fully-loaded common equity tier 1 ("CET1") ratio target for financial years 2019, 2020, 2021,2022 and 2023, respectively.

Deferred variable remuneration systems	Description and plan beneficiaries	Conditions	Calculation Base
(iii) Digital Transformation Award (2019, 2020 and 2021)	The 2019, 2020 and 2021 Digital Transformation Incentive (the "Digital Incentive") is a variable remuneration system that includes the delivery of Santander shares and share options. The aim of the Digital Incentive is to attract and retain the critical skill sets to support and accelerate the digital transformation of the Group. By means of this program, the Group offers a remuneration element which is competitive with the remuneration systems offered by other market operators who also compete for digital talent. The number of beneficiaries is limited to a maximum of 250 employees and the total amount of the incentive is limited to 30 million euros.	The funding of this incentive is subject to meeting important milestones that are aligned with the Group´s digital roadmap and have been approved by the board of directors, taking into account the digitalization strategy of the Group, with the aim of becoming the best open, responsible global financial services platform. Performance of incentive shall be measured based on achievement of the following milestones: 1. Launch of a Global Trade Services (GTS) platform. 2. Launch of a Global Merchant Services (GMS) platform. 3. Migration of our fully digital bank, OpenBank, to a "next generation" platform and launch in 3 markets. 4. Extension of SuperDigital in Brazil to at least one other country. 5. Launch of our international payments app based on blockchain Pago FX to non-Santander customers. The milestones for the 2020 Digital Transformation Award were: (i) rolling out the global merchant services (GMS) platform in 3 new geographies, enhancing the platform functionality and achieving volume targets for transactions and participating merchants; (ii) doing the commercial rollout of the global trade services (GTS) platform in 8 new geographies, enhancing platform functionality, and achieving volume targets for on-boarded clients and monthly active users; (iii) launching OpenBank in a new market and migrating the retail banking infrastructure to "new-mode" bank; (iv) launch the global platform SuperDigital in at least 4 countries, driving target active user growth; (v) deploying machine learning across pre-defined markets for 4 priority use cases, rolling out Conversion Rate Optimization (Digital marketing) for at least 40 sales programs, delivering profit targets, and driving reduction of agent handled calls in contact centers; (vi) successfully implementing initiatives related to on-board and identity services, common API (application programming interface) layer, payment hubs, mobile app for SMEs and virtual assistant services; and (vii) launching the PagoFX global platform in at least 4 countries. The milestones for 2021 are: (i)in relation to Pago Nxt Consumer payment platform: implementation of Superdigital platform in seven countries, acquisition of over 1.5 million active customer base and accelerating growth through B2B (business to business) and B2B2C (business to business to customer) partnerships, acquiring more than 50% of the new customers through these channels, which are more cost-effective; (ii)in relation to Digital Consumer Bank: launching online API for checkout lending in the European Union and completion of controllable items for Openbank launch in USA; (iii)in relation to One Santander strategy: implementation in Europe of One Common Mobile Experience and, specifically, implementation of Europe ONE app for individual customers in at least three of the four countries by December 2021; and be among the three-top rated entities in terms of Mobile NetPromoter Score (Mobile NPS) in at least two of the four countries by December 2021; (iv) In relation to cloud adoption: host 75% of migratable virtual machines on cloud technology (either public cloud or OHE) by December 2021. For these purposes, mainframes, physical servers and servers with non-x86 operating systems will be considered non-migratable.	The Digital Incentive is structured 50% in Santander shares and 50% in options over Santander shares, taking into account the fair value of the option at the moment in which they are granted. For Material Risk Takers subject to five years deferrals, the Digital Incentive (shares and options over shares) shall be delivered in thirds, on the third, fourth and fifth anniversary from their granting. For Material Risk Takers subject to three years deferrals and employees not subject to deferrals, delivery shall be done on the third anniversary from their granting. Any delivery of shares, either directly or via exercise of options overs shares, will be subject generally to the Group's general *malus* & *clawback* provisions as described in the Group's remuneration policy and to the continuity of the beneficiary within the Santander Group. In this regard, the board may define specific rules for non-Identified Staff. Vested share options can be exercised until maturity, with all options lapsing after ten years (for granting the 2019 incentive) and eight years (for granting the 2020 and 2021 incentive). The total achievement for 2021 Digital Incentive was 77.5% (85% en 2020 and 83% en 2019).

ii. Santander UK plc

The long-term incentive plans on shares of the Bank granted by management of Santander UK plc to its employees are as follows:

	Number of shares (in thousand)	Exercise price in pounds sterling*	Year granted	Employee group	Number of persons**	Date of commencement of exercise period	Date of expiry of exercise period
Plans outstanding at 01/01/2019	**26.838**						
Options granted (sharesave)	9,594	2.83	2019	Employees	5,606	01/11/19	01/11/22
						01/11/19	01/11/24
Options exercised	(7,978)	2.83					
Options cancelled (net) or not exercised	(5,081)	3.42					
Plans outstanding at 31/12/2019	**23,373**						
Options granted (sharesave)	11,642	1.65	2020	Employees	5,012	01/11/20	01/11/23
						01/11/20	01/11/25
Options exercised	(860)	2.75					
Options cancelled (net) or not exercised	(12,993)	2.96					
Plans outstanding at 31/12/2020	**21,162**						
Options granted (sharesave)	9,414	2.43	2021	Employees	4,142	11/01/21	11/01/24
						11/01/21	11/01/26
Options exercised	(48)	1.86					
Options cancelled (net) or not exercised	(4,592)	2.95					
Plans outstanding at 31/12/2021	**25,936**						

* At 31 December, 2021, 2020 and 2019, the euro/pound sterling exchange rate was EUR 1.1904 GBP 1, EUR 1.1168 GBP 1; EUR 1.1754 GBP 1, respectively.
** Number of accounts/contracts. A single employee may have more than one account/contract.

In 2008 the Group launched a voluntary savings scheme for Santander UK employees (Sharesave Scheme) whereby employees who join the scheme see deducted between GBP 5 and GBP 500 from their net monthly pay over a period of three or five years. At the end of the chosen period, the employee may choose between collecting the amount contributed, the interest accrued and a bonus (tax-exempt in the United Kingdom) or exercising options on shares of the Bank in an amount equal to the sum of such three amounts at a fixed price. The exercise price will be the result of reducing by up to 20% the average purchase and sale prices of the Bank shares in the three trading sessions prior to the approval of the scheme by the UK tax authorities (HMRC). This approval must be received within 21to 41 days following the publication of the Group's results for the first half of the year. This scheme was approved by the Board of Directors, at the proposal of the appointments and remuneration committee, and, since it involved the delivery of Bank shares, its application was authorized by the Annual General Meeting held on June 21, 2008. Also, the scheme was authorized by the UK tax authorities (HMRC) and commenced in September 2008. In subsequent years, at the Annual General Meetings held on June 19, 2009, June 11, 2010, June 17, 2011, March 30, 2012, March 22, 2013, March 28, 2014, March 27, 2015, March 18, 2016, April 7, 2017, March 23, 2018, April 12, 2019, April 3, 2020 and March 26, 2021, respectively, the shareholders approved the application of schemes previously approved by the board and with similar features to the scheme approved in 2008.

iii. Fair value

The fair value of the performance share plans was calculated as follows:

a) Deferred variable compensation plan linked to multi-year objectives 2019, 2020 and 2021:

The Group calculates at the grant date the fair value of the plan based on the valuation report of an independent expert, Willis Towers Watson. According to the design of the plan for 2019, 2020 and 2021 and the levels of achievement of similar plans in comparable entities, the expert concludes that the reasonable range for estimating the initial achievement ratio is around 60%-80%. It has been considered that the fair value is 70% of the maximum.

b) Santander UK sharesave plans:

The fair value of each option at the date of grant is estimated using an analytical model that also reflects the correlation between EUR and GBP. This model uses assumptions on the share price, the EUR/GBP FX rate, the EUR/GBP risk-free interest rate, dividend yields, the expected volatilities of both the underlying shares and EUR/GBP for the expected lives of options granted. The weighted average grant-date fair value of options granted during the year was GBP 0.20 (GBP 0.21 and GBP 0.49 reported in 2020 and 2019, respectively).

47. Other general administrative expenses

a) Breakdown

The detail of Other general administrative expenses is as follows:

EUR million

	2021	2020	2019
Technology and systems	2,182	2,119	2,161
Property, fixtures and supplies (note 2.k)	789	827	975
Technical reports	689	672	677
Taxes other than income tax	558	537	522
Advertising	510	523	685
Communications	401	473	518
Surveillance and cash courier services	306	325	416
Insurance premiums	109	88	86
Per diems and travel expenses	69	73	226
Other administrative expenses	1,830	1,900	1,872
	7,443	**7,537**	**8,138**

The payments associated with short-term leases (leases less than or equal to 12 months) and leases of low-value assets, that the Group recognises as an expense in the income statement is not material.

b) Technical reports and other

Technical reports includes the fees paid by the various Group companies (detailed in the accompanying appendices) for the services provided by their respective auditors, the detail being as follows:

EUR million

	2021	2020	2019
Audit fees	103.7	99.4	102.4
Audit-related fees	6.0	6	7.8
Tax fees	0.7	0.8	0.7
All other fees	2.4	1.2	2.3
Total	**112.8**	**107.4**	**113.2**

The 'Audit fees' heading includes mainly, audit fees for the Banco Santander, S.A. individual and consolidated financial statements, of the companies forming part of the Group, the integrated audits prepared for the annual report filling in the Form 20-F required by the U.S. Securities and Exchange Commission (SEC) for those entities currently required to do so, the internal control audit (SOx) for those required entities, the limited review of the financial statements and the regulatory reports required by the auditor corresponding to the different locations of Grupo Santander.

The main concepts included in 'Audit-related fees' correspond to aspects such as the issuance of Comfort letters, or other reviews required by different regulations in relation to aspects such as, for example, Securitization.

The services commissioned from the Group's auditors meet the independence requirements stipulated by the Audit Law, the US SEC rules and the Public Company Accounting Oversight Board (PCAOB), applicable to the Group, and they did not involve in any case the performance of any work that is incompatible with the audit function.

Lastly, the Group commissioned services from audit firms other than PwC amounting to EUR 263.8 million in 2021 (EUR 172.4 million and EUR 227.6 million in 2020 and 2019, respectively).

The Audit fees and Audit-related fees caption includes the fees corresponding to the audit for the year, regardless of the date on which the audit was completed. In the event of subsequent adjustments, which are not significant in any case, and for purposes of comparison, they are presented in this note in the year to which the audit relates. The rest of the services are presented according to their approval by the Audit Committee.

c) Number of branches

The number of offices at 31 December 2021, 2020 and 2019 is as follows:

Number of branches

	Group		
	2021	2020	2019
Spain	1,998	2,989	3,286
Group	7,881	8,247	8,666
	9,879	**11,236**	**11,952**

48. Gains or losses on non financial assets, net

The detail of Gains/ (losses) on disposal of assets not classified as non-current assets held for sale is as follows:

EUR million

	2021	2020	2019
Gains			
Tangible and intangible assets	87	89	131
Investments	2	60	1,219
Of which:			
Custody Business (note 3)	—	—	*989*
Prisma	—	—	*194*
	89	149	1,350
Losses			
Tangible and intangible assets	(36)	(34)	(55)
Investments	—	(1)	(4)
	(36)	(35)	(59)
	53	**114**	**1,291**

49. Gains or losses on non-current assets held for sale not classified as discontinued operations

The detail of Gains/(losses) on non-current assets held for sale not classified as discontinued operations is as follows:

EUR million

Net balance	2021	2020	2019
Tangible assets	(52)	(171)	(232)
Impairment	*(141)*	*(215)*	*(146)*
Gain (loss) on sale	*89*	*44*	*(86)*
Other gains and other losses	9	—	—
	(43)	**(171)**	**(232)**

50. Other disclosures

a) Residual maturity periods

The detail, by maturity, of the balances of certain items in the consolidated balance sheet at 31 December 2021, 2020 and 2019 is presented below:

	31 December 2021							
	EUR million							
	On demand	Within 1 month	1 to 3 months	3 to 12 months	1 to 3 years	3 to 5 years	More than 5 years	Total
Assets								
Cash, cash balances at Central Banks and other deposits on demand	210,689	—	—	—	—	—	—	210,689
Financial assets at fair value through other comprehensive income	—	10,378	9,507	10,447	20,001	17,745	37,507	105,585
Debt instruments	—	10,352	9,246	9,609	19,133	16,494	33,088	97,922
Loans and advances	—	26	261	838	868	1,251	4,419	7,663
Customers	—	26	261	838	868	1,251	4,419	7,663
Financial assets at amortized cost	35,520	89,819	72,018	121,272	154,345	130,456	434,468	1,037,898
Debt instruments	—	2,229	1,983	4,171	2,205	15,388	9,732	35,708
Loans and advances	35,520	87,590	70,035	117,101	152,140	115,068	424,736	1,002,190
Central banks	—	14,544	—	—	—	—	1,113	15,657
Credits institutions	11,849	11,042	9,760	4,542	93	150	1,733	39,169
Customers	23,671	62,004	60,275	112,559	152,047	114,918	421,890	947,364
	246,209	**100,197**	**81,525**	**131,719**	**174,346**	**148,201**	**471,975**	**1,354,172**
Liabilities								
Financial liabilities at amortized cost	718,435	98,928	70,085	99,223	194,879	98,210	69,409	1,349,169
Deposits	711,377	81,269	45,687	64,096	117,585	52,658	5,915	1,078,587
Central banks	92	4,657	1,204	2,130	91,651	40,013	10	139,757
Credit institutions	12,854	3,493	12,715	12,507	4,712	1,981	3,973	52,235
Customer deposits	698,431	73,119	31,768	49,459	21,222	10,664	1,932	886,595
Marketable debt securities* **	—	13,599	17,951	29,798	71,333	45,198	62,830	240,709
Other financial liabilities	7,058	4,060	6,447	5,329	5,961	354	664	29,873
	718,435	**98,928**	**70,085**	**99,223**	**194,879**	**98,210**	**69,409**	**1,349,169**
Difference (assets less liabilities)	**(472,226)**	**1,269**	**11,440**	**32,496**	**(20,533)**	**49,991**	**402,566**	**5,003**

* Includes promissory notes, certificates of deposit and other short-term debt issues.
** See breakdown by type of debt (subordinated debt, senior unsecured debt, senior secured debt, notes and other securities) (see note 22).

Grupo Santander has accounted as "On demand", those financial liabilities assumed, in which the counterparty may require the payments.

In addition, when Grupo Santander is committed to have amounts available in different maturity periods, these amounts have been accounted for in the first year, in which they may be required.

Additionally, for issued financial guarantee contracts, the Group has recorded the maximum amount of the financial guarantee issued, in the first year in which the guarantee could be executed.

	31 December 2020							
	EUR million							
	On demand	Within 1 month	1 to 3 months	3 to 12 months	1 to 3 years	3 to 5 years	More than 5 years	Total
Assets								
Cash, cash balances at Central Banks and other deposits on demand	153,839	—	—	—	—	—	—	153,839
Financial assets at fair value through other comprehensive income	—	6,664	4,420	7,738	19,923	21,302	58,123	118,170
Debt instruments	—	6,664	4,244	7,019	18,365	19,969	52,642	108,903
Loans and advances	—	—	176	719	1,558	1,333	5,481	9,267
Customers	—	—	176	719	1,558	1,333	5,481	9,267
Financial assets at amortized cost	51,513	57,047	60,288	109,561	150,399	120,376	409,194	958,378
Debt instruments	—	2,857	1,327	5,760	3,059	5,257	7,818	26,078
Loans and advances	51,513	54,190	58,961	103,801	147,340	115,119	401,376	932,300
Central banks	—	10,762	—	—	673	—	1,064	12,499
Credits institutions	21,337	4,405	4,545	3,910	3,207	34	400	37,838
Customers	30,176	39,023	54,416	99,891	143,460	115,085	399,912	881,963
	205,352	**63,711**	**64,708**	**117,299**	**170,322**	**141,678**	**467,317**	**1,230,387**
Liabilities								
Financial liabilities at amortized cost	640,613	84,875	90,394	93,296	175,238	80,041	83,731	1,248,188
Deposits	632,305	64,630	67,707	61,142	109,856	32,464	22,287	990,391
Central banks	150	5,204	5,295	3,216	83,112	15,827	—	112,804
Credit institutions	14,370	7,158	15,227	9,940	5,618	5,934	4,373	62,620
Customer deposits	617,785	52,268	47,185	47,986	21,126	10,703	17,914	814,967
Marketable debt securities*	—	14,981	18,276	30,994	59,526	47,143	59,909	230,829
Other financial liabilities	8,308	5,264	4,411	1,160	5,856	434	1,535	26,968
	640,613	**84,875**	**90,394**	**93,296**	**175,238**	**80,041**	**83,731**	**1,248,188**
Difference (assets less liabilities)	**(435,261)**	**(21,164)**	**(25,686)**	**24,003**	**(4,916)**	**61,637**	**383,586**	**(17,801)**

* Includes promissory notes, certificates of deposit and other short-term debt issues.

	31 December 2019							
	EUR million							
	On demand	Within 1 month	1 to 3 months	3 to 12 months	1 to 3 years	3 to 5 years	More than 5 years	Total
Assets								
Cash, cash balances at Central Banks and other deposits on demand	101,067	—	—	—	—	—	—	101,067
Financial assets at fair value through other comprehensive income	—	6,933	2,704	7,689	19,101	17,989	68,429	122,845
Debt instruments	—	6,879	2,699	7,554	17,489	17,063	66,721	118,405
Loans and advances	—	54	5	135	1,612	926	1,708	4,440
Customers	—	54	5	135	1,612	926	1,708	4,440
Financial assets at amortized cost	51,702	73,890	76,229	116,511	150,365	103,584	423,201	995,482
Debt instruments	—	1,563	1,847	3,073	2,549	3,642	17,115	29,789
Loans and advances	51,702	72,327	74,382	113,438	147,816	99,942	406,086	965,693
Central banks	—	17,086	—	—	—	—	1,388	18,474
Credit institutions	17,665	6,223	4,602	7,435	3,963	428	627	40,943
Customers	34,037	49,018	69,780	106,003	143,853	99,514	404,071	906,276
	152,769	**80,823**	**78,933**	**124,200**	**169,466**	**121,573**	**491,630**	**1,219,394**
Liabilities								
Financial liabilities at amortized cost	619,003	99,203	88,546	159,120	134,799	61,282	68,792	1,230,745
Deposits	607,051	76,101	61,627	111,190	64,781	14,224	7,443	942,417
Central banks	99	462	64	33,229	28,424	190	—	62,468
Credit institutions	23,526	14,494	18,922	14,245	9,327	5,668	4,319	90,501
Customer deposits	583,426	61,145	42,641	63,716	27,030	8,366	3,124	789,448
Marketable debt securities*	—	16,008	22,569	47,808	65,545	46,577	59,712	258,219
Other financial liabilities	11,952	7,094	4,350	122	4,473	481	1,637	30,109
	619,003	**99,203**	**88,546**	**159,120**	**134,799**	**61,282**	**68,792**	**1,230,745**
Difference (assets less liabilities)	**(466,234)**	**(18,380)**	**(9,613)**	**(34,920)**	**34,667**	**60,291**	**422,838**	**(11,351)**

* Includes promissory notes, certificates of deposit and other short-term debt issues.

The detail of the undiscounted contractual maturities of the existing financial liabilities at amortised cost at 31 December 2021, 2020 and 2019 is as follows:

	31 December 2021							
	EUR million							
	On demand	Within 1 month	1 to 3 months	3 to 12 months	1 to 3 years	3 to 5 years	More than 5 years	Total
Financial liabilities at amortized cost								
Deposits	705,129	75,102	45,552	62,896	116,343	52,031	5,884	1,062,937
Central banks	83	4,657	1,205	2,131	91,327	39,579	10	138,992
Credit institutions	12,683	3,491	12,693	11,867	4,504	1,945	3,950	51,133
Customer	692,363	66,954	31,654	48,898	20,512	10,507	1,924	872,812
Marketable debt securities	—	14,067	18,508	30,618	73,131	46,367	64,318	247,009
Other financial liabilities	7,059	4,060	6,447	5,329	5,961	354	663	29,873
	712,188	**93,229**	**70,507**	**98,843**	**195,435**	**98,752**	**70,865**	**1,339,819**

	31 December 2020							
	EUR million							
	On demand	Within 1 month	1 to 3 months	3 to 12 months	1 to 3 years	3 to 5 years	More than 5 years	Total
Financial liabilities at amortized cost								
Deposits	629,043	62,872	67,567	60,465	108,326	32,260	22,228	982,761
Central banks	150	5,204	5,293	3,217	82,803	15,827	—	112,494
Credit institutions	14,334	7,158	15,209	9,606	5,031	5,903	4,333	61,574
Customer	614,559	50,510	47,065	47,642	20,492	10,530	17,895	808,693
Marketable debt securities	—	15,298	19,009	31,103	58,645	46,118	56,730	226,903
Other financial liabilities	8,308	5,264	4,411	1,160	5,856	434	1,535	26,968
	637,351	**83,434**	**90,987**	**92,728**	**172,827**	**78,812**	**80,493**	**1,236,632**

.

	31 December 2019							
	EUR million							
	On demand	Within 1 month	1 to 3 months	3 to 12 months	1 to 3 years	3 to 5 years	More than 5 years	Total
Financial liabilities at amortized cost								
Deposits	603,126	75,899	61,107	109,747	63,013	14,027	7,228	934,147
Central banks	99	454	41	32,805	28,255	190	—	61,844
Credit institutions	23,348	14,491	18,810	14,134	8,519	5,478	4,113	88,893
Customer	579,679	60,954	42,256	62,808	26,239	8,359	3,115	783,410
Marketable debt securities	—	16,252	22,912	48,030	64,650	45,830	58,215	255,889
Other financial liabilities	11,952	7,094	4,350	122	4,473	481	1,637	30,109
	615,078	**99,245**	**88,369**	**157,899**	**132,136**	**60,338**	**67,080**	**1,220,145**

Below is a breakdown of contractual maturities for the rest of financial assets and liabilities as of 31 December 2021, 2020 and 2019 :

	31 December 2021						
	EUR million						
	Within 1 months	1 to 3 months	3 to 12 months	1 to 3 years	3 to 5 years	More than 5 years	Total
FINANCIAL ASSETS							
Financial assets held for trading	**13,120**	**8,767**	**20,627**	**20,047**	**15,105**	**39,287**	**116,953**
Derivatives	1,456	3,487	7,426	12,285	11,980	17,658	54,292
Equity instruments	—	—	—	—	—	15,077	15,077
Debt instruments	922	2,056	8,585	5,766	2,869	6,552	26,750
Loans and advances	10,742	3,224	4,616	1,996	256	—	20,834
Central banks	3,608	—	—	—	—	—	3,608
Credits institutions	4,827	780	3,982	808	—	—	10,397
Customers	2,307	2,444	634	1,188	256	—	6,829
Financial assets designated at fair value through profit or loss	**844**	**1,607**	**2,928**	**3,686**	**2,334**	**4,558**	**15,957**
Debt instruments	2	62	142	699	700	911	2,516
Loans and advances	842	1,545	2,786	2,987	1,634	3,647	13,441
Credit institutions	455	683	1,476	205	10	323	3,152
Customers	387	862	1,310	2,782	1,624	3,324	10,289
Non-trading financial assets mandatorily at fair value through profit or loss	**116**	**—**	**49**	**127**	**67**	**5,177**	**5,536**
Equity instruments	—	—	—	—	—	4,042	4,042
Debt instruments	4	—	40	4	6	903	957
Loans and advances	112	—	9	123	61	232	537
Customers	112	—	9	123	61	232	537
Financial assets at fair value through other comprehensive income	**—**	**—**	**—**	**—**	**—**	**2,453**	**2,453**
Equity instruments	—	—	—	—	—	2,453	2,453
Hedging derivatives	**239**	**129**	**857**	**748**	**1,270**	**1,518**	**4,761**
Changes in the fair value of hedged items in portfolio hedges of interest rate risk	**227**	**202**	**(11)**	**(304)**	**19**	**277**	**410**
TOTAL FINANCIAL ASSETS	**14,546**	**10,705**	**24,450**	**24,304**	**18,795**	**53,270**	**146,070**

	31 December 2021						
	EUR million						
	Within 1 months	1 to 3 months	3 to 12 months	1 to 3 years	3 to 5 years	More than 5 years	Total
FINANCIAL LIABILITIES							
Financial liabilities held for trading	**22,746**	**3,396**	**9,234**	**15,709**	**12,750**	**15,634**	**79,469**
Derivatives	1,742	2,743	7,583	14,868	11,912	14,718	53,566
Shorts positions	8,337	222	1,290	728	743	916	12,236
Deposits	12,667	431	361	113	95	—	13,667
Central banks	994	44	—	—	—	—	1,038
Credits institutions	5,534	385	361	113	95	—	6,488
Customers	6,139	2	—	—	—	—	6,141
Financial liabilities designated at fair value through profit or loss	**2,756**	**4,244**	**1,685**	**4,669**	**1,225**	**18,154**	**32,733**
Deposits	2,743	4,131	1,246	2,801	764	15,594	27,279
Central banks	569	—	38	—	—	—	607
Credits institutions	128	109	487	30	178	132	1,064
Customers	2,046	4,022	721	2,771	586	15,462	25,608
Marketable debt securities*	13	113	439	1,868	461	2,560	5,454
Hedging derivatives	**360**	**253**	**930**	**1,667**	**824**	**1,429**	**5,463**
Changes in the fair value of hedged items in portfolio hedges of interest rate risk	40	5	16	58	49	80	248
TOTAL FINANCIAL LIABILITIES	**25,902**	**7,898**	**11,865**	**22,103**	**14,848**	**35,297**	**117,913**

* Includes promissory notes, certificates of deposit and other short-term debt issues (see note 22).

	31 December 2021						
	EUR million						
	Within 1 months	1 to 3 months	3 to 12 months	1 to 3 years	3 to 5 years	More than 5 years	Total
Memorandum items							
Loans commitment granted	116,823	6,706	27,587	51,999	49,781	9,841	262,737
Financial guarantees granted	2,414	1,203	4,251	1,749	687	454	10,758
Other commitments granted	46,614	5,745	12,008	7,297	1,539	2,530	75,733
MEMORANDUM ITEMS	**165,851**	**13,654**	**43,846**	**61,045**	**52,007**	**12,825**	**349,228**

In the Group's experience, no outflows of cash or other financial assets take place prior to the contractual maturity date that might affect the information broken down above.

	31 December 2020						
	EUR million						
	Within 1 month	1 to 3 months	3 to 12 months	1 to 3 years	3 to 5 years	More than 5 years	Total
FINANCIAL ASSETS							
Financial assets held for trading	**5,760**	**6,734**	**27,753**	**22,473**	**18,014**	**34,211**	**114,945**
Derivatives	4,288	5,268	10,044	15,526	13,681	18,330	67,137
Equity instruments	—	—	—	—	—	9,615	9,615
Debt instruments	1,472	1,466	17,709	6,947	4,310	5,990	37,894
Loans and advances	—	—	—	—	23	276	299
Credits institutions	—	—	—	—	3	—	3
Customers	—	—	—	—	20	276	296
Financial assets designated at fair value through profit or loss	**12,500**	**14,834**	**7,205**	**3,680**	**3,933**	**6,565**	**48,717**
Debt instruments	181	78	162	407	719	1,432	2,979
Loans and advances	12,319	14,756	7,043	3,273	3,214	5,133	45,738
Central banks	343	9,138	—	—	—	—	9,481
Credit institutions	6,935	1,514	2,728	590	12	357	12,136
Customers	5,041	4,104	4,315	2,683	3,202	4,776	24,121
Non-trading financial assets mandatorily at fair value through profit or loss	**275**	**—**	**—**	**—**	**69**	**4,142**	**4,486**
Equity instruments	—	—	—	—	—	3,234	3,234
Debt instruments	85	—	—	—	—	615	700
Loans and advances	190	—	—	—	69	293	552
Central banks	—	—	—	—	—	—	—
Credits institutions	—	—	—	—	—	—	—
Customers	190	—	—	—	69	293	552
Financial assets at fair value through other comprehensive income	**—**	**—**	**—**	**—**	**—**	**2,783**	**2,783**
Equity instruments	—	—	—	—	—	2,783	2,783
Hedging derivatives	**1,534**	**469**	**1,293**	**1,107**	**1,083**	**2,839**	**8,325**
Changes in the fair value of hedged items in portfolio hedges of interest rate risk	**173**	**8**	**132**	**205**	**381**	**1,081**	**1,980**
TOTAL FINANCIAL ASSETS	**20,242**	**22,045**	**36,383**	**27,465**	**23,480**	**51,621**	**181,236**

	31 December 2020						
	EUR million						
	Within 1 month	1 to 3 months	3 to 12 months	1 to 3 years	3 to 5 years	More than 5 years	Total
FINANCIAL LIABILITIES							
Financial liabilities held for trading	**16,754**	**3,727**	**6,286**	**17,635**	**16,036**	**20,729**	**81,167**
Derivatives	1,132	3,206	5,800	17,566	16,036	20,729	64,469
Shorts positions	15,622	521	486	69	—	—	16,698
Deposits	—	—	—	—	—	—	—
Central banks	—	—	—	—	—	—	—
Credits institutions	—	—	—	—	—	—	—
Customers	—	—	—	—	—	—	—
Marketable debt securities	—	—	—	—	—	—	—
Other financial liabilities	—	—	—	—	—	—	—
Financial liabilities designated at fair value through profit or loss	**13,468**	**1,732**	**2,228**	**2,893**	**1,121**	**26,596**	**48,038**
Deposits	13,459	1,709	1,954	2,497	518	23,461	43,598
Central banks	841	866	783	—	—	—	2,490
Credits institutions	3,673	112	935	1,493	171	381	6,765
Customers	8,945	731	236	1,004	347	23,080	34,343
Marketable debt securities	9	23	274	396	603	3,135	4,440
Other financial liabilities	—	—	—	—	—	—	—
Hedging derivatives	**2,619**	**200**	**588**	**748**	**641**	**2,073**	**6,869**
Changes in the fair value of hedged items in portfolio hedges of interest rate risk	3	6	40	74	64	99	286
TOTAL FINANCIAL LIABILITIES	**32,844**	**5,665**	**9,142**	**21,350**	**17,862**	**49,497**	**136,360**

	31 December 2020						
	EUR million						
	Within 1 month	1 to 3 months	3 to 12 months	1 to 3 years	3 to 5 years	More than 5 years	Total
Memorandum items							
Loans commitment granted	104,725	9,496	28,207	47,876	40,458	10,468	241,230
Financial guarantees granted	1,809	852	3,732	4,134	1,169	681	12,377
Other commitments granted	39,205	4,529	10,497	5,101	3,207	1,999	64,538
MEMORANDUM ITEMS	**145,739**	**14,877**	**42,436**	**57,111**	**44,834**	**13,148**	**318,145**

	31 December 2019						
	EUR million						
	Within 1 month	1 to 3 months	3 to 12 months	1 to 3 years	3 to 5 years	More than 5 years	Total
FINANCIAL ASSETS							
Financial assets held for trading	**4,864**	**3,522**	**19,740**	**21,603**	**18,083**	**40,418**	**108,230**
Derivatives	3,329	2,233	6,552	15,855	14,925	20,503	63,397
Equity instruments	—	—	—	—	—	12,437	12,437
Debt instruments	1,531	1,289	13,188	5,748	3,141	7,144	32,041
Loans and advances	4	—	—	—	17	334	355
Credits institutions	—	—	—	—	—	—	—
Customers	4	—	—	—	17	334	355
Financial assets designated at fair value through profit or loss	**24,110**	**13,167**	**7,602**	**5,175**	**3,878**	**8,137**	**62,069**
Debt instruments	457	10	81	652	381	1,605	3,186
Loans and advances	23,653	13,157	7,521	4,523	3,497	6,532	58,883
Central banks	1,744	4,729	—	—	—	—	6,473
Credit institutions	13,186	4,946	1,534	1,015	9	959	21,649
Customers	8,723	3,482	5,987	3,508	3,488	5,573	30,761
Non-trading financial assets mandatorily at fair value through profit or loss	**272**	**0**	**4**	**11**	**117**	**4,507**	**4,911**
Equity instruments	—	—	—	—	—	3,350	3,350
Debt instruments	—	—	—	11	117	1,047	1,175
Loans and advances	272	—	4	—	—	110	386
Central banks	—	—	—	—	—	—	—
Credits institutions	—	—	—	—	—	—	—
Customers	272	—	4	—	—	110	386
Financial assets at fair value through other comprehensive income	**—**	**—**	**—**	**—**	**—**	**2,863**	**2,863**
Equity instruments	—	—	—	—	—	2,863	2,863
Hedging derivatives	**807**	**86**	**601**	**1,646**	**904**	**3,172**	**7,216**
Changes in the fair value of hedged items in portfolio hedges of interest rate risk	**267**	**1**	**24**	**112**	**265**	**1,033**	**1,702**
TOTAL FINANCIAL ASSETS	**30,320**	**16,776**	**27,971**	**28,547**	**23,247**	**60,130**	**186,991**

	31 December 2019						
	EUR million						
	Within 1 month	1 to 3 months	3 to 12 months	1 to 3 years	3 to 5 years	More than 5 years	Total
FINANCIAL LIABILITIES							
Financial liabilities held for trading	**10,851**	**3,427**	**7,130**	**17,244**	**16,905**	**21,582**	**77,139**
Derivatives	2,672	1,973	6,591	16,965	16,023	18,792	63,016
Shorts positions	8,179	1,454	539	279	882	2,790	14,123
Deposits	—	—	—	—	—	—	—
Central banks	—	—	—	—	—	—	—
Credits institutions	—	—	—	—	—	—	—
Customers	—	—	—	—	—	—	—
Marketable debt securities	—	—	—	—	—	—	—
Other financial liabilities	—	—	—	—	—	—	—
Financial liabilities designated at fair value through profit or loss	**21,929**	**2,259**	**5,307**	**3,565**	**1,450**	**26,485**	**60,995**
Deposits	21,904	2,225	4,909	2,429	780	24,864	57,111
Central banks	8,831	1,228	2,795	—	—	—	12,854
Credits institutions	4,133	521	1,857	2,132	11	686	9,340
Customers	8,940	476	257	297	769	24,178	34,917
Marketable debt securities	14	34	398	1,021	670	1,621	3,758
Other financial liabilities	11	—	—	115	—	—	126
Hedging derivatives	**1,997**	**337**	**848**	**678**	**528**	**1,660**	**6,048**
Changes in the fair value of hedged items in portfolio hedges of interest rate risk	3	6	26	53	59	122	269
TOTAL FINANCIAL LIABILITIES	**34,780**	**6,029**	**13,311**	**21,540**	**18,942**	**49,849**	**144,451**

	31 December 2019						
	EUR million						
	Within 1 month	1 to 3 months	3 to 12 months	1 to 3 years	3 to 5 years	More than 5 years	Total
Memorandum items							
Loans commitment granted	98,630	16,529	30,370	37,097	48,072	10,481	241,179
Financial guarantees granted	2,176	1,791	5,626	1,933	1,364	760	13,650
Other commitments granted	44,950	3,052	9,957	4,606	4,132	2,198	68,895
MEMORANDUM ITEMS	**145,756**	**21,372**	**45,953**	**43,636**	**53,568**	**13,439**	**323,724**

b) Equivalent euro value of assets and liabilities

The detail of the main foreign currency balances in the consolidated balance sheet, based on the nature of the related items, is as follows:

Equivalent value in EUR million

	2021		2020		2019	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Cash, cash balances at central banks and other deposits on demand	105,457	—	76,882	—	65,205	—
Financial assets/liabilities held for trading	65,345	49,314	66,448	50,494	60,526	45,262
Non-trading financial assets mandatorily at fair value through profit or loss	2,460	—	2,248	—	2,611	—
Other financial assets/liabilities at fair value through profit or loss	1,230	9,103	24,015	18,347	25,938	29,593
Financial assets at fair value through other comprehensive income	78,086	—	79,688	—	76,402	—
Financial assets at amortized cost	680,774	—	610,152	—	656,564	—
Investments	1,666	—	1,671	—	1,355	—
Tangible assets	22,350	—	21,617	—	24,662	—
Intangible assets	10,066	—	9,609	—	21,942	—
Financial liabilities at amortized cost	—	796,395	—	726,516	—	752,188
Liabilities under insurance contracts	—	10	—	13	—	13
Other	22,631	20,420	26,433	22,801	25,410	23,428
	990,065	**875,242**	**918,763**	**818,171**	**960,615**	**850,484**

c) Fair value of financial assets and liabilities not measured at fair value

The financial assets owned by the Group are measured at fair value in the accompanying consolidated balance sheet, except for cash, cash balances at central banks and other deposits on demand, loans and advances at amortised cost.

Similarly, the Group's financial liabilities -except for financial liabilities held for trading, those measured at fair value and derivatives other than those having as their underlying equity instruments whose market value cannot be estimated reliably- are measured at amortised cost in the accompanying consolidated balance sheet.

Following is a comparison of the carrying amounts of the Group's financial instruments measured at other than fair value and their respective fair values at year-end:

i) Financial assets measured at other than fair value

EUR million

	2021					2020					2019				
Assets	Carrying amount	Fair value	Level 1	Level 2	Level 3	Carrying amount	Fair value	Level 1	Level 2	Level 3	Carrying amount	Fair value	Level 1	Level 2	Level 3
Loans and advances	1,002,190	1,006,711	—	69,840	936,871	932,300	940,258	—	65,755	874,503	965,693	975,523	—	82,045	893,478
Debt instruments	35,708	35,378	13,558	12,158	9,662	26,078	26,532	6,753	11,899	7,880	29,789	30,031	10,907	9,971	9,153
	1,037,898	**1,042,089**	**13,558**	**81,998**	**946,533**	**958,378**	**966,790**	**6,753**	**77,654**	**882,383**	**995,482**	**1,005,554**	**10,907**	**92,016**	**902,631**

ii) Financial liabilities measured at other than fair value

EUR million

	2021					2020					2019				
Liabilities*	Carrying amount	Fair value	Level 1	Level 2	Level 3	Carrying amount	Fair value	Level 1	Level 2	Level 3	Carrying amount	Fair value	Level 1	Level 2	Level 3
Deposits	1,078,587	1,076,876	—	286,613	790,263	990,391	990,807	—	263,517	727,290	942,417	942,397	—	245,143	697,254
Debt instruments	240,709	246,697	109,346	115,034	22,317	230,829	241,174	91,771	125,031	24,372	258,219	266,784	84,793	149,516	32,475
	1,319,296	**1,323,573**	**109,346**	**401,647**	**812,580**	**1,221,220**	**1,231,981**	**91,771**	**388,548**	**751,662**	**1,200,636**	**1,209,181**	**84,793**	**394,659**	**729,729**

* At 31 December 2021, Grupo Santander had other financial liabilities that amounted to EUR 29,873 million, EUR 26,968 million in 2020 and EUR 30,109 million in 2019.

The main valuation methods and inputs used in the estimates at 31 December 2021 of the fair values of the financial assets and liabilities in the foregoing table were as follows:

- Financial assets at amortised cost: the fair value was estimated using the present value method. The estimates were made considering factors such as the expected maturity of the portfolio, market interest rates, spreads on newly approved transactions or market spreads -when available-.
- Financial liabilities at amortised cost:

i) Deposits: the fair value of short term deposits was taken to be their carrying amount. Factors such as the expected maturity of the transactions and the Group's current cost of funding in similar transactions are consider for the estimation of long term deposits fair value. It had been used also current rates offered for deposits of similar remaining maturities.

ii) Marketable debt securities and subordinated liabilities: the fair value was calculated based on market prices for these instruments -when available- or by the present value method using market interest rates and spreads, as well as using any significant input which is not observable with market data if applicable.

iii) The fair value of cash, cash balances at central banks and other deposits on demand was taken to be their carrying amount since they are mainly short-term balances.

51. Primary and secondary segments reporting

Grupo Santander bases segment reporting on financial information presented to the chief operating decision maker, which excludes certain statutory results items that distort year-on-year comparisons and are not considered for management reporting. This financial information (underlying basis) is computed by adjusting reported results for the effects of certain gains and losses (e.g. capital gains, write-downs, impairment of goodwill, etc.). These gains and losses are items that management and investors ordinarily identify and consider separately to better understand the underlying trends in the business.

Grupo Santander has aligned the information in this note with the underlying information used internally for management reporting and with that presented in Grupo Santander's other public documents.

Grupo Santander executive committee has been determined to be its chief operating decision maker. Grupo Santander's operating segments reflect its organizational and managerial structures. Grupo Santander 's executive committee reviews internal reporting based on these segments to assess performance and allocate resources.

The segments are split by geographic area in which profits are earned and type of business. Grupo Santander prepares the information by aggregating the figures for Grupo Santander's various geographic areas and business units, relating it to both the accounting data of the units integrated in each segment and that provided by management information systems. The same general principles as those used in Grupo Santander are applied.

On 9 April 2021, Grupo Santander announced that, starting and effective with the financial information for the first quarter of 2021, Grupo Santander would carry out a change in the reportable segments to reflect our new organizational and management structure.

These changes in the reportable segments aim to align the segment information with their management and have no impact on the group's accounting figures.

The main changes, which have been applied to management information for all periods included in the consolidated financial statements, are the following:

1. Primary segments

– Creation of the new Digital Consumer Bank (DCB) segment, which includes:

  - Santander Consumer Finance (SCF), previously included in the Europe segment, and the consumer finance business in the United Kingdom, previously recorded in the country.

- Grupo Santander fully digital bank Openbank and the Open Digital Services (ODS) platform, which were previously included in the Santander Global Platform segment.

– Santander Global Platform (SGP), which incorporated our global digital services under a single unit, is no longer a primary segment. Its activities have been distributed as follows:

- Openbank and Open Digital Services (ODS), which, as mentioned above, are now included under the new Digital Consumer Bank reporting segment.

- The business recorded in Global Payment Services (Merchant Solutions -GMS-, Trade Solutions -GTS- and Consumer Solutions -Superdigital and Pago FX-) has been allocated to the three main geographic segments, Europe, North America and South America, with no impact on the information reported for each country.

2. Secondary segments

– Creation of the PagoNxt segment, which incorporates simple and accessible digital payment solutions to drive customer loyalty and allows us to combine our most disruptive payment businesses into a single autonomous company, providing global technology solutions for our banks and new customers in the open market, and which has been structured into three businesses, previously included in SGP:

- Merchant Solutions: acquiring solutions for merchants.

- Trade Solutions: solutions for SMEs and companies operating internationally.

- Consumer Solutions: payment solutions for individuals aimed at underbanked populations.

– Annual adjustment of the perimeter of the Global Customer Relationship Model between Retail Banking and Santander Corporate & Investment Banking and between Retail Banking and Wealth Management & Insurance.

– Elimination of the Santander Global Platform reporting segment:

- Openbank and ODS are now recorded in the Retail Banking segment.

- The remaining Santander Global Platform businesses form the new PagoNxt reporting segment.

Grupo Santander recasted the corresponding information of earlier periods considering the changes included in this section. As stated above, group consolidated figures remain unchanged.

a) Primary segments

This primary level of segmentation, which is based on the Group's management structure, comprises five reportable segments: four operating areas plus the Corporate Centre. The operating areas are:

- Europe: which comprises all business activity carried out in the region, except that included in Digital Consumer Bank. Detailed financial information is provided on Spain, the UK, Portugal and Poland.

- North America: which comprises all the business activities carried out in Mexico and the US, which includes the holding company (SHUSA) and the businesses of Santander Bank, Santander Consumer USA, the specialized business unit Banco Santander International, Santander Investment Securities (SIS) and the New York branch.

- South America: includes all the financial activities carried out by Grupo Santander through its banks and subsidiary banks in the region. Detailed information is provided on Brazil, Chile, Argentina, Uruguay, Peru and Colombia.

- Digital Consumer Bank: includes Santander Consumer Finance, which incorporates the entire consumer finance business in Europe, Openbank and ODS.

In addition to these operating units, which report by geographic area and businesses, Grupo Santander continues to maintain the area of Corporate Centre, that includes the centralized activities relating to equity stakes in financial companies, financial management of the structural exchange rate position, assumed within the sphere of Grupo Santander's assets and liabilities committee, as well as management of liquidity and of shareholders' equity via issuances.

As Grupo Santander's holding entity, this area manages all capital and reserves and allocations of capital and liquidity with the rest of businesses. It also incorporates amortization of goodwill but not the costs related to the Grupo Santander's central services (charged to the areas), except for corporate and institutional expenses related to the Grupo Santander's functioning.

With regard to the balance sheet, due to the required segregation of the various business units (included in a single consolidated balance sheet), the amounts lent and borrowed between the units are shown as increases in the assets and liabilities of each business. These amounts relating to intra-Group liquidity are eliminated and are shown in the Intra-Group eliminations column in the table below in order to reconcile the amounts contributed by each business unit to the consolidated Grupo Santander's balance sheet.

There are no customers located in any of the areas that generate income exceeding 10% of Total income.

The condensed balance sheets and income statements of the various primary segments are as follows:

EUR million

	2021						
Balance sheet (condensed)	Europe	North America	South America	Digital Consumer Bank	Corporate Centre	Intra-Group eliminations	Total
Total assets	**981,154**	**244,734**	**257,805**	**159,683**	**215,467**	**(263,008)**	**1,595,835**
Loans and advances to customers	590,610	137,428	123,920	113,937	6,787	—	972,682
Cash, balances at central banks and credit institutions and other deposits on demand	256,433	34,857	43,134	33,482	88,918	(174,152)	282,672
Debt instruments	67,068	38,500	51,451	5,280	1,554	—	163,853
Other financial assets	37,250	12,555	23,809	47	2,203	—	75,864
Other asset accounts	29,793	21,394	15,491	6,937	116,005	(88,856)	100,764
Total liabilities	**936,057**	**215,955**	**237,364**	**147,108**	**136,450**	**(174,152)**	**1,498,782**
Customer deposits	619,486	121,989	120,500	55,327	1,042	—	918,344
Central banks and credit institutions	193,307	35,059	44,303	49,109	53,563	(174,152)	201,189
Marketable debt securities	73,629	38,061	23,461	36,710	74,302	—	246,163
Other financial liabilities***	38,706	14,652	40,490	1,397	430	—	95,675
Other liabilities accounts****	10,929	6,194	8,610	4,565	7,113	—	37,411
Total equity	**45,097**	**28,779**	**20,441**	**12,575**	**79,017**	**(88,856)**	**97,053**
Other customer funds under management	**114,698**	**13,949**	**57,428**	**852**	**—**	**—**	**186,927**
Investment funds	82,641	12,112	51,234	—	—	—	145,987
Pension funds	15,994	84	—	—	—	—	16,078
Assets under management	16,063	1,753	6,194	852	—	—	24,862
Other non-managed marketed customer funds	**25,572**	**20,213**	**103**	**2,497**	**—**	**—**	**48,385**

* Including Trading derivatives and Equity instruments.
** Including Hedging derivatives, Changes in the fair value of hedged items in portfolio hedges of interest risk, Investments in joint ventures and associated entities, Assets under insurance or reinsurance contracts, tangible assets, intangible assets, tax assets, other assets and non-current assets held for sale.
*** Including Trading derivatives, Short positions and Other financial liabilities.
**** Including Hedging derivatives, Changes in the fair value of hedged items in portfolio hedges of interest risk, Liabilities under insurance or reinsurance contracts, provisions, tax liabilities, other liabilities and liabilities associated with non-current assets held for sale.

EUR million

	2020						
Balance sheet (condensed)	Europe	North America	South America	Digital Consumer Bank	Corporate Centre	Intra-Group eliminations	Total
Total assets	**942,620**	**223,797**	**238,746**	**146,851**	**182,587**	**(226,351)**	**1,508,250**
Loans and advances to customers	563,581	120,571	113,745	113,258	5,044	—	916,199
Cash, balances at central banks and credit institutions and other deposits on demand	213,561	28,666	43,154	21,754	61,174	(142,513)	225,796
Debt instruments	81,271	38,403	49,304	5,659	1,917	—	176,554
Other financial assets*	48,313	15,439	17,342	30	1,645	—	82,769
Other asset accounts**	35,894	20,718	15,201	6,150	112,807	(83,838)	106,932
Total liabilities	**899,990**	**199,735**	**218,918**	**134,241**	**106,557**	**(142,513)**	**1,416,928**
Customer deposits	582,353	102,924	111,808	51,399	826	—	849,310
Central banks and credit institutions	167,014	38,017	42,040	41,567	38,554	(142,513)	184,679
Marketable debt securities	84,201	36,583	21,280	35,965	57,240	—	235,269
Other financial liabilities***	54,634	16,182	35,456	1,370	493	—	108,135
Other liabilities accounts****	11,788	6,029	8,334	3,940	9,444	—	39,535
Total equity	**42,630**	**24,062**	**19,828**	**12,610**	**76,030**	**(83,838)**	**91,322**
Other customer funds under management	**99,301**	**12,501**	**55,965**	**475**	**12**	**—**	**168,254**
Investment funds	71,239	10,864	49,850	—	12	—	131,965
Pension funds	15,487	90	—	—	—	—	15,577
Assets under management	12,575	1,547	6,115	475	—	—	20,712
Other non-managed marketed customer funds	**21,913**	**15,920**	**72**	**658**	**—**	**—**	**38,563**

* Including Trading derivatives and Equity instruments.
** Including Hedging derivatives, Changes in the fair value of hedged items in portfolio hedges of interest risk, Investments in joint ventures and associated entities, Assets under insurance or reinsurance contracts, tangible assets, intangible assets, tax assets, other assets and non-current assets held for sale.
*** Including Trading derivatives, Short positions and Other financial liabilities.
**** Including' Hedging derivatives', Changes in the fair value of hedged items in portfolio hedges of interest risk, Liabilities under insurance or reinsurance contracts, provisions, tax liabilities, other liabilities and liabilities associated with non-current assets held for sale.

EUR million

	2019						
Balance sheet (condensed)	Europe	North America	South America	Digital Consumer Bank	Corporate Centre	Intra-Group eliminations	Total
Total assets	**926,768**	**223,972**	**253,919**	**140,273**	**168,352**	**(190,589)**	**1,522,695**
Loans and advances to customers	563,101	133,727	125,122	114,504	5,764	—	942,218
Cash, balances at central banks and credit institutions and other deposits on demand	171,974	22,904	51,379	17,440	32,804	(107,895)	188,606
Debt instruments	101,189	33,749	45,622	3,196	840	—	184,596
Other financial assets*	53,918	10,822	14,864	37	2,406	—	82,047
Other asset accounts**	36,586	22,770	16,932	5,096	126,538	(82,694)	125,228
Total liabilities	**882,479**	**199,993**	**231,361**	**128,107**	**77,991**	**(107,895)**	**1,412,036**
Customer deposits	559,720	98,915	114,817	50,120	793	—	824,365
Central banks and credit institutions	156,201	38,952	41,999	33,652	12,254	(107,895)	175,163
Marketable debt securities	94,882	44,097	29,840	38,661	54,497	—	261,977
Other financial liabilities***	59,241	11,773	34,072	1,652	636	—	107,374
Other liabilities accounts****	12,435	6,256	10,633	4,022	9,811	—	43,157
Total equity	**44,289**	**23,979**	**22,558**	**12,166**	**90,361**	**(82,694)**	**110,659**
Other customer funds under management	**86,558**	**14,319**	**76,023**	**—**	**11**	**—**	**176,911**
Investment funds	62,203	11,703	69,071	—	11	—	142,988
Pension funds	11,746	98	—	—	—	—	11,844
Assets under management	12,609	2,518	6,952	—	—	—	22,079
Other non-managed marketed customer funds	**32,707**	**15,872**	**60**	**851**	**—**	**—**	**49,490**

* Including 'Trading derivatives' and 'Equity instruments'.
** Including 'Hedging derivatives', 'Changes in the fair value of hedged items in portfolio hedges of interest risk', 'Investments in joint ventures and associated entities'', 'Assets under insurance or reinsurance contracts', 'Tangible assets', 'Intangible assets', 'Tax assets', other assets and non-current assets held for sale.
*** Including Trading derivatives, Short positions and Other financial liabilities.
**** Including Hedging derivatives, Changes in the fair value of hedged items in portfolio hedges of interest risk, Liabilities under insurance or reinsurance contracts, provisions, tax liabilities, other liabilities and liabilities associated with non-current assets held for sale.

The condensed income statements for the primary segments are as follows:

EUR million

	2021					
Underlying income statement (condensed)	Europe	North America	South America	Digital Consumer Bank	Corporate centre	Total
Net interest income	**10,952**	**8,204**	**11,323**	**4,281**	**(1,390)**	**33,370**
Net fee income	4,344	1,644	3,721	821	(28)	10,502
Gains (losses) on financial transactions*	756	224	716	8	(141)	1,563
Other operating income**	260	914	(407)	229	(27)	969
Total income	**16,312**	**10,986**	**15,353**	**5,339**	**(1,586)**	**46,404**
Administrative expenses, depreciation and amortisation	(8,318)	(4,967)	(5,379)	(2,405)	(346)	(21,415)
Net operating income* **	**7,994**	**6,019**	**9,974**	**2,934**	**(1,932)**	**24,989**
Net loan-loss provisions****	(2,293)	(1,210)	(3,251)	(527)	(155)	(7,436)
Other gains (losses) and provisions*****	(1,290)	(145)	(474)	(194)	(190)	(2,293)
Operating profit/(loss) before tax	**4,411**	**4,664**	**6,249**	**2,213**	**(2,277)**	**15,260**
Tax on profit	(1,362)	(1,055)	(2,365)	(536)	242	(5,076)
Profit from continuing operations	**3,049**	**3,609**	**3,884**	**1,677**	**(2,035)**	**10,184**
Net profit from discontinued operations	—	—	—	—	—	—
Consolidated profit	**3,049**	**3,609**	**3,884**	**1,677**	**(2,035)**	**10,184**
Non-controlling interests	71	556	556	345	2	1,530
Attributable profit to the parent	**2,978**	**3,053**	**3,328**	**1,332**	**(2,037)**	**8,654**

* Gains (losses) on financial transactions includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Gain or losses on financial assets and liabilities not measured at fair value through profit or loss, net, Gain or losses on financial assets and liabilities held for trading, net, Gains or losses on non-trading financial assets and liabilities mandatorily at fair value through profit or loss, net, Gain or losses on financial assets and liabilities measured at fair value through profit or loss, net, Gain or losses from hedge accounting, net and Exchange differences, net.

** Other operating income includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Dividend income; Income from companies accounted for using the equity method, Other operating income, Other operating expenses, Income from assets under insurance or reinsurance contracts and Expenses from liabilities under insurance or reinsurance contracts.

*** 'Net Operating Income' is used for the Group's internal reporting and management reporting purposes but is not a line item in the statutory consolidated income statement.

**** 'Net loan-loss provisions' refers to Impairment or reversal of impairment at financial assets not measured at fair value through profit or loss and net gains and losses from changes line item in the statutory income statement. Additionally, includes a release of EUR 29 million mainly corresponding to the results by commitments and contingent risks includes in the line of the statutory income statement of provisions or reversal of provisions.

***** Other gains (losses) and provisions includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Provisions or reversal of provisions except a release EUR 29 million mainly corresponding to the results by commitments and contingent risks; Impairment of investments in joint ventures and associates, net; Impairment on non-financial assets, net; Gains or losses on non-financial assets, net; Negative goodwill recognised in results and Gains or losses on non-current assets held for sale not classified as discontinued operations.

EUR million

	2020					
Underlying income statement (condensed)	Europe	North America	South America	Digital Consumer Bank	Corporate Centre	Total
Net interest income	**9,912**	**8,470**	**10,723**	**4,263**	**(1,374)**	**31,994**
Net fee income	4,000	1,684	3,589	771	(29)	10,015
Gains (losses) on financial transactions*	868	251	765	16	287	2,187
Other operating income**	(106)	628	(209)	116	(25)	404
Total income	**14,674**	**11,033**	**14,868**	**5,166**	**(1,141)**	**44,600**
Administrative expenses, depreciation and amortisation	(8,275)	(4,677)	(5,357)	(2,329)	(329)	(20,967)
Net operating income* **	**6,399**	**6,356**	**9,511**	**2,837**	**(1,470)**	**23,633**
Net loan-loss provisions****	(3,345)	(3,917)	(3,924)	(957)	(31)	(12,174)
Other gains (losses) and provisions*****	(970)	(132)	(320)	49	(412)	(1,785)
Operating profit/(loss) before tax	**2,084**	**2,307**	**5,267**	**1,929**	**(1,913)**	**9,674**
Tax on profit	(593)	(574)	(1,923)	(495)	69	(3,516)
Profit from continuing operations	**1,491**	**1,733**	**3,344**	**1,434**	**(1,844)**	**6,158**
Net profit from discontinued operations	—	—	—	—	—	—
Consolidated profit	**1,491**	**1,733**	**3,344**	**1,434**	**(1,844)**	**6,158**
Non-controlling interests	78	261	437	301	—	1,077
Attributable profit to the parent	**1,413**	**1,472**	**2,907**	**1,133**	**(1,844)**	**5,081**

* Gains (losses) on financial transactions includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Gain or losses on financial assets and liabilities not measured at fair value through profit or loss, net, Gain or losses on financial assets and liabilities held for trading, net, Gains or losses on non-trading financial assets and liabilities mandatorily at fair value through profit or loss, net, Gain or losses on financial assets and liabilities measured at fair value through profit or loss, net, Gain or losses from hedge accounting, net and Exchange differences, net.

** Other operating income includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Dividend income; Income from companies accounted for using the equity method, Other operating income, Other operating expenses, Income from assets under insurance or reinsurance contracts and Expenses from liabilities under insurance or reinsurance contracts.

*** 'Net Operating Income' is used for the Group's internal reporting and management reporting purposes but is not a line item in the statutory consolidated income statement.

**** 'Loan loss provisions' refers to Impairment or reversal of impairment at financial assets not measured at fair value through profit or loss and net gains and losses from changes line item in the statutory income statement. Additionally, includes a release of EUR 50 million mainly corresponding to the results by commitments and contingent risks includes in the line of the statutory income statement of provisions or reversal of provisions.

***** Other gains (losses) and provisions includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Provisions or reversal of provisions except a release of EUR 50 million mainly corresponding to the results by commitments and contingent risks; Impairment of investments in joint ventures and associates, net; Impairment on non-financial assets, net; Gains or losses on non-financial assets, net; Negative goodwill recognised in results and Gains or losses on non-current assets held for sale not classified as discontinued operations.

EUR million

	2019					
Underlying income statement (condensed)	Europe	North America	South America	Digital Consumer Bank	Corporate Centre	Total
Net interest income	**10,072**	**8,926**	**13,316**	**4,221**	**(1,252)**	**35,283**
Net fee income	4,423	1,776	4,787	843	(50)	11,779
Gains (losses) on financial transactions*	1,045	229	564	(10)	(297)	1,531
Other operating income**	399	673	(242)	90	(19)	901
Total income	**15,939**	**11,604**	**18,425**	**5,144**	**(1,618)**	**49,494**
Administrative expenses, depreciation and amortisation	(8,912)	(4,983)	(6,673)	(2,339)	(373)	(23,280)
Net operating income* **	**7,027**	**6,621**	**11,752**	**2,805**	**(1,991)**	**26,214**
Net loan-loss provisions****	(1,333)	(3,656)	(3,789)	(508)	(35)	(9,321)
Other gains (losses) and provisions*****	(792)	(203)	(749)	18	(238)	(1,964)
Operating profit/(loss) before tax	**4,902**	**2,762**	**7,214**	**2,315**	**(2,264)**	**14,929**
Tax on profit	(1,340)	(681)	(2,640)	(599)	157	(5,103)
Profit from continuing operations	**3,562**	**2,081**	**4,574**	**1,716**	**(2,107)**	**9,826**
Net profit from discontinued operations	—	—	—	—	—	—
Consolidated profit	**3,562**	**2,081**	**4,574**	**1,716**	**(2,107)**	**9,826**
Non-controlling interests	167	426	664	326	(9)	1,574
Attributable profit to the parent	**3,395**	**1,655**	**3,910**	**1,390**	**(2,098)**	**8,252**

* Gains (losses) on financial transactions includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Gain or losses on financial assets and liabilities not measured at fair value through profit or loss, net, Gain or losses on financial assets and liabilities held for trading, net, Gains or losses on non-trading financial assets and liabilities mandatorily at fair value through profit or loss, net, Gain or losses on financial assets and liabilities measured at fair value through profit or loss, net, Gain or losses from hedge accounting, net and Exchange differences, net.

** Other operating income includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Dividend income; Income from companies accounted for using the equity method, Other operating income, Other operating expenses, Income from assets under insurance or reinsurance contracts and Expenses from liabilities under insurance or reinsurance contracts.

*** 'Net Operating Income' is used for the Group's internal reporting and management reporting purposes but is not a line item in the statutory consolidated income statement.

**** 'Net loan-loss provisions' refers to Impairment or reversal of impairment at financial assets not measured at fair value through profit or loss and net gains and losses from changes line item in the statutory income statement. Additionally, includes a release of EUR 31 million mainly corresponding to the results by commitments and contingent risks includes in the line of the statutory income statement of provisions or reversal of provisions.

***** Other gains (losses) and provisions includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Provisions or reversal of provisions except a release of EUR 31 million mainly corresponding to the results by commitments and contingent risks; Impairment of investments in joint ventures and associates, net; Impairment on non-financial assets, net; Gains or losses on non-financial assets, net; Negative goodwill recognised in results and Gains or losses on non-current assets held for sale not classified as discontinued operations.

b) Secondary segments

At this secondary level, Grupo Santander is structured into Retail Banking, Santander Corporate & Investment Banking (SCIB), Wealth Management & Insurance (WM&I) and PagoNxt.

- Retail Banking: this covers all customer banking businesses, including consumer finance, except those of corporate banking which are managed through Santander Corporate & Investment Banking, asset management, private banking and insurance, which are managed by WM&I. The results of the hedging positions in each country are also included, conducted within the sphere of their respective assets and liabilities committees.

- Santander Corporate & Investment Banking (SCIB): this business reflects revenue from global corporate banking, investment banking and markets worldwide including treasuries managed globally (always after the appropriate distribution with Retail Banking customers), as well as equity business.

- Wealth Management & Insurance: includes the asset management business (Santander Asset Management), the corporate unit of Private Banking and International Private Banking in Miami and Switzerland (Santander Private Banking) and the insurance business (Santander Insurance).

- PagoNxt: this includes digital payment solutions, providing global technology solutions for Grupo Santander's banks and new customers in the open market. It is structured in three businesses: Merchant Solutions, International Trade and Consumer.

Although WM&I and PagoNxt do not meet the quantitative thresholds defined in IFRS 8, these segments are considered reportable by Grupo Santander and are disclosed separately because Grupo Santander's management believes that information about these segments are useful to users of the financial statements.

There are no customers located in a place different from the location of the Group's assets that generate revenues in excess of 10% of ordinary revenues.

The condensed income statements are as follows:

EUR million

	2021					
Underlying income statement (condensed)	Retail Banking	Santander Corporate & Investment Banking	Wealth Management & Insurance	PagoNxt	Corporate centre	Total
Net interest income	**31,389**	**2,995**	**375**	**1**	**(1,390)**	**33,370**
Net fee income	7,011	1,750	1,276	493	(28)	10,502
Gains (losses) on financial transactions*	920	684	101	(1)	(141)	1,563
Other operating income**	316	264	414	2	(27)	969
Total income	**39,636**	**5,693**	**2,166**	**495**	**(1,586)**	**46,404**
Administrative expenses, depreciation and amortisation	(17,193)	(2,301)	(902)	(673)	(346)	(21,415)
Net operating income* **	**22,443**	**3,392**	**1,264**	**(178)**	**(1,932)**	**24,989**
Net loan-loss provisions****	(7,114)	(130)	(27)	(10)	(155)	(7,436)
Other gains (losses) and provisions*****	(2,064)	(10)	10	(39)	(190)	(2,293)
Operating profit/(loss) before tax	**13,265**	**3,252**	**1,247**	**(227)**	**(2,277)**	**15,260**
Tax on profit	(4,052)	(938)	(304)	(24)	242	(5,076)
Profit/(loss) from continuing operations	**9,213**	**2,314**	**943**	**(251)**	**(2,035)**	**10,184**
Net profit/(loss) from discontinued operations	—	—	—	—	—	—
Consolidated profit/(loss)	**9,213**	**2,314**	**943**	**(251)**	**(2,035)**	**10,184**
Non-controlling interests	1,344	146	36	2	2	1,530
Attributable profit/(loss) to the parent	**7,869**	**2,168**	**907**	**(253)**	**(2,037)**	**8,654**

* Gains (losses) on financial transactions includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Gain or losses on financial assets and liabilities not measured at fair value through profit or loss, net, Gain or losses on financial assets and liabilities held for trading, net, Gains or losses on non-trading financial assets and liabilities mandatorily at fair value through profit or loss, net, Gain or losses on financial assets and liabilities measured at fair value through profit or loss, net, Gain or losses from hedge accounting, net and Exchange differences, net.

** Other operating income includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Dividend income; Income from companies accounted for using the equity method, Other operating income, Other operating expenses, Income from assets under insurance or reinsurance contracts and Expenses from liabilities under insurance or reinsurance contracts.

*** Net Operating Income is used for the Group's internal reporting and management reporting purposes but is not a line item in the statutory consolidated income statement.

**** Net loan-loss provisions refers to Impairment or reversal of impairment at financial assets not measured at fair value through profit or loss and net gains and losses from changes line item in the statutory income statement. Additionally, includes an addition of EUR 29 million mainly corresponding to the results by commitments and contingent risks included in the line provisions or reversal of provisions, net of the statutory income statement.

***** Other gains (losses) and provisions includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Provisions or reversal of provisions except an addition of EUR 29 million mainly corresponding to the results by commitments and contingent risks; Impairment of investments in joint ventures and associates, net; Impairment on non-financial assets, net; Gains or losses on non-financial assets, net; Negative goodwill recognized in results and Gains or losses on non-current assets held for sale not classified as discontinued operations.

EUR million

	2020					
Underlying income statement (condensed)	Retail Banking	Santander Corporate & Investment Banking (SCIB)	Wealth Management & Insurance	PagoNxt	Corporate Centre	Total
Net interest income	**30,056**	**2,918**	**394**	**(1)**	**(1,373)**	**31,994**
Net fee income	6,986	1,543	1,154	362	(30)	10,015
Gains (losses) on financial transactions*	1,133	670	98	(1)	287	2,187
Other operating income**	(153)	201	384	(3)	(25)	404
Total income	**38,022**	**5,332**	**2,030**	**357**	**(1,141)**	**44,600**
Administrative expenses, depreciation and amortisation	(17,285)	(2,038)	(872)	(443)	(329)	(20,967)
Net operating income* **	**20,737**	**3,294**	**1,158**	**(86)**	**(1,470)**	**23,633**
Net loan-loss provisions****	(11,633)	(470)	(29)	(12)	(30)	(12,174)
Other gains (losses) and provisions*****	(1,237)	(135)	—	(2)	(411)	(1,785)
Operating profit/(loss) before tax	**7,867**	**2,689**	**1,129**	**(100)**	**(1,911)**	**9,674**
Tax on profit	(2,525)	(773)	(270)	(15)	67	(3,516)
Profit/(loss) from continuing operations	**5,342**	**1,916**	**859**	**(115)**	**(1,844)**	**6,158**
Net profit/(loss) from discontinued operations	—	—	—	—	—	—
Consolidated profit/(loss)	**5,342**	**1,916**	**859**	**(115)**	**(1,844)**	**6,158**
Non-controlling interests	921	118	37	1	—	1,077
Attributable profit/(loss) to the parent	**4,421**	**1,798**	**822**	**(116)**	**(1,844)**	**5,081**

* Gains (losses) on financial transactions includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Gain or losses on financial assets and liabilities not measured at fair value through profit or loss, net, Gain or losses on financial assets and liabilities held for trading, net, Gains or losses on non-trading financial assets and liabilities mandatorily at fair value through profit or loss, net, Gain or losses on financial assets and liabilities measured at fair value through profit or loss, net, Gain or losses from hedge accounting, net and Exchange differences, net.

** Other operating income includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Dividend income; Income from companies accounted for using the equity method, Other operating income, Other operating expenses, Income from assets under insurance or reinsurance contracts and Expenses from liabilities under insurance or reinsurance contracts.

*** Net Operating Income is used for the Group's internal reporting and management reporting purposes but is not a line item in the statutory consolidated income statement.

**** Net loan-loss provisions refers to Impairment or reversal of impairment at financial assets not measured at fair value through profit or loss and net gains and losses from changes line item in the statutory income statement. Additionally, includes a release of EUR 50 million mainly corresponding to the results by commitments and contingent risks included in the line provisions or reversal of provisions, net of the statutory income statement.

***** Other gains (losses) and provisions includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Provisions or reversal of provisions except a release of EUR 50 million mainly corresponding to the results by commitments and contingent risks; Impairment of investments in joint ventures and associates, net; Impairment on non-financial assets, net; Gains or losses on non-financial assets, net; Negative goodwill recognized in results and Gains or losses on non-current assets held for sale not classified as discontinued operations.

EUR million

	2019					
Underlying income statement (condensed)	Retail Banking	Santander Corporate & Investment Banking (SCIB)	Wealth Management & Insurance	PagoNxt	Corporate Centre	Total
Net interest income	**33,308**	**2,728**	**479**	**20**	**(1,252)**	**35,283**
Net fee income	8,663	1,520	1,190	456	(50)	11,779
Gains (losses) on financial transactions*	1,025	689	117	(3)	(297)	1,531
Other operating income**	291	289	340	—	(19)	901
Total income	**43,287**	**5,226**	**2,126**	**473**	**(1,618)**	**49,494**
Administrative expenses, depreciation and amortisation	(19,280)	(2,281)	(939)	(407)	(373)	(23,280)
Net operating income* **	**24,007**	**2,945**	**1,187**	**66**	**(1,991)**	**26,214**
Net loan-loss provisions****	(9,132)	(155)	23	(21)	(36)	(9,321)
Other gains (losses) and provisions*****	(1,623)	(91)	(13)	—	(237)	(1,964)
Operating profit/(loss) before tax	**13,252**	**2,699**	**1,197**	**45**	**(2,264)**	**14,929**
Tax on profit	(4,132)	(815)	(280)	(33)	157	(5,103)
Profit/(loss) from continuing operations	**9,120**	**1,884**	**917**	**12**	**(2,107)**	**9,826**
Net profit/(loss) from discontinued operations	—	—	—	—	—	—
Consolidated profit/(loss)	**9,120**	**1,884**	**917**	**12**	**(2,107)**	**9,826**
Non-controlling interests	1,364	171	50	(2)	(9)	1,574
Attributable profit/(loss) to the parent	**7,756**	**1,713**	**867**	**14**	**(2,098)**	**8,252**

* Gains (losses) on financial transactions includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Gain or losses on financial assets and liabilities not measured at fair value through profit or loss, net, Gain or losses on financial assets and liabilities held for trading, net, Gains or losses on non-trading financial assets and liabilities mandatorily at fair value through profit or loss, net, Gain or losses on financial assets and liabilities measured at fair value through profit or loss, net, Gain or losses from hedge accounting, net and Exchange differences, net.

** Other operating income includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Dividend income; Income from companies accounted for using the equity method, Other operating income, Other operating expenses, Income from assets under insurance or reinsurance contracts and Expenses from liabilities under insurance or reinsurance contracts.

*** Net Operating Income is used for the Group's internal reporting and management reporting purposes but is not a line item in the statutory consolidated income statement.

**** Net loan-loss provisions refers to Impairment or reversal of impairment at financial assets not measured at fair value through profit or loss and net gains and losses from changes line item in the statutory income statement. Additionally, includes a release of EUR 31 million mainly corresponding to the results by commitments and contingent risks included in the line provisions or reversal of provisions, net of the statutory income statement.

***** Other gains (losses) and provisions includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Provisions or reversal of provisions except a release of EUR 31 million mainly corresponding to the results by commitments and contingent risks; Impairment of investments in joint ventures and associates, net; Impairment on non-financial assets, net; Gains or losses on non-financial assets, net; Negative goodwill recognized in results and Gains or losses on non-current assets held for sale not classified as discontinued operations.

c) Reconciliations of reportable segment results

The tables below reconcile the underlying basis results to the statutory results for each of the periods presented as required by IFRS 8. For the purposes of these reconciliations, all material reconciling items are separately identified and described.

Grupo Santander assets and liabilities for management reporting purposes do not differ from the statutory reported figures and therefore are not reconciled.

EUR million

2021			
Reconciliation of underlying results to statutory results	Underlying results	Adjustments	Statutory results
Net interest income	**33,370**	**—**	**33,370**
Net fee income	10,502	—	10,502
Gains (losses) on financial transactions*	1,563	—	1,563
Other operating income**	969	—	969
Total income	**46,404**	**—**	**46,404**
Administrative expenses, depreciation and amortisation	(21,415)	—	(21,415)
Net operating income* **	**24,989**	**—**	**24,989**
Net loan-loss provisions****	(7,436)	—	(7,436)
Other gains (losses) and provisions*****	(2,293)	(713)	(3,006)
Operating profit/(loss) before tax	**15,260**	**(713)**	**14,547**
Tax on profit	(5,076)	182	(4,894)
Adjusted profit for the year from continuing operations	**10,184**	**(531)**	**9,653**
Profit from discontinued operations (net)	—	—	—
Consolidated profit/(loss)	**10,184**	**(531)**	**9,653**
Non-controlling interests	(1,530)	1	(1,529)
Attributable profit/(loss) to the parent	**8,654**	**(530)**	**8,124**

* Gains (losses) on financial transactions includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Gain or losses on financial assets and liabilities not measured at fair value through profit or loss, net, Gain or losses on financial assets and liabilities held for trading, net, Gains or losses on non-trading financial assets and liabilities mandatorily at fair value through profit or loss, net, Gain or losses on financial assets and liabilities measured at fair value through profit or loss, net, Gain or losses from hedge accounting, net and Exchange differences, net.

** Other operating income includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Dividend income; Income from companies accounted for using the equity method, Other operating income, Other operating expenses, Income from assets under insurance or reinsurance contracts and Expenses from liabilities under insurance or reinsurance contracts.

*** Net Operating Income is used for the Group's internal reporting and management reporting purposes but is not a line item in the statutory consolidated income statement.

**** Net loan-loss provisions refers to Impairment or reversal of impairment at financial assets not measured at fair value through profit or loss and net gains and losses from changes line item in the statutory income statement. Additionally, includes an addition of EUR 29 million mainly corresponding to the results by commitments and contingent risks includes in the line of the statutory income statement of provisions or reversal of provisions.

***** Other gains (losses) and provisions includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Provisions or reversal of provisions except for an addition of EUR 29 million mainly corresponding to results from commitments and contingent risks; Impairment of investments in joint ventures and associates, net; Impairment on non-financial assets, net; Gains or losses on non-financial assets, net; Negative goodwill recognized in results and Gains or losses on non-current assets held for sale not classified as discontinued operations.

Explanation of adjustments:

- Restructuring costs for net impact of EUR -530 million, mainly in the United Kingdom and Portugal.

EUR million

2020			
Reconciliation of underlying results to statutory results	Underlying results	Adjustments	Statutory results
Net interest income	**31,994**	**—**	**31,994**
Net fee income	10,015	—	10,015
Gains (losses) on financial transactions*	2,187	—	2,187
Other operating income**	404	(321)	83
Total income	**44,600**	**(321)**	**44,279**
Administrative expenses, depreciation and amortisation	(20,967)	(163)	(21,130)
Net operating income* **	**23,633**	**(484)**	**23,149**
Net loan-loss provisions****	(12,174)	(258)	(12,432)
Other gains (losses) and provisions*****	(1,785)	(11,008)	(12,793)
Operating profit/(loss) before tax	**9,674**	**(11,750)**	**(2,076)**
Tax on profit	(3,516)	(2,116)	(5,632)
Adjusted profit for the year from continuing operations	**6,158**	**(13,866)**	**(7,708)**
Profit from discontinued operations (net)	—	—	—
Consolidated profit/(loss)	**6,158**	**(13,866)**	**(7,708)**
Non-controlling interests	1,077	(14)	1,063
Attributable profit/(loss) to the parent	**5,081**	**(13,852)**	**(8,771)**

* Gains (losses) on financial transactions includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Gain or losses on financial assets and liabilities not measured at fair value through profit or loss, net, Gain or losses on financial assets and liabilities held for trading, net, Gains or losses on non-trading financial assets and liabilities mandatorily at fair value through profit or loss, net, Gain or losses on financial assets and liabilities measured at fair value through profit or loss, net, Gain or losses from hedge accounting, net and Exchange differences, net.

** Other operating income includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Dividend income; Income from companies accounted for using the equity method, Other operating income, Other operating expenses, Income from assets under insurance or reinsurance contracts and Expenses from liabilities under insurance or reinsurance contracts.

*** Net Operating Income is used for the Group's internal reporting and management reporting purposes but is not a line item in the statutory consolidated income statement.

**** Net loan-loss provisions refers to Impairment or reversal of impairment at financial assets not measured at fair value through profit or loss and net gains and losses from changes line item in the statutory income statement. Additionally, includes an addition of EUR 50 million mainly corresponding to the results by commitments and contingent risks includes in the line of the statutory income statement of provisions or reversal of provisions.

***** Other gains (losses) and provisions includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Provisions or reversal of provisions except for an addition of EUR 50 million mainly corresponding to results from commitments and contingent risks; Impairment of investments in joint ventures and associates, net; Impairment on non-financial assets, net; Gains or losses on non-financial assets, net; Negative goodwill recognized in results and Gains or losses on non-current assets held for sale not classified as discontinued operations

Explanation of adjustments:

- Adjustment to the valuation of goodwill arising from the Group's acquisitions in the amount of EUR -10,100 million, which is included in the line 'Other gains (losses) and provisions'.
- Adjustment to the valuation of the deferred tax assets of the consolidated tax group in Spain in the amount of EUR -2,500 million, which is included in the 'Tax on profit' line.
- Restructuring costs with a net impact of EUR -1,114 million, which are included for their gross amount mainly in the line 'Other gains (losses) and provisions'.
- Other charges of EUR -138 million (related to sales of non-performing loans in Spain, cancellation of pension commitment costs and other expenses), which are recorded gross in 'Other gains (losses) and provisions', 'Net loan-loss provision' and 'Administrative expenses and depreciation and amortization'.

EUR million

2019			
Reconciliation of underlying results to statutory results	Underlying results	Adjustments	Statutory results
Net interest income	**35,283**	**—**	**35,283**
Net fee income	11,779	—	11,779
Gains (losses) on financial transactions*	1,531	—	1,531
Other operating income**	901	(265)	636
Total income	**49,494**	**(265)**	**49,229**
Administrative expenses, depreciation and amortisation	(23,280)	—	(23,280)
Net operating income* **	**26,214**	**(265)**	**25,949**
Net loan-loss provisions****	(9,321)	—	(9,321)
Other gains (losses) and provisions*****	(1,964)	(2,121)	(4,085)
Operating profit/(loss) before tax	**14,929**	**(2,386)**	**12,543**
Tax on profit	(5,103)	676	(4,427)
Adjusted profit for the year from continuing operations	**9,826**	**(1,710)**	**8,116**
Profit from discontinued operations (net)	—	—	—
Consolidated profit/(loss)	**9,826**	**(1,710)**	**8,116**
Non-controlling interests	1,574	27	1,601
Attributable profit/(loss) to the parent	**8,252**	**(1,737)**	**6,515**

* Gains (losses) on financial transactions includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Gain or losses on financial assets and liabilities not measured at fair value through profit or loss, net, Gain or losses on financial assets and liabilities held for trading, net, Gains or losses on non-trading financial assets and liabilities mandatorily at fair value through profit or loss, net, Gain or losses on financial assets and liabilities measured at fair value through profit or loss, net, Gain or losses from hedge accounting, net and Exchange differences, net.

** Other operating income includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Dividend income; Income from companies accounted for using the equity method, Other operating income, Other operating expenses, Income from assets under insurance or reinsurance contracts and Expenses from liabilities under insurance or reinsurance contracts.

*** Net Operating Income is used for the Group's internal reporting and management reporting purposes but is not a line item in the statutory consolidated income statement.

**** Net loan-loss provisions refers to Impairment or reversal of impairment at financial assets not measured at fair value through profit or loss and net gains and losses from changes line item in the statutory income statement. Additionally, includes a release of EUR 31 million mainly corresponding to the results by commitments and contingent risks includes in the line of the statutory income statement of provisions or reversal of provisions.

***** Other gains (losses) and provisions includes the following line items in the statutory income statement, which are presented net for internal reporting and management reporting purposes: Provisions or reversal of provisions except a release of EUR 31 million mainly corresponding to results from commitments and contingent risks; Impairment of investments in joint ventures and associates, net; Impairment on non-financial assets, net; Gains or losses on non-financial assets, net; Negative goodwill recognized in results and Gains or losses on non-current assets held for sale not classified as discontinued operations.

Explanation of adjustments:

- Impairment of the goodwill assigned to Santander UK and provisions for PPI in the UK, with a net impact of EUR -1,491 million and EUR -183 million, respectively, reflected in the line 'Other gains (losses) and provisions'.
- Restructuring costs with a net impact of EUR -864 million, which are included in the line 'Other gains (losses) and provisions'.
- Losses related to real estate assets and holdings in Spain with a net impact of EUR -405 million, which are included in the 'Other operating income' and 'Other gains (losses) and provisions' lines.
- Provisions related to intangible assets and others, amounting to EUR -174 million, which are included for their gross amount in the line 'Other gains (losses) and provisions'.
- Capital gains on the sale of holdings in Prisma and on the integration of the custody business, with a net impact of EUR 136 million and EUR 693 million respectively, which are reflected at their gross amount in the line 'Other gains (losses) and provisions'.
- Positive impact due to changes in tax regulations in Brazil for a net amount of EUR 551 million, which is included in the line "Tax on profit'.

52. Related parties

The parties related to the Group are deemed to include, in addition to its subsidiaries, associates and joint ventures, the Bank's key management personnel (the members of its board of directors and the executive vice presidents, together with their close family members) and the entities over which the key management personnel may exercise significant influence or control.

Following below is the balance sheet balances and amounts of the Group's income statement corresponding to operations with the parties related to it, distinguishing between associates and joint ventures, members of the Bank's board of directors, the Bank's executive vice presidents, and other related parties. Related-party transactions were made on terms equivalent to those that prevail in arm's-length transactions or, when this was not the case, the related compensation in kind was recognized.

EUR million

	2021			
	Associates and joint ventures	Members of the board of directors	Executive vicepresident	Other related parties
Assets	**9,386**	**—**	**14**	**384**
Cash, cash balances at central banks and other deposits on demand	131	—	—	—
Loans and advances: credit institutions	437	—	—	—
Loans and advances: customers	8,148	—	14	384
Debt instruments	496	—	—	—
Others	174	—	—	—
Liabilities	**3,405**	**8**	**11**	**197**
Financial liabilities: credit institutions	867	—	—	—
Financial liabilities: customers	2,464	8	11	197
Marketable debt securities	—	—	—	—
Others	74	—	—	—
Income statement	**1,265**	**—**	**—**	**1**
Interest income	90	—	—	1
Interest expense	(13)	—	—	—
Gains/losses on financial assets and liabilities and others	(32)	—	—	—
Commission income	1,268	—	—	—
Commission expense	(48)	—	—	—
Other	**3,965**	**2**	**2**	**76**
Financial guarantees granted and Others	11	1	1	17
Loan commitments and Other commitments granted	314	1	1	13
Derivative financial instruments	3,640	—	—	46

EUR million

	2020			
	Associates and joint ventures	Members of the board of directors	Executive vicepresident	Other related parties
Assets	**8,473**	**—**	**24**	**95**
Cash, cash balances at central banks and other deposits on demand	151	—	—	—
Loans and advances: credit institutions	562	—	—	—
Loans and advances: customers	6,934	—	24	95
Debt instruments	423	—	—	—
Others	403	—	—	—
Liabilities	**3,593**	**4**	**16**	**159**
Financial liabilities: credit institutions	944	—	—	—
Financial liabilities: customers	2,557	4	16	159
Marketable debt securities	12	—	—	—
Others	80	—	—	—
Income statement	**1,269**	**—**	**—**	**3**
Interest income	106	—	—	2
Interest expense	(8)	—	—	—
Gains/losses on financial assets and liabilities and others	49	—	—	—
Commission income	1,154	—	—	1
Commission expense	(32)	—	—	—
Other	**4,097**	**1**	**1**	**52**
Financial guarantees granted and Others	14	—	—	3
Loan commitments and Other commitments granted	253	1	1	13
Derivative financial instruments	3,830	—	—	36

EUR million

	2019			
	Associates and joint ventures	Members of the board of directors	Executive vicepresident	Other related parties
Assets	**9,659**	**—**	**26**	**104**
Cash, cash balances at central banks and other deposits on demand	740	—	—	—
Loans and advances: credit institutions	961	—	—	—
Loans and advances: customers	6,950	—	26	104
Debt instruments	848	—	—	—
Others	160	—	—	—
Liabilities	**2,689**	**41**	**12**	**57**
Financial liabilities: credit institutions	563	—	—	—
Financial liabilities: customers	2,064	41	12	57
Marketable debt securities	—	—	—	—
Others	62	—	—	—
Income statement	**1,386**	**—**	**—**	**2**
Interest income	111	—	—	1
Interest expense	(15)	—	—	—
Gains/losses on financial assets and liabilities and others	47	—	—	—
Commission income	1,269	—	—	1
Commission expense	(26)	—	—	—
Other	**4,219**	**7**	**3**	**49**
Financial guarantees granted and Others	17	5	2	38
Loan commitments and Other commitments granted	197	1	1	6
Derivative financial instruments	4,005	1	—	5

The remaining required information is detailed in notes 5, 14 and 46.c.

53. Risk management

a) Risk principles and culture

Grupo Santander´s risk principles below are compulsory. They comply with regulatory requirements and are inspired by best market practices:

1. **All employees are risk managers** who must understand the risks associated with their functions and not assume risks with an impact that exceeds the Group's risk appetite or is unknown.

2. **Involvement of senior managers,** with consistent risk management and control through their conduct, actions and communications, as well as oversight of the risk culture and make sure Grupo Santander maintain the risk profile within the defined risk appetite.

3. **Independent risk management and control functions,** according to the three lines of defence model of Grupo Santander.

4. **A forward-looking, comprehensive approach to risk management and contro**l for all businesses and risk types.

5. **Complete and timely information** to identify, assess, manage and disclose risks to the appropriate level.

Grupo Santander's holistic control structure stands on these principles and includes strategic tools and processes set out in the risk appetite statement, such as annual planning and budget planning, scenario analysis, the risk reporting structure and risk identification and assessment.

1. Risk factors

Grupo Santander's risks categorization ensures effective risk management, control and reporting. The risk framework distinguishes these risk types:

- **Credit risk** relates to financial loss arising from the default or credit quality deterioration of a customer or counterparty, to which Santander has directly provided credit or assumed a contractual obligation.

- **Market risk** results from changes in interest rates, exchange rates, equities, commodities and other market factors, and from their effect on profit or capital. It includes the structural risk relates to market movements or balance sheets behaviour will change the value or profit generation of assets or liabilities in the banking book.

- **Liquidity risk** occurs if liquid financial resources are insufficient or too costly to obtain in order to meet liabilities when they fall due.

- **Capital risk** is the risk that arises from the possibility of having an inadequate quantity or quality of capital to meet internal business objectives, regulatory requirements or market expectations in the area of structural risk.

Grupo Santander also takes into account, on an ongoing basis in its management of the risk function, operational, regulatory compliance, model, reputational and strategic risks.

Besides, environmental and climate-related risk drivers are considered as factors that could impact the existing risks in the medium-to-long-term. These elements include, on the one hand, those derived from the physical effects of climate change, generated by one-off events as well as by chronic changes in the environment and, on the other hand, those derived from the process of transition to a development model with lower emissions, including legislative, technological or behaviour of economic agents changes.

The analysis of climate change scenarios has continued to advance during 2021 in the Group to try to cover the different casuistry related to the risks of transition to a low-carbon economy and/or the effects derived from the physical risk of possible climatic events in certain geographies where the Group operates.

Grupo Santander continues to make progress in the credit granting process following the EBA guidelines as well as in the development of a more restrictive financing policy, taking special account of the most sensitive sectors/activities, which includes ceasing to provide financial services to medium term to electricity generation customers with more than 10% of revenues dependent on coal and eliminate exposure to coal mining production in the world.

Grupo Santander has scheduled a series of actions to continue integrating climatic and environmental factors in the credit admission process, through i) their incorporation in the assessment processes of local credit committees, ii) their inclusion in the assignment of corporate ratings in the wholesale market (with a future expansion to retail banking) and in the process of setting prices through the entities' own ratings and the specific pricing that already exists for specific products with discount rates based on the fulfillment of various conditions , and iii) the inclusion of energy certificates in the valuation of collaterals.

Additionally, Grupo Santander has increased focus on the impact of climate risk in relation to market, structural and liquidity risk, which arise from the possibility that changes in climate may adversely affect the value of a financial instrument, a portfolio or the Group as a whole. This risk may have an impact both on financial instruments value or portfolios and on Santander's liquidity. Grupo Santander measures this risk through stress scenarios for both market and liquidity risk, which arises from the possibility that climate change may adversely affect the value of a financial instrument, a portfolio or the Group as a whole

2. Risk governance

Grupo Santander robust risk and compliance governance structure allows us to conduct effective oversight in line with our risk appetite. It stands on three lines of defence, a structure of committees and strong Group-subsidiary relations, guided by our risk culture, Risk Pro.

2.1 Lines of defence

Grupo Santander model of three lines of defence effectively manages and controls risks:

– **First line:** formed by businesses and functions that take or originate exposure to risk, it recognizes, measures, controls, monitors and reports on risks according to internal risk management regulation. Risk origination must be consistent with the approved risk appetite and related limits.

– **Second line:** formed by the Risk and Compliance and Conduct functions, it independently oversees and challenges the first line's risk management. Its duties include ensuring that risks are

managed according to the risk appetite defined by senior management and strengthening our risk culture throughout Grupo Santander.

– **Third line:** the Internal Audit function, which is independent to ensure the board of directors and senior managers with high-quality and efficient internal controls, governance and risk management systems, helping to safeguard our value, solvency and reputation.

The Risk, Compliance & Conduct and Internal Audit functions are separate and independent. Each has direct access to the board of directors and its committees.

2.2 Risk committee structure

The **board of directors** is ultimately responsible for risk and compliance management and control. It revises and approves the bank's risk frameworks and appetite, while promoting a strong risk culture across the Group. The board relies on its risk supervision, regulation and compliance committee for risk control and on the group's executive committee for risk approval.

The **Group chief risk officer (Group CRO)**, who decides risk strategy and promotes proper risk culture, is in charge of overseeing all risks and challenging and advising business lines on risk management.

The **Group chief compliance officer (Group CCO)**, who decides compliance and conduct strategy, is in charge of controlling the risks within their purview and must provide the Group CRO with a complete overview on the situation of risks being monitored.

Both the Group CRO and the Group CCO have direct access and report to the risk supervision, regulation and compliance committee and the board of directors.

The executive risk, risk control and compliance and conduct committees are executive committees and have been delegated powers by the board.

Furthermore, risk functions have forums and regular meetings to manage and control the risks within their purview. Executive committees also delegate some duties to subordinate forums.

Their responsibilities include:

- Reporting to the Group CRO, the Group CCO, the risk control committee and the compliance and conduct committee on risk management according to risk appetite;
- monitoring and ensuring proper management of each risk factor; and
- overseeing measures to comply with supervisors and auditors' expectations.

Besides, Grupo Santander, in order to establish an adequate control environment for the management of each risk factors, the Risk and Compliance and Conduct functions have effective internal regulation to create the right environment to manage and control all risks.

Grupo Santander can also dictate new governance measures for special situations. During the Brexit crisis transition process, it set up separate steering committees and working groups with Santander UK. Also, to cope with the covid-19 crisis, it created special situation forums, in which close coordination with subsidiaries, local contingency plan activation and scenario analysis enhanced allocated resources and governance.

2.3 The Group's relationship with subsidiaries

In all subsidiaries, the risk and compliance management and control model is consistent with the frameworks approved by Grupo Santander's board of directors, which they adhere to through their own boards and can only adapt according to local law and regulation. In its duty to carry out aggregate risk oversight, Grupo Santander validates and challenges subsidiaries' internal regulation and transactions, which results in a common risk management model across the Group.

In 2021, Grupo Santander continued to strengthen the regional subsidiary relations model, based on regions, to find synergies for common operations and platforms building on the global and regional scale; to streamline processes; and to tighten control mechanisms so Grupo Santander's business can grow, allocate capital more efficiently and offer the best service to customers.

In this sense, each local CRO interact regularly with their regional head of risk, the Group CRO and the Group CCO in periodic regional or country control meetings. Local and global Risk and Compliance functions also hold follow-up meetings to address special matters. The Group CRO and the Group CCO and regional heads of risk are involved in appointing, setting of objectives, reviewing and compensating their local counterparts to ensure proper risk management.

Grupo Santander enhances its relations with subsidiaries and its advanced risk management model through:

- Close collaboration between countries in the same region to carry out common initiatives efficiently;
- structural change, subsidiary benchmarks and a strategic vision for the function to implement advanced risk management infrastructures and practices;
- the exchange of best practices to strengthen processes and drive innovation in order to achieve a quantitative impact.;
- identification of talent in risk and compliance teams, promoting international mobility through a global risk talent programme and tightening succession plans.

3. Management processes and tools

Grupo Santander has these effective risk management processes and tools:

3.1 Risk appetite and structure of limits

Risk appetite is the volume and type of risks Grupo Santander deem prudent for the business strategy, even in unforeseen circumstances. It considers adverse scenarios that could have a negative impact on capital, liquidity and profitability.

The board sets the Group's risk appetite statement (RAS) every year. Grupo Santander subsidiaries' boards also set their own risk appetites annually. Each of those risk appetites translates into risk management limits and policies based on risk type, portfolio and segment.

3.1.1. Business model and risk appetite fundamentals

Grupo Santander's risk appetite is consistent with the risk culture and business model built on customer focus, scale and diversification. At the core of Grupo Santander's risk appetite are:

- A medium-low and predictable target risk profile that is centred on retail and commercial banking, internationally diversified operations and strong market share;
- Stable, recurrent earnings and shareholder remuneration, sustained by a sound base of capital, liquidity and sources of funding;
- Independent subsidiaries that manage their own capital and liquidity, with risk profiles that do not compromise Grupo Santander's solvency;
- An independent risk function with involvement by senior management to embed a strong risk culture and drive a sustainable return on capital;
- A global and holistic vision through a meticulous control and monitoring of risks, businesses and markets;
- A focus on products Grupo Santander know well;
- A conduct model that protects Grupo Santander`s customers; and
- A remuneration policy that aligns employees and executives' interests with risk appetite and long-term results.

3.1.2. Corporate risk appetite principles

The principles that inform Grupo Santander's risk appetite are:

- **The board and senior management's responsibility** for risk appetite;
- **An enterprise-wide view of risk, back-testing and challenge of risk profile** based on quantitative metrics and qualitative indicators;
- **A forward-looking view** based on plausible assumptions and adverse/stress scenarios to reflect the desired risk profile in the short and medium term;
- **Strategic and business plans embedded in daily management** by policies and limits;
- **Common standards** that align each subsidiary's appetite with the Group's; and
- **Regular reviews, best practice and regulatory requirements,** with mechanisms in place to keep the risk profile stable and mitigate non-compliance.

3.1.3. Structure of limits, monitoring and control

Risk appetite is expressed in qualitative terms and limits, structured on these five core elements.

1 **Earnings volatility**
The maximum loss Grupo Santander can tolerate in an acute -but- plausible stress scenario.

2 **Solvency**
- Minimum capital position Grupo Santander can tolerate in a stress scenario.
- Maximum leverage Grupo Santander can tolerate in a stress scenario.

3 **Liquidity**
- Minimum structural liquidity position.
- Minimum liquidity horizon Grupo Santander can tolerate in peak stress scenario.
- Minimum liquidity coverage position.

4 **Concentration**
- Concentration in single names, industries and portfolios.
- Concentration in non-investment grade counterparties.
- Concentration in large exposures.

5 **Non-financial risks**
- Maximum operational risk losses.
- Maximum risk profile.
- Non-financial risk indicators:
  - Financial crime compliance (FCC)
  - Cyber and security risk
  - Model risk
  - Reputational risk

b) Credit risk

1. Introduction to the credit risk treatment

Credit risk refers to a potential financial loss from the default or credit quality deterioration of a customer or other third party with whom Grupo Santander has a contractual obligation. It is our most important risk, both in terms of exposure and capital consumption. It also includes counterparty risk, country risk and sovereign risk.

Credit risk management

Grupo Santander identifies, analyses, controls and decides on credit risk based on holistic view of the credit risk cycle, which includes the transaction, the customer and the portfolio.

Credit risk identification is key to managing and controlling Grupo Santander's portfolios effectively. Grupo Santander classify external and internal risks in each business and adopt corrective and mitigating measures when needed through these processes:

1.1. Planning

Grupo Santander´s planning helps to set business targets and define specific action plans within our risk appetite framework.

Strategic commercial plans (SCP) are a management and control tool the business and risk areas prepare for Grupo Santander's credit portfolios. They determine commercial strategies, risk policies, resources and infrastructure, ensuring a holistic view of the portfolios. They provide managers with an updated view of credit portfolio quality to measure credit risk, run internal controls over the defined strategy coupled with regular monitoring, detect significant deviations in risk and potential impacts, and take corrective actions when necessary. They also align with Grupo Santander's risk

appetite and its subsidiaries' capital targets, and are approved and monitored by senior managers at each subsidiary before being reviewed and validated by Grupo Santander.

1.2. Risk assessment and credit rating

To analyse customers' ability to meet contractual obligations, Grupo Santander uses valuation and parameter estimation models in each of the segments. Grupo Santander's credit quality valuation models are based on credit rating drivers, which Grupo Santander monitors to calibrate and adjust the decisions and ratings they assign. Depending on each segment, drivers can be:

- Rating: from mathematical algorithms that have a quantitative model based on balance sheet ratios or macroeconomic variables, and a qualitative module supplemented by the credit analyst's expert judgement. It is used for SCIB, corporate, institutional and SME segments (with individualised treatment).
- Scoring: an automatic system to evaluate credit applications that assigns an individual score to customers for subsequent decision-making, generally in the retail and smaller SME segments.

Grupo Santander's parameter estimation models follow econometric models built on Grupo Santander's portfolios' historical defaults and losses. Grupo Santander uses them to calculate economic and regulatory capital as well as IFRS 9 provisions for each portfolio.

Grupo Santander regularly monitoring and evaluate models' appropriateness, predictive capacity, performance, granularity, compliance with policies and other related factors. Grupo Santander reviews ratings with the latest available financial and economic information. Grupo Santander has also increased the reviews for customers who are under closer observation or have automatic warnings in the risk management systems.

1.3. Credit risk mitigation techniques

We approve risks generally on the basis of borrowers' ability to pay in fulfilment of financial obligations, notwithstanding any additional collateral or personal guarantees we can require from them. To determine this, we analyse funds or net cash flows from their businesses or income with no guarantors or the assets pledged as collateral. We always consider guarantors and collateral when deciding to approve a loan as a secondary means of recourse if the first channel fails.

In general, a guarantee is as a reinforcement measure added to a credit transaction to mitigate a loss due to a failure to meet a payment obligation.

Grupo Santander has credit risk mitigation techniques for various types of customer and products. Some are for specific transactions (e.g., property) while others apply to a series of transactions (e.g., derivatives netting and collateral). Grupo Santander can be grouped into personal guarantees, guarantees in the form of credit derivatives or collateral.

1.4. Definition of limits, pre-classifications and pre-approvals

Grupo Santander uses SCPs to manage credit portfolios, defining limits for each of them and for new originations, in line with the Group´s credit risk appetite and its target risk profile. Transposing the risk appetite to portfolio management strengthens controls over our credit portfolios.

Grupo Santander´s limits, pre-classifications and pre-approvals processes determine the risk we can assume with each customer.

Limits are approved by the executive risk committee (or delegated committees) and should reflect a transaction's expected risk-return

Grupo Santander applies various limits models to each segment:

- **Large corporate groups**: are subject to a pre-classification model based on a system for measuring and monitoring economic capital. Pre-classification models express the level of risk Grupo Santander is willing to assume in transactions with customers/ groups in terms of capital at risk, nominal cap and maximum tenors. To manage limits with financial entities, Grupo Santander uses Credit Equivalent Risk (CER), which includes actual and expected risks with customers according to risk appetite and credit policies.
- **Corporates and institutions**: that meet certain requirements (strong relationships, rating, etc.): Grupo Santander uses simpler pre-classification model with an internal limit. It establishes a reference point in a customer's level of risk based on repayment capacity, overall indebtedness and a pool of banks.

Transactions with large corporates, corporates and institutions above certain limits or with special characteristics could require approval from a senior credit analyst or a committee.

- **For individual customers and SMEs** with low turnover, Grupo Santander manages large volumes of credit transactions with automatic decision models to classify customers and transactions.

1.5. Scenario analysis

Grupo Santander´s scenario analyses determine the potential risks in its credit portfolios and provide a better understanding of our portfolios' performance under various macroeconomic conditions.

They allow us to anticipate management strategies that will avoid future deviations from defined plans and targets. They simulate the impact of alternative scenarios in portfolios' credit parameters (PD, LGD) and expected credit losses. We compare findings with portfolios' credit profile indicators to find the right measures for managers to take. Credit risk management of portfolios and SCPs incorporate scenario analyses.

1.6. Monitoring

Regularly monitoring business performance and comparing it to pre-defined plans is key to our management of risk.

Grupo Santander's holistic monitoring of customers helps detect impacts on risk performance and credit quality early.

Grupo Santander assigns customers a classification with a pre-defined course of action and ad hoc measures to correct any deviations.

Monitoring, which considers transaction forecasts and characteristics, in addition to changes in classification, is performed by local and global risk teams and is based on customer segmentation:

- For SCIB, monitoring is initially a function of business managers and risk analysts which provide an up-to-date view of customers' credit quality to predict a potential customer's deterioration.
- For commercial banking, institutions and SMEs assigned a credit analyst, Grupo Santander tracks customers requiring closer monitoring and review their ratings based on relevant indicators.

- Monitoring of individual customers, businesses and smaller SMEs follows a system of automatic alerts to detect shifts in portfolios' performance.

Monitoring uses the Santander Customer Assessment Note (SCAN) tool. Grupo Santander fully rolled it out in our subsidiaries in 2019. It helps set individual monitoring levels and frequencies, policies, and actions for customers based on credit quality and particular circumstances.

In addition to monitoring customer credit quality, Grupo Santander defines control procedures to analyse portfolios and performance, as well as any deviations from planning or approved alert levels.

1.7. Recovery and collections management

The Collections & Recoveries area carries out recoveries, which are important to risk management. It defines a global, enterprise-wide management strategy with guidelines and general lines of action for Grupo Santander's subsidiaries based on the economic environment. business model and other local recovery conditions. Recovery management follows regulatory requirements set out in the EBA Guidelines on the management of non-performing and forborne exposures. In addition, Grupo Santander applies specific policies on recovery management that include the principles of the different strategies.

The Collections & Recoveries areas directly manage customers. As sustained value creation is based on effective and efficient collections, digital channels that develop new customer relations are gaining importance. Grupo Santander's diverse customer base requires segmentation to manage recoveries appropriately. The highly technological and digital processes Grupo Santander follows help us attend to large groups of customers with similar profiles and products. Grupo Santander's personalized management, however, focuses on customer profiles that require a special manager and approach.

Grupo Santander splits recovery management into four phases: arrears, credit impaired loans, write-offs and foreclosed assets. Grupo Santander may uses mechanisms to rapidly reduce assets like sales of foreclosed assets or credit impaired loans pool sales. Grupo Santander constantly seeks alternatives to legal action in order to collect debt.

Grupo Santander includes debt instruments as written-off loans (even if they are not past-due) if an individual analysis of the solvency of a transaction and the borrower leads us to believe recovery is remote due to a notorious and unrecoverable impairment. Though this may lead to full or partial cancellation and de-recognition of the gross carrying amount of debt, it does not mean we interrupt negotiations and legal proceedings to recover debt. In countries with high exposure to real estate risk, we have efficient sales management instruments that help maximize recovery and optimize balance sheet stocks.

2. Main aggregates and variations

Following are the main aggregates relating to credit risk from our activities with customers:

MAIN CREDIT RISK PERFORMANCE METRICS FROM ACTIVITY WITH CUSTOMERS*

December data

	Credit risk with customers ** (EUR million)			Credit impaired loans (EUR million)			NPL ratio (%)		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
Europe	**636,123**	**606,997**	**605,969**	**19,822**	**20,272**	**21,054**	**3.12**	**3.34**	**3.47**
Spain	221,100	221,341	213,668	12,758	13,796	14,824	5.77	6.23	6.94
UK	262,869	252,255	264,297	3,766	3,138	2,736	1.43	1.24	1.04
Portugal	41,941	40,693	37,978	1,442	1,584	1,834	3.44	3.89	4.83
Poland	33,497	31,578	33,566	1,210	1,496	1,447	3.61	4.74	4.31
North America	**149,792**	**131,626**	**143,839**	**3,632**	**2,938**	**3,165**	**2.42**	**2.23**	**2.20**
US	112,808	99,135	105,792	2,624	2,025	2,331	2.33	2.04	2.20
Mexico	36,984	32,476	38,047	1,009	913	834	2.73	2.81	2.19
South America	**141,874**	**129,590**	**143,428**	**6,387**	**5,688**	**6,972**	**4.50**	**4.39**	**4.86**
Brazil	85,702	74,712	88,893	4,182	3,429	4,727	4.88	4.59	5.32
Chile	41,479	42,826	42,000	1,838	2,051	1,947	4.43	4.79	4.64
Argentina	5,481	4,418	5,044	198	93	171	3.61	2.11	3.39
Digital Consumer Bank	**117,049**	**116,381**	**117,399**	**2,490**	**2,525**	**2,470**	**2.13**	**2.17**	**2.10**
Corporate Centre	**6,277**	**4,862**	**5,872**	**903**	**344**	**138**	**14.38**	**7.08**	**2.34**
Total Group	**1,051,115**	**989,456**	**1,016,507**	**33,234**	**31,767**	**33,799**	**3.16**	**3.21**	**3.32**

*Management perimeter according to the reported segments
** Includes gross lending to customers, guarantees and documentary credits.

Key figures by geographic region are described below at 31 December 2021:

- **Europe**: the NPL ratio fell 22 bps to 3.12% from 2020 due to a significant reduction in credit impaired loans in Spain and Poland, offsetting the increase observed in the UK.
- **North America**: the NPL ratio increased 19 bps to 2.42% from 2020, mainly due to increases at SC USA. NPL stock rose 24% year-on-year.
- **South America**: the NPL ratio rose 11 bps to 4.50%. comparing to 2020, due to the increase observed in Argentina (+150 bps) and Brazil (+29 bps), offsetting the decrease in Chile (-36 bps).
- **Digital Consumer Bank:** The NPL ratio decreased 4 bp to 2.13% comparing to 2020, despite the decrease in automobile financing.

Information on the estimation of impairment losses

Estimation of expected credit losses:

The covid-19 health crisis, since its beginning in 2020, was unexpected, unpredictable and severe, but it is estimated to be of a temporary nature. Grupo Santander's priority in these circumstances has been to look after the health of its employees, customers and shareholders, but also to help reduce the economic impact of the pandemic. This includes trying to offer the best solutions to help customers.

Conceptually, the phases in managing the effects of covid-19 have been:

- Identification of customers or groups affected or potentially affected by the pandemic.
- Early relief of temporary financial difficulties caused by covid-19 through measures promoted by governments, central banks, and financial institutions.
- Monitoring the evolution of customers, to ensure that they continue to be provided with the best solution for their situation, and also to guarantee that their potential impairment is correctly reflected in the risk management and accounting. This point is particularly relevant at the expiry of any moratorium or liquidity support measures to which customers may have availed themselves.
- Monitoring is accompanied by recovery management activities when necessary.

These conceptual phases do not occur sequentially but overlap in time. Additionally, the continuous interaction and coordination between the different subsidiaries proved to be a fundamental asset in the management of this crisis. The experience obtained in the fight against the health crisis and its financial consequences in our different geographies, and the different speeds at which it has been developing in each of them, allow us to share the best practices identified and to implement in an agile and efficient manner those strategies and concrete actions that have been most successful, always adapted to the local reality of each market.

Estimation of expected loss

In the context described above on the measures taken in relation to covid-19, many regulators and supervisors highlighted the uncertainties surrounding the economic impacts of the health crisis. This is also evident in the frequent updates of macroeconomic forecasts, with different perspectives and views on the depth and duration of the crisis. Thus, the general recommendation (including IASB, ESMA, EBA and ECB) was not to mechanistically apply the usual techniques for calculating expected losses under IFRS 9, in order to avoid that this variability of economic conditions would translate into volatility in results, with its potential pro-cyclical effects on the economy.

Thus, Grupo Santander has analysed losses under IFRS 9 on the basis of three types of elements:

1.Continuous monitoring of customers

Monitoring the credit quality of customers could have been more complex in the current circumstances. For such monitoring, and in addition to the application of internal customer monitoring policies, all available information should be used. The availability of information and its relevance is different in the various portfolios of the different countries in which Grupo Santander operates, but it may include, but is not limited to the following:

- The payment of interest in the case of principal-only shortfalls.
- The payment of other operations of the same client in the institution (not subject to moratorium).
- Information on payment of loans in other entities (through credit bureaus).
- Customer financial information: average balances in current accounts, availability/use of limits, etc.
- Available behavioural elements (variables that feed the behavioural scores, etc.).
- Information gathered from customer contacts (surveys, calls, questionnaires, etc.). This may include: customers who have taken up furlough programs, direct government aid, etc.

2. Forward-looking vision

As it was reflected by the IASB, macroeconomic uncertainty makes the usual application of IFRS 9 expected loss calculation models difficult but did not exempt the incorporation of the prospective feature of the standard. To this end, the European Central Bank recommended the use of a stable, long-term view (long-run) of the macroeconomic forecasts, which takes into account in the assessment the multiple support measures explained above.

During 2021, this uncertainty has been reduced as vaccination progressed, hospitalisation rates gradually declined, allowing, in some cases, for the reduction of restriction measures. In parallel, support measures expired while maintaining the good performance of the portfolios.

This implies that once the economic scenarios have been stabilising and converging to their potential growth, these new economic scenarios have been gradually updated in the models by returning to the standard forward-looking calculation.

3. Additional elements

Additional elements will be required when necessary because they have not been captured under the two previous elements. This has included, among others, the analysis of sectors most affected by the pandemic if their impacts are not sufficiently captured by the macroeconomic scenarios. Also collective analysis techniques, when the potential impairment in a group of clients cannot be identified individually.

With the elements indicated above, Grupo Santander has evaluated in each of the geographical areas the evolution of the credit quality of its customers, for the purposes of their classification in Grupo Santander financial statements.

In terms of classification, in 2021 Grupo Santander has maintained the criteria and thresholds for classification applied prior to the start of the pandemic, eliminating regulatory criteria of the effect of moratorium classification as they have expired, as well as the collective analyses associated with these groups of loans.

Regarding moratorium measures, a rigorous identification and periodic monitoring of the credit quality of the clients and their payment behaviour have been carried out and, through a specific individual or collective evaluation, the timely detection of the Significant Increase in Credit Risk (SICR).

As part of governance processes, Grupo Santander issued guideline documents to all subsidiaries to ensure consistent standards and governance in managing the new treatment and particular impacts on pandemic-related provisions. The guidelines included instructions on how to calculate the macroeconomic impact of the crisis using overlay and potential collective assessments that considered impairment caused by covid-19. Those documents also include a monitoring guide to ensure the appropriateness of special insolvency fund adjustments for covid-19-related situations and anticipate any other necessary adjustment.

Regarding moratoria measures, a rigorous identification and regular monitoring of customer credit quality and payment behavior have been performed and through specific individual or collective assessment, the timely detection of SICR have been assured.

Details of the exposure by stage can be found in notes 6, 7, 10, as well as in this note of these consolidated annual accounts.

Grupo Santander estimates the impairment losses by calculating the expected loss at 12 months or for the entire life of the transaction, based on the stage in which each financial asset is classified in accordance with IFRS 9.

Then, considering the most relevant units of the Group (United Kingdom, Spain, United States, Brazil, also Chile, Mexico, Portugal, Poland, Argentina and Santander Consumer Finance), which represent approximately 96% of the total Group's provisions. The

table below shows the impairment losses associated with each stage as of 31 December 2021, 2020 and 2019.In addition, depending on the transactions credit quality, the exposure is divided into three categories according to Standard & Poor's rating scale:

EXPOSURE AND IMPAIRMENT LOSSES BY STAGE

EUR million

	2021			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	565,443	13,798	—	579,241
From BB- to CCC	237,525	56,170	—	293,695
Default	—	—	30,711	30,711
Total exposure **	**802,968**	**69,968**	**30,711**	**903,647**
Impairment losses***	**4,149**	**5,103**	**12,873**	**22,125**

EXPOSURE AND IMPAIRMENT LOSSES BY STAGE

EUR million

	2020			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	489,518	9,124	—	498,642
From BB- to CCC	276,516	55,838	—	332,354
Default	—	—	30,436	30,436
Total exposure **	**766,034**	**64,962**	**30,436**	**861,432**
Impairment losses***	**4,458**	**5,461**	**13,503**	**23,422**

EXPOSURE AND IMPAIRMENT LOSSES BY STAGE

EUR million

	2019			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	552,763	5,532	—	558,295
From BB- to CCC	306,880	47,365	—	354,245
Default	—	—	31,363	31,363
Total exposure **	**859,643**	**52,897**	**31,363**	**943,903**
Impairment losses***	**3,980**	**4,311**	**13,276**	**21,567**

* Detail of credit quality ratings calculated for Group management purposes.
** Total exposure includes loan balances (drawn amounts) and off balance (letters of credit + guarantees) and excludes REPOs, FV portfolio, trading portfolio and undrawn commitments.
***Includes provisions for undrawn authorized lines (loan commitments)

The remaining units that form the totality of the Group exposure, contributed EUR 102,631 million in stage 1; EUR 1,870 million in stage 2, and EUR 2,522 million in stage 3 (in 2020 EUR 98,121 million in stage 1; EUR 3,613 million in stage 2, and EUR 1,322 million in stage 3. In 2019, EUR 38,174 million in stage 1; EUR 1,422 million in stage 2, and EUR 1,056 million in stage 3), and impairment losses of EUR 408 million in stage 1; EUR 322 million for stage 2, and EUR 841 million in stage 3 (in 2020, EUR 180 million, EUR 393 million and EUR 277 million and in 2019, EUR 264 million, EUR 306 million and EUR 91 million in stage 1, stage 2 and stage 3, respectively).

The remaining exposure, including all financial instruments not included before, amounts to EUR 349,228 million (EUR 478,093 million in 2020 and EUR 507,479 million in 2019), and it includes all undrawn authorized lines (loan commitments).

As of 31 December 2021, the Group had EUR 420 million net of provisions (EUR 497 million and EUR 706 million at 31 December 2020 and 2019, respectively) of purchased credit-impaired assets, which relate mainly to the business combinations carried out by the Group.

Regarding the evolution of credit risk provisions, the Group, in collaboration with the main geographical areas, monitors them by carrying out sensitivity analyses considering changes in macroeconomic scenarios and main variables that have an impact on the financial assets distribution in the different stages and calculating credit risk provisions.

Additionally, based on consistent macroeconomic scenarios, the Group also performs stress tests and sensitivity analysis in a regular basis, such as ICAAP, strategic plans, budgets and recovery and resolution plans. In this sense, a prospective view of the sensitivity of each of the Group's loan portfolio is created in relation to the possible deviation from the base scenario, considering both the macroeconomic developments in different scenarios and the three year evolution of the business. These tests include potentially adverse and favourable scenarios.

The transactions classification into the different IFRS 9 stages is carried out in accordance with the regulation through the risk management policies of our subsidiaries, which are consistent with the risk management policies defined by the Group. In order to determine the classification in stage 2, the Group assesses whether there has been a significant increase in credit risk (SICR) since the initial recognition of the transactions, considering a series of common principles throughout the Group that guarantee that all financial instruments are subject to this assessment, which considers the particularities of each portfolio and type of product on the basis of various quantitative and qualitative indicators. Furthermore, transactions are subject to the expert judgement of the analysts, who set the thresholds under an effective integration in management. All is implemented according to the approved governance.

The criteria thresholds used by the Group are based on a series of principles, and develop a set of techniques. The principles are as follows:

- Universality: all financial instruments subject to a credit rating must be assessed for their possible SICR.
- Proportionality: the definition of the SICR must take into account the particularities of each portfolio.
- Materiality: its implementation must be also consistent with the relevance of each portfolio so as not to incur in unnecessary costs or efforts.
- Holistic vision: the approach selected must be a combination of the most relevant credit risk aspects (e.g. quantitative and qualitative).
- Application of IFRS 9: the approach must take into consideration IFRS 9 characteristics, focusing on a comparison with credit risk at initial recognition, as well as considering forward-looking information.
- Risk management integration: the criteria must be consistent with those metrics considered in the day-to-day risk management.
- Documentation: Appropriate documentation must be prepared.

The techniques are summarised below:

- Stability of stage 2: in the absence of significant changes in the portfolios credit quality, the volume of assets in stage 2 should maintain a certain stability as a whole.
- Economic reasonableness: at transaction level, stage 2 is expected to be a transitional rating for exposures that could eventually move to a deteriorating credit status at some point or stage 3, as well as for exposures that have suffered credit deterioration and whose credit quality is improving.
- Predictive power: it is expected that the SICR definition avoids, as far as possible, direct migrations from stage 1 to stage 3 without having been previously classified in stage 2.
- Time in stage 2: it is expected that the exposures do not remain categorized as stage 2 for an excessive time.

The application of the aforementioned techniques, conclude in the setting of one or several thresholds for each portfolio in each geography. Likewise, these thresholds are subject to a regular review by means of calibration tests, which may entail updating the thresholds types or their values.

Covid-19 credit risk evolution and customer support programmes

In the context of the general response of Santander to the covid-19 pandemic, and specifically with the purpose to help the customers from the credit perspective and foster their economic resilience during the crisis, Grupo Santander implemented several actions in addition to those listed above, the following:

- The severity of the pandemic's effects was significantly different depending on the economic sector. Consequently, Santander launched a process to identify those that could be more affected in order to focus credit risk management on them.
- Due to the covid-19 crisis, great focus was placed on collections & recoveries readiness across Grupo Santander to deal with the impact expected on its portfolios once the support measures granted have expired.

Since the start of the pandemic in 2020, at the end of December 2021, Grupo Santander granted a total of EUR 93,112 million in payment moratoria, equivalent to 9.68% of the loan portfolio.

From the total moratoria, 99.8% had expired at 31 December 2021, from which 74.6% were classified in stage 1, 18.7% in stage 2 and 6.7% in stage 3. At December 2020, 79.1% of total moratoria has expired, from which 82.4% classified in stage 1, 14.5% in stage 2 and 3.1% in stage 3.

At the end of December 2021, total lending under government liquidity programmes amounted to EUR 39,879 million. By geography, Spain represent 68% of total exposure granted to these types of programmes, with an average coverage of ICO guarantees of 77%. UK constitutes the 13% of total exposure with an average coverage of 98%.

Quantification of additional provisions for covid-19

In relation to the measures in the insolvency funds, the Group set up additional provisions during 2020 based on a collective analysis of vulnerable sectors, and segments affected by the crisis derived from the covid-19 pandemic, as well as an estimate of the additional impairment of the loan and advance portfolio caused by the economic effects of the pandemic, realistically reflecting the structural deterioration of the economy at the date of construction of the estimate. This estimate was made on the basis of the information available at that date, which was affected by the high degree of uncertainty at the time of the estimate, and was aligned with the projections generated by the ECB. This macroeconomic scenario included a balance between short- and long-term forecasts, without being a 'through the cycle' scenario. The convergence of these scenarios with pre-crisis paths was expected to occur in the first quarter of 2022 for most macroeconomic indicators (except for house prices, which were expected to converge in the first quarter of 2023).

Grupo Santander has continuously and regularly monitored the following aspects during 2021 and 2020: (1) the evolution of the pandemic and the macroeconomic outlook, (2) forecasts from institutions and central banks, and (3) the evolution of portfolios in each of the countries where Grupo Santander is present.

Based on that monitoring, the Group updates and evaluates the adequacy of the macroeconomic scenarios in accordance with the established governance, when reliable and supportable information is available. At the end of 2021, we updated the most recent scenarios to calculate IFRS 9 provisions by recalibrating and revising the forward-looking information and risk model parameters. Following that process, during 2021 the model update included the macroeconomic scenarios. Out of the EUR 3,105 million at the end of December 2020, EUR 1,235 million overlay remain in additional provisions, motivated by several countries' government relief measures, in particular income support measures in the US, payment holiday extensions for longer periods in Portugal, and from continued volatility in the UK.

3.Detail of the main geographical areas

Following is the risk information related to the most relevant geographies in exposure and credit risk allowances.

This information includes sensitivity analysis, consisting on simulations of +/-100 bp in the main macroeconomic variables. A set of specific and complete scenarios is used in each geography, where different shocks that affect both the reference variable as well as the rest of the parameters is simulated. These shocks may be originated by productivity, tax, wages or exchange and interest rates factors. Sensitivity is measured as the average variation on expected loss corresponding to the aforementioned scenarios. Following a conservative approach, the negative movements take into account one additional standard deviation in order to reflect the potential higher variability of losses.

3.1. United Kingdom

Credit risk with customers in the UK grew 4.2% (-2.5% in local currency) year-on-year to EUR 262,869 million. The UK accounts for 25% of Santander's loan portfolio.

Since the pandemic began, Santander granted 368,000 moratoriums and EUR 5,280 million in government-backed loans to help our customers.

The NPL ratio in 2021, 1.43%, increased as compared to 2020 (+19 bps) due to the increase in SME segment, as well as the decrease of the portfolio in the wholesale segment. The profile of the different segments remains stable.

Mortgage portfolio

Because of its size, we closely monitor Santander UK's mortgage portfolio for the entity itself and Grupo Santander.

As of December 2021, it amounted to EUR 209,949 million, growing by +4.3% in local currency. It comprises residential mortgages granted to new and existing customers which are first lien mortgages. There are no second or more liens on mortgaged properties.

2021 was a year of strong mortgage activity, mainly due to the higher demand after the covid-19 restrictions were lifted and the reduction of the stamp duty rates up until September. As a consequence, Santander UK achieved all-time high mortgage lending origination levels in June.

In accordance with Santander's risk management principles, properties are appraised independently before we approve a new mortgage.

In line with market practice and legislation, property values used as collateral for granted mortgages are updated quarterly by an independent agency's automatic appraisal system.

Information on the estimation of impairment losses

The detail of Santander's UK exposure and impairment losses associated with each of the stages at 31 December, 2021, 2020 and 2019, is shown below.

In addition, the exposure is divided in three tranches of the Standard & Poor's rating scale, according to their current credit quality:

EXPOSURE AND IMPAIRMENT LOSSES BY STAGE

EUR million

	2021			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	210,418	9,088	—	219,506
From BB- to CCC	13,063	11,601	—	24,664
Default	—	—	3,508	3,508
Total exposure **	**223,481**	**20,689**	**3,508**	**247,678**
Impairment losses***	**135**	**372**	**460**	**967**

EXPOSURE AND IMPAIRMENT LOSSES BY STAGE

EUR million

	2020			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	184,065	2,227	—	186,292
From BB- to CCC	34,965	16,814	—	51,779
Default	—	—	3,229	3,229
Total exposure **	**219,030**	**19,041**	**3,229**	**241,300**
Impairment losses***	**223**	**557**	**668**	**1,448**

EXPOSURE AND IMPAIRMENT LOSSES BY STAGE

EUR million

	2019			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	238,985	2,032	—	241,017
From BB- to CCC	40,281	12,543	—	52,824
Default	—	—	2,821	2,821
Total exposure **	**279,266**	**14,575**	**2,821**	**296,662**
Impairment losses***	**117**	**470**	**588**	**1,175**

* Detail of credit quality ratings calculated for Group management purposes.
** Total exposure includes loan balances (drawn amounts) and off balance (letters of credit + guarantees) and excludes REPOs, FV portfolio, trading portfolio and undrawn commitments.
***Includes provisions for undrawn authorized lines (loan commitments)

The Government support measures taken in the United Kingdom in 2020 as response to the covid-19 pandemic have gradually expired and at the end of December 2021, Santander UK had granted, since the start of the pandemic, a total amount of EUR 40,949 million moratoriums, equivalent to 16.53% of the loan portfolio.

100% of the moratoriums granted had expired at 31 December 2021, from which 81.7% were in stage 1, 15.2% in stage 2 and 3.1% in stage 3 (at the end of 2020, of the total moratoriums, 93.5% had expired, of which 83.6% were in stage 1, 14.7% in stage 2 and 1.7% in stage 3).

For the estimation of expected losses, prospective information is taken into account. Specifically, Santander UK considers five macroeconomic scenarios, which are updated periodically. The evolution forecasted in 2021 for the next five years of the main macroeconomic indicators used by Santander UK to estimate expected losses is presented below:

	2022 - 2026				
Variables	Pessimistic scenario 3	Pessimistic scenario 2	Pessimistic scenario 1	Base scenario	Optimistic scenario 1
Interest rate	-0.1%	2.0%	0.8%	0.7%	1.1%
Unemployment rate	8.4%	6.4%	5.1%	4.4%	4.0%
Housing price change	-5.0%	-3.0%	-1.5%	2.2%	1.5%
GDP growth	—	1.0%	1.3%	2.2%	2.6%

Each of the macroeconomic scenarios is associated with a given weight. In terms of allocation, Santander UK associates the highest weighting to the base scenario, while it associates the lowest weightings to the most extreme or severe scenarios. In addition, at 31 December 2021, the weights used by Santander UK reflect the future prospects of the British economy in relation to its current political and economic position so that higher weights are assigned for negative scenarios:

	2021	2020	2019
Pessimistic scenario 3	5%	10%	—
Pessimistic scenario 2	20%	25%	15%
Pessimistic scenario 1	25%	15%	30%
Base scenario	45%	45%	40%
Optimistic scenario 1	5%	5%	10%
Optimistic scenario 2	—	—	5%

The sensitivity analysis of the main portfolios expected loss to variations of +/-100 bp for the macroeconomic variables used in the construction of the scenarios, as of December 2021, is as follows:

	Change in Provision	
	Mortgages	Corporates
GDP Growth		
-100 bp	19.1%	5.7%
100 bp	-6.7%	-1.0%
Housing price change		
-100 bp	4.0%	3.1%
100 bp	-3.7%	-0.6%
Unemployment rate		
-100 bp	-9.6%	-0.4%
100 bp	21.0%	0.4%

With regards to the determination of classification in stage 2, the quantitative criteria applied by Santander UK are based on identifying whether any increase in PD for the expected life of the transaction is greater than both an absolute and a relative threshold (the PD used in that assessment are adjusted to the transaction's remaining term and also annualised in order to facilitate that the thresholds defined cover the whole range of the transactions maturity dates). The relative threshold established is common to all portfolios and a transaction is considered to exceed this threshold when the PD for the entire life of the transaction increases by 100% with respect to the PD at the time of initial recognition. The absolute threshold, on the other hand, is different for each portfolio depending on the characteristics of the transactions, ranging between 360 bp and 30 bp.

In addition, for each portfolio, a series of specific qualitative criteria is defined to indicate that the exposure has experienced a significant increase in credit risk, regardless of the evolution of its PD since the time of initial recognition. Santander UK, among other criteria, considers that an operation presents a significant increase in credit risk when it presents irregular positions for more than 30 days. These criteria depend on the risk management practices of each portfolio.

3.2. Spain

Portfolio overview

Santander España's credit risk totalled EUR 221,100 million (21% of Grupo Santander's total). It is appropriately diversified among products and customer segments.

Amid economic and credit recovery, as macroeconomic figures improved after the end of the covid-19 lockdowns in 2020, consumer loans (especially mortgages) grew significantly, as the corporate and SME lending remained below 2020 numbers, as we maintained positions with customers in liquidity support programmes (i.e. ICO lines of credit) without having to seek new financing.

Total credit risk decreased -0.1% from December 2020. The ICO loans in Corporate and SME lending amounted to a significant EUR 27,294 (around half of them were extended according to the current regulation).

The credit portfolio's NPL ratio was 5.77%, 46 bp lower than in December 2020. This better overall portfolio performance was driven by customer support programmes; the regularization of several restructured positions; and portfolio sales.

The additional provisions raised to mitigate the potential impacts from the exceptional circumstances of the covid-19 pandemic, increased the NPL coverage ratio to 52% (+5 bp vs. December 2020). On the other hand, the non-performing portfolio declined mainly from loans with the highest expected losses.

The cost of credit reflects the rise in Covid-19 provisions, with slight improvement at the end of 2021 compared to December 2020.

Information on the estimation of impairment losses

The detail of Santander Spain exposure and impairment losses associated with each of the stages at 31 December, 2021, 2020 and 2019, is shown below. In addition, the exposure is divided in three tranches of the Standard & Poor's rating scale, according to their current credit quality:

EXPOSURE AND IMPAIRMENT LOSSES PER STAGE

EUR million

	2021			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	153,120	908	—	154,028
From BB- to CCC	33,233	14,740	—	47,973
Default	—	—	12,761	12,761
Total exposure **	**186,353**	**15,648**	**12,761**	**214,762**
Impairment losses***	**422**	**580**	**5,005**	**6,007**

EXPOSURE AND IMPAIRMENT LOSSES PER STAGE

EUR million

	2020			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	146,992	1,517	—	148,509
From BB- to CCC	40,630	11,541	—	52,171
Default	—	—	13,762	13,762
Total exposure **	**187,622**	**13,058**	**13,762**	**214,442**
Impairment losses***	**479**	**732**	**5,277**	**6,488**

EXPOSURE AND IMPAIRMENT LOSSES PER STAGE

EUR million

	2019			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	139,673	1,315	—	140,988
From BB- to CCC	42,603	9,115	—	51,718
Default	—	—	14,587	14,587
Total exposure **	**182,276**	**10,430**	**14,587**	**207,293**
Impairment losses***	**296**	**503**	**5,195**	**5,994**

* Detail of credit quality ratings calculated for Group management purposes.
** Total exposure includes loan balances (drawn amounts) and off balance (letters of credit + guarantees) and excludes REPOs, FV portfolio, trading portfolio and undrawn commitments.
***Includes provisions for undrawn authorized lines (loan commitments)

The real estate unit in Spain (UAI) was consolidated within Santander Spain in 2019, (this process was completed in 2020). Consequently, unlike in 2019, in 2021 and 2020 the perimeter is aligned.

The remaining legal entities to reach the entire portfolio in Spain contribute another EUR 5,693 million, EUR 445 million and EUR 237 million of exposure in 2019 in stage 1, stage 2 and stage 3 respectively, and impairment losses in the amount of EUR 55 million, EUR 41 million and EUR 8 million in stage 1, stage 2 and stage 3, respectively.

The Government support measures taken in Spain in 2020 as response to the covid-19 pandemic have gradually expired and at the end of December 2021 Santander Spain had granted, since the start of the pandemic in 2020, a total amount of EUR 9,819 million moratoriums, equivalent to 4.87% of the loan portfolio.

Of the total moratoriums, 99.6% had expired at 31 December 2021, from which 75.6% was in stage 1, 14.9% in stage 2 and 9.5% in stage 3. At the end of 2020, of the total moratoria, 26.4% had expired, of which 77.2% were in stage 1, 15% in stage 2 and 7.8% in stage 3.

For the estimation of the expected losses, the prospective information is taken into account. Specifically, Santander Spain considers three macroeconomic scenarios, which are updated periodically. The projected evolution for a period of five years of the main macroeconomic indicators used by Santander Spain for estimating expected losses as of 2021, is presented below:

	2022-2026		
Variables	Pessimistic scenario	Base scenario	Optimistic scenario
Interest rate	0.6%	-0.2%	-0.2%
Unemployment rate	18.3%	13.0%	11.2%
Housing price change	1.6%	2.6%	3.2%
GDP growth	1.1%	2.9%	3.7%

Each macroeconomic scenarios is associated with a given weight. As for its allocation, Santander Spain associates the Base scenario with the highest weight, while associating the lower weights to the most extreme scenarios:

	2021	2020	2019
Pessimistic scenario	30%	30%	30%
Base scenario	40%	40%	40%
Optimistic scenario 1	30%	30%	30%

The sensitivity analysis of the main portfolios expected loss to variations of +/-100 bp for the macroeconomic variables used in the construction of the scenarios is as follows:

	Change in Provision		
	Mortgages	Corporates	Others
GDP Growth			
-100 bp	11.9%	5.4%	4.9%
100 bp	-4.9%	-2.9%	-2.7%
Housing price change			
-100 bp	4.1%	3.2%	3.3%
100 bp	-2.5%	-1.7%	-1.4%

With regards to the stage 2 classification determination, the quantitative criteria applied in Santander Spain are based on identifying whether an increase in the PD for the expected lifetime of the transaction when compared to the one at its origination is greater than an absolute threshold. The threshold established is different for each portfolio based on the transactions characteristics, considering that a transaction is above this threshold when the PD for the life of the transaction increases by a certain quantity over the initial recognized PD. The values of these thresholds depend on their calibration, carried out periodically as indicated in the preceding paragraphs, which currently ranges from 25% to 1%, depending on the type of product and estimated sensitivity.

In the case of non-retail portfolios, Santander Spain uses the transaction's rating as a reference for its PD, taking into account its rating at the time of origination and its current rating, setting absolute thresholds for the different rating bands that depend on each portfolio characteristics. A SICR implies changes in the rating value between 0.1 and 4, depending on the portfolio and the estimated sensitivity (from lower to higher credit quality, the rating range goes from 1 to 9.3).

In addition, for each portfolio, a series of specific qualitative criteria are defined indicating that the exposure experienced a significant increase in credit risk, regardless of the evolution of its PD since the time of initial recognition. Santander Spain, among other criteria, considers that an operation presents a significant increase in credit risk when positions have been past due for more than 30 days. These criteria depend on the risk management practices of each portfolio.

Residential mortgage portfolio

Residential mortgages in Spain, including Santander Consumer Finance business, amounted to EUR 62,324 million in 2021 (EUR 59,605 million and EUR 62,236 million in 2020 and 2019, respectively), 99.33% of which have a mortgage guarantee (99.35% and 99.51% in 2020 and 2019, respectively).

	2021	
EUR Million	Gross amount	Of which: impaired
Home purchase loans to families	62,324	1,860
Without mortgage guarantee	419	115
With mortgage guarantee	61,905	1,745

	2020	
EUR Million	Gross amount	Of which: impaired
Home purchase loans to families	59,605	1,850
Without mortgage guarantee	387	75
With mortgage guarantee	59,218	1,775

	2019	
EUR Million	Gross amount	Of which: impaired
Home purchase loans to families	62,236	2,649
Without mortgage guarantee	306	14
With mortgage guarantee	61,930	2,635

The mortgage portfolio for the acquisition of homes in Spain is characterised by its medium-low risk profile, which limits expectations of any potential additional impairment:

- Principal is repaid on all mortgages from the start.
- Early repayment is common so the average life of the transaction is well below that of the contract.
- High quality of collateral, concentrated almost exclusively in financing for first homes.
- The average affordability rate stood at 27% (27% and 26% in 2020 and 2019, respectively).
- The 89.41% of the portfolio has a LTV below 80% calculated as total risk/latest available house appraisal.

Breakdown of the credit with mortgage guarantee to households for house acquisition, according to the percentage that the total risk represents on the amount of the latest available valuation (loan to value):

	2021					
	Loan to value ratio					
EUR Million	Less than or equal to 40%	More than 40% and less than 60%	More than 60% and less than 80%	More than 80% and less than or equal to 100%	More than 100%	Total
Gross amount	16,479	19,391	19,479	4,376	2,180	61,905
Of which impaired	187	240	349	313	656	1,745

Businesses portfolio

Credit risk with SME and corporates amounted to EUR 117,544 million, 3.1% lower than in December 2020, mainly due to the fall in the portfolio of SMEs. This is Santander Spain's main lending segment, accounting for 51% of the total. Most of the portfolio corresponds to customers with an assigned credit analyst to monitor their loans throughout the risk cycle.

The portfolio is broadly diversified and not concentrated by sector of activity. 2021 was a year of stability in the portfolio figures after the significant growth in 2020 due to the liquidity support programmes (ICO), which after the initial grace period have begun to be amortised.

The portfolio's NPL ratio stood at 7.50% in December 2021. Even though total risk decreased, the NPL ratio increased by 8 bp compared to December 2020, due to lower portfolio volume, while the stock of credit impaired loans slightly reduced.

Real estate activity

The Real Estate Unit in Spain (UAI) was consolidated within Santander Spain in 2019 (this process was completed in 2020). The part of the portfolio resulting from the past financial crisis and the new business that is identified as viable should be differentiated. In both cases, Santander has specialized teams that are in charge of their management and risk areas that cover the entire life cycle of these operations.

In recent years the Group's strategy has been geared towards reducing these assets. The changes in gross property development loans to customers were as follows:

EUR million	2021	2020	2019
Balance at beginning of year	2,871	2,939	4,812
Foreclosed assets	(1)	(6)	(29)
Reductions	(230)	(24)	(1,685)
Written-off assets	(15)	(38)	(159)
Balance at end of year	**2,625**	**2,871**	**2,939**

The NPL ratio of this portfolio ended the year at 5.07% (compared with 6.13% and 9.73% at December 2020 and 2019, respectively) due to the decrease of non-performing assets in the troubled loan portfolio and, in particular, to the sharp reduction in lending in this segment. The table below shows the distribution of the portfolio. The coverage ratio of the real estate doubtful exposure in Spain stands at 30.08% (32.95% and 35.31% in 2020 and 2019, respectively).

	2021		
EUR Million	Gross amount	Excess of gross exposure over maximum recoverable amount of effective collateral	Specific allowance
Financing for construction and property development (including land) (business in Spain)	2,625	380	53
Of which impaired	133	22	40
Memorandum items written-off assets	650	—	—

Memorandum items: Data from the public con solidated balance sheet

	2021
EUR Million	Carrying amount
Total loans and advances to customers excluding the Public sector (business in Spain) (Book value)	239,328
Total consolidated assets (Total business) (Book value)	1,595,835
Impairment losses and credit risk allowances. Coverage for unimpaired assets (business in Spain)	1,472

At year-end, the distribution of this portfolio was as follows:

	2021
EUR Million	Loans: gross amount
1. Without mortgage guarantee	180
2. With mortgage guarantee	2,445
2.1 Completed buildings	1,412
2.1.1 Residential	876
2.1.2 Other	536
2.2 Buildings and other constructions under construction	969
2.2.1 Residential	907
2.2.2 Other	62
2.3 Land	64
2.3.1 Developed consolidated land	46
2.3.2 Other land	18
Total	**2,625**

Policies and strategies in place for the management of these risks

The policies in force for the management of this portfolio are periodically reviewed and approved on a regular basis by Santander's senior management.

As has already been disclosed in this section, the Group's anticipatory management of these risks enabled it to significantly reduce its exposure, and it has a granular, geographically diversified portfolio in which the financing of second residences accounts for a very small proportion of the total.

Mortgage lending on non-urban land represents a low percentage of mortgage exposure to land, while the remainder relates to land already classified as urban or approved for development.

The significant reduction of exposure in the case of residential financing projects in which the construction work has already been completed was based on various actions. As well as the specialised marketing channels already in existence, campaigns were carried out with the support of specific teams of managers for this function who, in the case of the Santander network, were directly supervised by the recoveries business area. These campaigns, which involved the direct management of the projects with property developers and purchasers, reducing sale prices and adapting the lending conditions to the buyers' needs, enabled loans already in force to be subrogated. These subrogations enable the Group to diversify its risk in a business segment that displays a clearly lower non-performing loans ratio.

In the case of construction-phase projects that are experiencing difficulties of any kind, the policy adopted is to ensure completion of the construction work so as to obtain completed buildings that can be sold in the market. To achieve this aim, the projects are analysed on a case-by-case basis in order to adopt the most effective series of measures for each case (structured payments to suppliers to ensure completion of the work, specific schedules for drawing down amounts, etc.).

For the new post-crisis real estate business production, the admission processes are managed by specialized teams that work in direct coordination with the commercial teams, with clearly defined policies and criteria:

- Property developers with a robust solvency profile and a proven track record in the market.
- Medium-high level projects, conducting to contracted demand and significant cities.
- Strict criteria regarding the specific parameters of the transactions: exclusive financing for the construction cost, high percentages of accredited sales, principal residence financing, etc.
- Support of financing of government-subsidised housing, with accredited sales percentages.
- Restricted financing of land purchases dealt with exceptional nature.

In addition to the permanent control performed by its risk monitoring teams, the Group has a specialist technical unit that monitors and controls this portfolio with regard to the stage of completion of construction work, planning compliance and sales control, and validates and controls progress billing payments. The Group has created a set of specific tools for this function. All mortgage distributions, amounts drawn down of any kind, changes made to the grace periods, etc. are authorised on a centralised basis.

Foreclosed properties

At 31 December 2021, the net balance of these assets amounted to EUR 3,591 million gross amount: of EUR 7,364 million; recognised allowance: of EUR 3,773 million, of which EUR 2,729 million related to impairment after the foreclosure date. At 31 December 2020, the net balance of these assets amounted to EUR 3,962 million (gross amount: EUR 7,937 million; recognised allowance: EUR 3,975 million, of which EUR 2,834 million related to impairment after the foreclosure date). At 31 December, 2019, the net balance of these assets amounted to EUR 4,190 million (gross amount: EUR 8,226 million; recognised allowance: EUR 4,036 million, of which EUR 2,812 million related to impairment after the foreclosure date).

The following table shows the detail of the assets foreclosed by the businesses in Spain at the end of 2021:

	2021			
EUR Million	Gross carrying amount	Valuation adjustments	Of which impairment losses on assets since time of foreclosure	Net Carrying amount
Property assets arising from financing provided to construction and property development companies	**6,313**	**3,376**	**2,455**	**2,937**
Of which:				
Completed buildings	*1,900*	*799*	*627*	*1,101*
Residential	*470*	*181*	*143*	*289*
Other	*1,430*	*618*	*484*	*812*
Buildings under construction	*112*	*57*	*42*	*55*
Residential	*56*	*26*	*17*	*30*
Other	*56*	*31*	*25*	*25*
Land	*4,301*	*2,520*	*1,786*	*1,781*
Developed land	*1,506*	*805*	*496*	*701*
Other land	*2,795*	*1,715*	*1,290*	*1,080*
Property assets from home purchase mortgage loans to households	**838**	**310**	**211**	**528**
Other foreclosed property assets	**213**	**87**	**63**	**126**
Total property assets	**7,364**	**3,773**	**2,729**	**3,591**

In addition, the Group has shareholdings in entities holding foreclosed assets amounting to EUR 701 million (mainly Project Quasar Investment 2017, S.L. with EUR 655 million), and equity instruments foreclosed or received in payment of debts amounting to EUR 16 million.

In recent years, the Group has considered foreclosure to be a more efficient method for resolving cases of default than legal proceedings. The Group initially recognises foreclosed assets at the lower of the carrying amount of the debt (net of provisions) and the fair value of the foreclosed asset (less estimated costs to sell).Subsequent to initial recognition, the assets are measured at the lower of fair value (less costs to sell) and the amount initially recognised.

The fair value of this type of assets is determined by the Group's directors based on evidence obtained from qualified valuers or evidence of recent transactions.

The management of real estate assets on the balance sheet is carried out through companies specializing in the sale of real estate that is complemented by the structure of the commercial network. The sale is realised with at prices in accordance with the market situation and the offer of wholesale buyers.

The gross movement in foreclosed properties were as follows (EUR billion):

	EUR Billion		
	2021	2020	2019
Gross additions	0.4	0.5	0.7
Disposals	(1.1)	(0.9)	(2.7)
Difference	(0.7)	(0.4)	(2.0)

3.3. United States

Santander US's credit risk increased to EUR 112,808 million by the end of December 2021. It makes up 11% of Grupo Santander's total credit risk and includes these business units:

Santander Bank, National Association (SBNA)

At 78% of total credit risk, retail and commercial banking is Santander Bank, National Association's main business. 24% of the portfolio is with individuals, and approximately 76% with corporates. The bank's primary goals include expanding the SCIB business — 22% of total credit risk — by enhancing customer experience and growing core customers and deposits through digital, branch and commercial transformation initiatives; leveraging its deposit base to support its commercial real estate business; and strengthening its auto finance partnerships. Its 15.1% hike in lending spanned all segments. Excluding the FX effect, the increase was lower, standing at 9.2%.

The NPL ratio increased to 0.85% (+4 bp in the year) as of December 2021 the cost of credit fell to -0.06% due to the release of provisions based on better-than-expected market performance, customer behaviour (support programmes and fiscal stimulus) and greater workout recoveries.

Information on the estimation of impairment losses

The detail of Santander Bank, National Association exposure and impairment losses associated with each of the stages at 31 December, 2021, 2020 and 2019, is shown below. In addition, the exposure is divided in three tranches of the Standard & Poor's rating scale, according to their current credit quality:

EXPOSURE AND IMPAIRMENT LOSSES BY STAGE

EUR million

	2021			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	38,191	1,157	—	39,348
From BB- to CCC	12,212	3,117	—	15,329
Default	—	—	477	477
Total exposure **	**50,403**	**4,274**	**477**	**55,154**
Impairment losses***	**263**	**314**	**45**	**622**

EXPOSURE AND IMPAIRMENT LOSSES BY STAGE

EUR million

	2020			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	18,105	1,778	—	19,883
From BB- to CCC	24,380	2,977	—	27,357
Default	—	—	403	403
Total exposure **	**42,485**	**4,755**	**403**	**47,643**
Impairment losses***	**344**	**316**	**42**	**702**

EXPOSURE AND IMPAIRMENT LOSSES BY STAGE

EUR million

	2019			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	27,078	763	—	27,841
From BB- to CCC	32,273	3,964	—	36,237
Default	—	—	419	419
Total exposure **	**59,351**	**4,727**	**419**	**64,497**
Impairment losses***	**265**	**208**	**71**	**544**

* Detail of credit quality ratings calculated for Group management purposes.
** Total exposure includes loan balances (drawn amounts) and off-balance (letters of credit + guarantees) and excludes REPOs, FV portfolio, trading portfolio and undrawn commitments.
***Includes provisions for undrawn authorized lines (loan commitments).

The Government support measures taken in the United States in 2020 as response to the covid-19 pandemic have gradually expired and at the end of December 2021 SBNA had granted, since the start of the pandemic in 2020, a total amount of EUR 3,723 million moratoriums, equivalent to 7.32% of the loan portfolio.

Of the total moratoriums granted,99.9% expired at 31 December, 2021, from which 67.9% were in stage 1, 26.2% in stage 2 and 5.9% in stage 3 (at the end of 2020, of the total moratoriums, 90% had expired, of which 62.1% were in stage 1, 35.3% in stage 2 and 2.6% in stage 3).

Total loans granted under government liquidity programmes in SBNA amounted to EUR 221 million at 31 December 2021.

For the estimation of expected losses, prospective information is taken into account. Specifically, Santander Bank, National Association considers four macroeconomic scenarios, which are updated periodically. The evolution projected in 2021 for a period of five years of the main macroeconomic indicators used Santander Bank, National Association to estimate expected losses is presented below:

	2022 - 2026			
Variables	Pessimistic scenario 2	Pessimistic scenario 1	Base scenario	Optimistic scenario
Interest rate (annual averaged)	0.2%	1.2%	1.3%	1.7%
Unemployment rate	6.6%	4.6%	3.8%	3.3%
House price change	1.2%	1.7%	2.3%	2.8%
GDP growth	2.3%	2.8%	2.7%	3.3%

Each of the macroeconomic scenarios is associated with a given weight. As for its allocation, Santander Bank, National Association associates the highest weighting to the Base scenario, while associates the lowest weightings to the most extreme scenarios:

	2021	2020	2019
Pessimistic scenario 2	18%	18%	18%
Pessimistic scenario 1	20%	20%	20%
Base scenario	33%	33%	33%
Optimistic scenario	30%	30%	30%

In the case of SBNA, no additional 'long-run' scenario was generated for the calculation of the post model adjustment The additional provisions for covid-19 were calculated using the internal model.

The sensitivity analysis of the main portfolios expected loss to variations of +/-100 bp for the macroeconomic variables used in the construction of the scenarios as of 2021 is as follows:

	Change in Provision	
	Mortgages	Corporates
GDP Growth		
-100 bp	2.0%	7.4%
100 bp	-1.4%	-4.6%
Housing price change		
-100 bp	3.7%	12.4%
100 bp	-2.0%	-6.3%
Unemployment rate		
-100 bp	-5.5%	-15.1%
100 bp	6.6%	22.8%

In relation to the Stage 2 classification determination, the quantitative criteria applied at SBNA for retail portfolios uses the FICO (Fair Isaac Corporation) score at the time of origination and its current value, establishing different absolute threshold for each portfolio according to their characteristics. A SICR implies changes in that score ranging from 120 bp to 20 bp In the case of some portfolios, the behaviour score complements this criterion.

In the case of wholesale portfolios, SBNA uses the transaction's rating as a reference for its PD, taking into account its rating at the time of origination and its current rating, setting absolute thresholds for the different rating bands that depend on each portfolio characteristics. A SICR implies changes in the rating value between 2 and 0.1, depending on the portfolio and the estimated sensitivity (from lower to higher credit quality, the rating range goes from 1 to 9.3).

Additionally, for each portfolio, a series of specific qualitative criteria are defined, which indicate that the exposure has experienced a significant increase in credit risk, regardless of the evolution of its PD since the initial recognition. Santander Bank, National Association, among other criteria, considers that a transaction presents a significant increase in credit risk when it has arrears positions for more than 30 days. These criteria depend on the risk management practices of each portfolio.

Santander Consumer USA Inc.

Santander Consumer USA Inc. (SC USA) presents higher risk indicators than other Santander US units due to the nature of its business, which focuses on auto finance via loans and leasing.

The focus continues to be on managing the relationship between profitability and risk, via management of prices adjusted to the credit quality of the customer/transaction, while improving the dealers' experience.

In 2021, loan originations grew more than 4% year-on-year, returning to the pre-pandemic prime and non-prime mix on the back of the commercial relationship we have with Stellantis Group. The production mix resumed the segmentation between prime and non-prime prior to the pandemic.

Auto originations continued to increase, driven mainly by hikes in used car prices and demand.

As of December, the NPL ratio rose to 6.27% (+101 bp in the year) and the cost of credit stood at 1.54% (-654 bp YoY). Annual net credit losses fell year on year due to customer support programmes (triggered by the health crisis), federal fiscal stimulus packages and greater recovery driven by a surge in used car prices. Due to the increase in defaults, the non-performing coverage ratio fell to 176% (-54 bp in the year).

Furthermore, leases carried out exclusively under the Stellantis Group agreement (primarily with highly creditworthy customers) dropped 5% to EUR 13,600 million, providing stable and recurring earnings. Risk management and residual value mitigation measures remain a priority.

Information on the estimation of impairment losses

The detail of Santander Consumer USA Holding Inc. exposure and impairment losses associated with each of the stages at 31 December 2021, 2020 and 2019, is shown below. In addition, the

exposure is divided in three tranches of the Standard & Poor's rating scale, according to their current credit quality:

EXPOSURE AND IMPAIRMENT LOSSES BY STAGE

EUR million

	2021			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	1,218	39	—	1,257
From BB- to CCC	18,876	7,861	—	26,737
Default	—	—	1,658	1,658
**Total exposure ** **	**20,094**	**7,900**	**1,658**	**29,652**
Impairment losses***	**524**	**1,741**	**572**	**2,837**

EXPOSURE AND IMPAIRMENT LOSSES BY STAGE

EUR million

	2020			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	1,689	12	—	1,701
From BB- to CCC	21,491	4,831	—	26,322
Default	—	—	1,019	1,019
**Total exposure ** **	**23,180**	**4,843**	**1,019**	**29,042**
Impairment losses***	**911**	**1,820**	**726**	**3,457**

EXPOSURE AND IMPAIRMENT LOSSES BY STAGE

EUR million

	2019			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	1,029	14	—	1,043
From BB- to CCC	20,083	6,277	—	26,360
Default	—	—	1,600	1,600
**Total exposure ** **	**21,112**	**6,291**	**1,600**	**29,003**
Impairment losses***	**859**	**1,503**	**731**	**3,093**

* Detail of credit quality ratings calculated for Group management purposes.
** Total exposure includes loan balances (drawn amounts) and off-balance (letters of credit + guarantees) and excludes REPOs, FV portfolio, trading portfolio and undrawn commitments.
***Includes provisions for undrawn authorized lines (loan commitments).

Since the start of the pandemic in 2020, SC USA has granted a total amount of EUR 5,370 million moratoriums, equivalent to 18.11% of the loan portfolio, at the end of 31 December 2021.

100% of the moratoriums granted had expired at 31 December, 2021, which 2.8% were in stage 1, 68.7% in stage 2 and 28.5% in stage 3 (at the end of 2020, of the total moratoriums, 89.8% had expired, of which 78.5% were in stage 1, 14.6%in stage 2 and 6.9% in stage 3).

Given the nature of its business focused on auto financing for individuals, no loans were granted by liquidity programs in SC USA.

SC USA reassessed the suitability of macroeconomic scenarios and adjusted them in light of new information. At the end of 2021, we updated the most recent scenarios to calculate IFRS 9 provisions by recalibrating and revising the forward-looking information and risk model parameters. After this process, there are additional provisions amounting to EUR 849 million mainly due to the volatility of used car prices and the end of public aid. The car price index during 2021 presents an unusually high value, as a result of the exceptional covid-19 context.

In relation to the methodology used to calculate impairment losses, Santander Consumer USA Inc. uses a method for calculating expected losses based on the use of risk parameters: EAD (exposure at default), PD (probability of default) and LGD (loss given default). The expected loss is calculated by adding the estimated monthly expected losses for the entire life of the operation, unless the operation is classified in Stage 1, which will correspond to the sum of the estimated monthly expected losses during the following 12 months.

In general, there is an inverse relationship between the transactions credit quality and the impairment losses projections so that transactions with better credit quality require a lower expected loss. Transactions credit quality, which is reflected in the internal rating associated to each transaction or client, is shown in the probability of default of the transactions.

For the expected losses estimation, prospective information should be taken into account. Specifically, Santander Consumer USA Holdings Inc. considers four macroeconomic scenarios, periodically updated over a 5-year time horizon.

The evolution forecasted in 2021 for a period of five years of the main macroeconomic indicators used by in Santander Consumer USA Holdings Inc in the estimation of expected losses is shown below:

	2022 - 2026			
Variables	Pessimistic scenario 2	Pessimistic scenario 1	Base scenario	Optimistic scenario
Interest rate (annual averaged)	0.2%	1.2%	1.3%	1.7%
Unemployment rate	6.6%	4.6%	3.8%	3.3%
House price change	1.2%	1.7%	2.3%	2.8%
GDP growth	2.3%	2.8%	2.7%	3.3%
Manheim[A] index	-2.3%	-1.9%	-1.9%	-1.8%

A. US used vehicle price car index.

Each of the macroeconomic scenarios is associated with a given weight. Santander Consumer USA Inc. associates the highest weighting to the Base scenario, whereas it associates the lowest weightings to the most extreme or acid scenarios:

	2021	2020	2019
Pessimistic scenario 2	18%	18%	18%
Pessimistic scenario 1	20%	20%	20%
Base scenario	33%	33%	33%
Optimistic scenario	30%	30%	30%

In the case of SC USA, no additional 'long-run' scenario was generated for the calculation of the post model adjustment. The additional provisions for covid-19 were calculated using the internal model.

The sensitivity analysis of the main portfolios expected loss to variations of +/-100 bp for the macroeconomic variables used in the construction of the scenarios at the end of 2021 is as follows:

	Change in provision
	SC Auto
Manheim index	
-100 bp	1.1%
100 bp	-0.7%
Unemployment Rate	
-100 bp	-4.0%
100 bp	4.6%
House Price Change	
-100 bp	2.6%
100 bp	-1.5%
GDP growth	
-100 bp	1.8%
100 bp	-1.2%

In relation to the stage 2 classification determination, the quantitative criteria applied at SC USA uses the FICO (Fair Isaac Corporation) score at the time of origination and its current value, establishing different absolute threshold for each portfolio according to their characteristics. A SICR implies changes in that score ranging from 100 bp to 60 bp.

Additionally, for each portfolio, a series of specific qualitative criteria are defined, which indicate that the exposure has had a significant increase in credit risk, regardless of the evolution of its PD since the initial recognition. Santander Consumer USA Holdings Inc. among other criteria, considers that a transaction presents a significant increase in credit risk when it has irregular positions for more than 30 days. These criteria depend on the risk management practices of each portfolio.

3.4. Banco Santander (Brasil) S.A.

Positive economic recovery due to the reopening of the service sector, in line with the advances in the vaccination campaigns and the lift of restrictions, although international supply problems have continued to hamper industry growth.

Santander Brasil's credit risk amounted to EUR 85,702 million. It increased by 15% from 2020. Minus the exchange rate effect, it grew by 13%. As of December 2021, Santander Brasil accounts for 8% of Grupo Santander's loan book.

The SME portfolio (Varejo PJ) grew significantly due to the contribution of the different billing clusters that make the portfolio and its different products. State-backed guarantees to combat the effects of the pandemic ended in December 2020, although a new window opened in July 2021.

Net loan-loss provisions stood at EUR 2,715 million (-10% compared to 2020), a decrease driven by additional provision made in 2020 related to covid-19. In local currency, provisions declined by 35%. Cost of credit decreased to 3.73% from 4.35% at the end of 2020, driven by the aforementioned provisions evolution.

Information on the estimation of impairment losses

The detail of Banco Santander (Brasil) S.A. exposure and impairment losses associated with each of the stages at 31December, 2021, 2020 and 2019, is shown below. In addition, the exposure is divided in three tranches of the Standard & Poor's rating scale, according to their current credit quality:

EXPOSURE AND IMPAIRMENT LOSSES

EUR million	2021			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	46,558	575	—	47,133
From BB- to CCC	28,582	4,785	—	33,367
Default	—	—	4,182	4,182
Total exposure **	**75,140**	**5,360**	**4,182**	**84,682**
Impairment losses***	**1,232**	**909**	**2,510**	**4,651**

EXPOSURE AND IMPAIRMENT LOSSES

EUR million	2020			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	38,686	210	—	38,896
From BB- to CCC	26,166	5,942	—	32,108
Default	—	—	3,428	3,428
Total exposure **	**64,852**	**6,152**	**3,428**	**74,432**
Impairment losses***	**971**	**777**	**2,132**	**3,880**

EXPOSURE AND IMPAIRMENT LOSSES

EUR million	2019			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	45,765	308	—	46,073
From BB- to CCC	32,698	5,393	—	38,091
Default	—	—	4,727	4,727
Total exposure **	**78,463**	**5,701**	**4,727**	**88,891**
Impairment losses***	**1,054**	**732**	**2,931**	**4,717**

* Detail of credit quality ratings calculated for Group management purposes.
** Total exposure includes loan balances (drawn amounts) and off-balance (letters of credit + guarantees) and excludes REPOs, FV portfolio, trading portfolio and undrawn commitments.
***Includes provisions for undrawn authorized lines (loan commitments).

The Government support measures taken in Brazil in 2020 as response to the covid-19 pandemic have gradually expired and at the end of December 2021, Santander Brazil had granted, since the start of the pandemic, a total amount of EUR 3,835 million moratoriums, equivalent to 5.35% of the loan portfolio.

Of the total moratoriums granted, 99.7% expired at 31 December 2021, from which 70.8% were in stage 1, 17.4% in stage 2 and 11.8% in stage 3. At the end of 2020, of the total moratoriums 92.4% had expired, of which 75.6% were in stage 1, 17.6% in stage 2 and 6.8% of in stage 3.

Total loans granted by liquidity programmes in Brazil amounted to EUR 1,563 million as of 31 December 2021.

For the expected losses estimation, prospective information is taken into account. Particularly, Santander Brazil considers three macroeconomic scenarios, periodically updated. The evolution for a period of five years of the main macroeconomic indicators used to estimate the expected losses in Santander Brazil is as follows:

	2022-2026		
Variables	Pessimistic scenario	Base scenario	Optimistic scenario
Interest rate (annual averaged)	13.3%	6.7%	4.8%
Unemployment rate	13.3%	12.1%	8.8%
House price change	2.6%	8.7%	13.2%
GDP growth	-1.0%	2.1%	4.5%
Burden income	38.9%	34.9%	29.2%

Each macroeconomic scenario is associated with a given weight. Regarding its assignation, Brazil links the highest weight to the base scenario whilst links the lowest weights to the most extreme scenarios:

	2021	2020	2019
Pessimistic scenario	10%	10%	10%
Base scenario	80%	80%	80%
Optimistic scenario	10%	10%	10%

The sensitivity analysis of the main portfolios expected loss to variations of +/-100 bp for the macroeconomic variables used in the construction of the scenarios is at the end of 2021 as follows:

	Change in provision		
	Consumer	Corporate	Other
GDP growth			
-100 bp	0.4%	1.3%	1.9%
100 bp	-0.1%	-0.6%	-0.9%
Burden income			
-100 bp	-0.3%	-0.5%	-1.3%
100 bp	0.7%	2.0%	2.9%
Interest rate (SELIC)			
-100 bp	-0.1%	-0.5%	-0.8%
100 bp	0.6%	2.9%	3.6%

Regarding the stage 2 classification determination, Santander Brazil uses the transaction's rating as a reference for its PD, taking into account its rating at the time of origination and its current rating, setting different thresholds that depend on each portfolio characteristics. SICR is determined by observing the rating's evolution, considering that a significant increase in credit risk has occurred when the rating reduction reaches values between 3.2 and 1, depending on the rating's value at the time of origination.

In addition, for every portfolio, a set of specific qualitative criteria are defined to indicate that the exposure to credit risk has significantly risen, regardless of the evolution of its PD since the initial recognition. Santander Brazil, among other criteria, considers that an operations involves a significant increase in credit risk when it presents irregular positions for more than 30 days, but in Real State, Consigned and Financial portfolios, where, due to their particular attributes, they use a 60 days threshold. Such criteria depend upon each portfolio's risk management practices.

4. Other credit risk aspects

4.1. Credit risk by activity in the financial markets

This section covers credit risk generated in treasury activities with customers, mainly with credit institutions. Transactions are undertaken through money market financial products with different financial institutions and through counterparty risk products, which serve the Group's customer needs.

According to regulation (EU) n.º 575/2013, counterparty credit risk, which includes derivative instruments, transactions with a repurchase obligation, stock and commodities lending, transactions with deferred repayment and financing of guarantees, arises from the likelihood that a counterparty will default before the final settlement of the transaction's cash flows.

There are two methodologies for measuring this exposure: (i) mark-to-market (MtM) methodology (replacement value of derivatives) plus potential future exposure (add-on); and the Montecarlo simulation to calculate exposures for some countries and products. We also calculate capital at risk and unexpected loss, which is the difference between the economic capital, net of guarantees and recoveries, and expected loss.

After market close, the exposures are recalculated by adjusting transactions to their new time frame, adapting potential future exposure and applying mitigation measures (netting, collateral, etc.) to control exposures directly against the limits approved by senior management. Grupo Santander runs risk control with an integrated system in real time that enables us to know the exposure limit with any counterparty, product and maturity and in any of Santander's subsidiaries at any time.

4.2. Concentration risk

Concentration risk control is a vital part of our management. The Group continuously monitors the degree of concentration of its credit risk portfolios using various criteria: geographic areas and countries, economic sectors and groups of customers.

The board, via the risk appetite framework, determines the maximum levels of concentration.

In line with these maximum levels and limits, the executive risk committee establishes the risk policies and reviews the appropriate exposure levels for the effective management of the degree of concentration in Santander's credit risk portfolios.

Grupo Santander must adhere to the regulation on large risks contained in the CRR, according to which the exposure contracted by an entity with a customer or group of associated customers will be considered a large exposure when its value is equal to or greater than 10% of eligible capital.

In addition, in order to limit large exposures, no entity may assume exposures exceeding 25% of its eligible capital with a single customer or group of associated customers, having factored in the credit risk mitigation effect contained in the regulation.

At the end of December, after applying risk mitigation techniques, no group reaches the above-mentioned thresholds.

Regulatory credit exposure with the 20 largest groups within the scope of large risks represented 5% of the outstanding credit risk with customers (lending to customers plus off-balance sheet risks) as of December 2021.

The detail, by activity and geographical area of the Group's risk concentration at 31 December 2021 is as follows:

EUR million

	2021				
	Total	Spain	Other EU countries	America	Rest of the world
Central banks and Credit institutions	327,984	93,520	59,499	81,647	93,318
Public sector	149,623	35,258	26,276	82,194	5,895
Of which:					
Central government	124,807	23,188	24,525	71,639	5,455
Other central government	24,816	12,070	1,751	10,555	440
Other financial institutions (financial business activity)	120,294	14,228	40,344	35,818	29,904
Non-financial companies and individual entrepreneurs (non-financial business activity) (broken down by purpose)	415,297	121,795	86,183	141,139	66,180
Of which:					
Construction and property development	21,523	3,607	3,392	7,309	7,215
Civil engineering construction	5,857	2,397	2,442	847	171
Large companies	248,955	58,030	49,343	94,496	47,086
SMEs and individual entrepreneurs	138,962	57,761	31,006	38,487	11,708
Households – other (broken down by purpose)	543,804	88,763	95,458	122,809	236,774
Of which:					
Residential	353,752	63,487	35,978	40,265	214,022
Consumer loans	169,897	18,078	56,879	75,837	19,103
Other purposes	20,155	7,198	2,601	6,707	3,649
Total	**1,557,002**	**353,564**	**307,760**	**463,607**	**432,071**

* For the purposes of this table, the definition of risk includes the following items in the public balance sheet: 'Loans and advances to credit institutions', 'Loans and advances to Central Banks', 'Loans and advances to Customers', 'Debt Instruments', 'Equity Instruments', 'Trading Derivatives', 'Hedging derivatives', 'Investments and financial guarantees given'.

4.3. Sovereign risk and exposure to other public sector entities

Sovereign risk occurs in transactions with a central bank. It includes the regulatory cash reserve, issuer risk with the Treasury (public debt portfolio) and risk from transactions with government institutions whose funding only come from the state's budgetary revenue and not commercial operations.

The historic criteria of Grupo Santander can differ from regular EBA stress test standards. Though the EBA does include national, regional and local government institutions, it does not include deposits with central banks, exposures with insurance companies, indirect exposures via guarantees and other instruments.

Grupo Santander´s local sovereign exposure, in currencies other than the official currency of the country of issuance, is not significant (EUR 10,013 million, 2.6% of total sovereign risk) according to our management criteria. Furthermore, exposure to non-local sovereign issuers involving cross-border risk[1] is even less significant (EUR 7,011 million, 1.8% of total sovereign risk).

Sovereign exposure in Latin America is mostly in local currency, and is recognised in the local accounts and concentrated in short- term maturities.

Over the past few years, total exposure to sovereign risk has remained in line with regulatory requirements and our strategy to manage this portfolio.

The shifts observed in the different countries exposure is due to our liquidity management strategy and the hedging of interest and exchange rates risks. Santander's exposure spreads among countries with varied macroeconomic outlooks and dissimilar scenarios in terms of growth, interest and exchange rates.

Our investment strategy for sovereign risk considers country's credit quality to set the maximum exposure limits*:

	2021	2020	2019
AAA	15%	18%	20%
AA	32%	25%	24%
A	26%	25%	18%
BBB	11%	14%	15%
Less than BBB	16%	18%	23%

*Internal ratings are applied.

[1] Countries that are not considered low risk by Banco de España.

The exposure in the table below is disclosed following the latest amendments of the regulatory reporting framework carried out by the EBA, which entered into force in 2021:

	2021					2020
	Portfolio					
Country	Financial assets designated at fair value through profit or loss	Financial assets at fair value through other comprehensive income	Financial assets at amortized cost	Non-trading financial assets mandatorily at fair value through profit or loss	Total net direct exposure	Total net direct exposure
Spain	2,574	2,805	14,178	—	19,557	24,245
Portugal	(20)	2,287	4,277	—	6,544	8,730
Italy	(73)	634	323	—	884	4,015
Greece	—	—	—	—	—	—
Ireland	—	—	9	—	9	—
Rest Eurozone	(233)	1,231	2,631	—	3,629	4,054
UK	(538)	676	228	—	366	(97)
Poland	(15)	10,819	489	—	11,293	10,947
Rest of Europe	—	77	1,291	—	1,368	1,070
US	1,050	13,803	7,616	—	22,469	15,548
Brazil	8,733	16,432	3,394	—	28,559	27,717
Mexico	2,150	10,253	1,106	—	13,509	21,029
Chile	56	1,134	4,881	—	6,071	6,955
Rest of America	94	651	680	—	1,425	958
Rest of the World	2	1,524	1,811	—	3,337	4,752
TOTAL	**13,780**	**62,326**	**42,914**	**—**	**119,020**	**129,923**

5. Forborne loan portfolio

Grupo Santander's internal forbearance policy acts as a reference for our subsidiaries locally. It shares the principles of regulations and supervisory expectations. It includes the requirements of the EBA guidelines on management of non performing and forborne exposures.

It defines forbearance as the modification of the payment conditions of a transaction to allow a customer experiencing financial difficulties (current or foreseeable) to fulfil their payment obligations. If forbearance is not allowed, there would be reasonable certainty that the customer would not be able to meet their financial obligations.

In addition, this policy also sets down rigorous criteria for evaluating, classifying and monitoring forbearances to ensure the strictest possible care and diligence in recovering due amounts. Thus, it dictates that we must adapt payment obligations to customers' current circumstances. Our forbearance policy also defines classification criteria to ensure we recognize risks appropriately. They must remain classified as non-performing or in watch-list for a prudential period for reasonable certainty of repayment.

Forbearances may never be used to delay the immediate recognition of losses or hinder the appropriate recognition of risk of default.

Total volume of forborne portfolio, at the end of December 2021, stood at EUR 36,042 million. After years of decreases due to the positive macroeconomic situation of the group's main geographies, the forborne stock remained practically flat in 2020. The portfolio increased by 24% in 2021, as a result of greater volume of forbearance carried out to attend to the needs of customers facing financial difficulties. In terms of credit quality, 43% of the loans is classified as doubtful, with a coverage ratio of 41%.

The following terms are used with the meanings specified below:

- Refinancing transaction: transaction that is granted or used, for reasons relating to current or foreseeable financial difficulties of the borrower, to repay one or more of the transactions granted to it, or through which the payments on such transactions are brought fully or partially up to date, in order to enable the borrowers of the cancelled or refinanced transactions to repay their debt (principal and interest) because they are unable, or might foreseeably become unable, to comply with the conditions there of in due time and form.

- Restructured transaction: transaction with respect to which, for economic or legal reasons relating to current or foreseeable financial difficulties of the borrower, the financial terms and conditions are modified in order to facilitate the payment of the debt (principal and interest) because the borrower is unable, or might foreseeably become unable, to comply with the aforementioned terms and conditions in due time and form, even if such modification is envisaged in the agreement.

Current refinancing and restructuring balances

Amounts in EUR million, except number of transactions that are in units

	2021						
	Total						
	Without real guarantee		With real guarantee				
					Maximum amount of the actual collateral that can be considered		
	Number of transactions	Gross amount	Number of transactions	Gross amount	Real estate guarantee	Rest of real guarantees	Impairment of accumulated value or accumulated losses in fair value due to credit risk
Credit entities	—	—	—	—	—	—	—
Public sector	32	18	15	7	2	—	4
Other financial institutions and: individual shareholder	1,002	93	720	200	102	79	30
Non-financial institutions and individual shareholder	248,375	11,548	47,865	8,915	5,517	1,206	4,367
Of which financing for constructions and property development	8,576	113	1,321	550	390	40	176
Other warehouses	3,650,507	4,491	451,930	10,771	6,063	3,615	3,860
Total	**3,899,916**	**16,150**	**500,530**	**19,893**	**11,684**	**4,900**	**8,261**
Financing classified as non-current assets and disposable groups of items that have been classified as held for sale	—	—	—	—	—	—	—

Current refinancing and restructuring balances

Amounts in EUR million, except number of transactions that are in units

	2021						
	Of which, non-performing/Doubtful						
	Without real guarantee		With real guarantee				
					Maximum amount of the actual collateral that can be considered		
	Number of transactions	Gross amount	Number of transactions	Gross amount	Real estate guarantee	Rest of real guarantees	Impairment of accumulated value or accumulated losses in fair value due to credit risk
Credit entities	—	—	—	—	—	—	—
Public sector	7	1	14	5	2	—	4
Other financial institutions and: individual shareholder	421	51	528	67	54	7	27
Non-financial institutions and individual shareholder	116,009	4,377	32,263	5,261	3,308	424	3,891
Of which financing for constructions and property development	4,638	63	849	301	172	34	148
Other warehouses	1,839,629	1,879	162,177	3,898	2,641	434	2,382
Total	**1,956,066**	**6,308**	**194,982**	**9,231**	**6,005**	**865**	**6,304**
Financing classified as non-current assets and disposable groups of items that have been classified as held for sale	—	—	—	—	—	—	—

In 2021, the amortised cost of financial assets whose contractual cash flows were modified during the year when the corresponding loss adjustment was valued at an amount equal to the expected credit losses over the life of the asset amounted to EUR 2,480 million, without these modifications having a material impact on the income statement. Also, during 2021, the total of financial assets that have been modified since the initial recognition, and whose correction for expected loss has gone from being valued during the entire life of the asset to the following twelve months, amounts to EUR 1,868 million.

The transactions presented in the foregoing tables were classified at 31 December 2021 by nature, as follows:

- Non-performing: Operations that rest on an inadequate payment scheme will be classified within the non-performing category, regardless they include contract clauses that delay the repayment of the operation throughout regular payments or present amounts written off the balance sheet for being considered irrecoverable.
- Performing: Operations not classifiable as non-performing will be classified within this category. Operations will also be classified as normal if they have been reclassified from the non-performing category for complying with the specific criteria detailed below:

  a) A period of a year must have passed from the refinancing or restructuring date.

  b) The owner must have paid for the accrued amounts of the capital and interests, thus reducing the rearranged capital amount, from the date when the restructuring of refinancing operation was formalised.

c) The owner must not have any other operation with amounts past due by more than 90 days on the date of the reclassification to the normal risk category.

Attending to the credit attention 57% of the forborne loan transactions are classified as other than non-performing. Particularly noteworthy are the level of existing guarantees (46% of transactions are secured by collateral) and the coverage provided by specific allowances (representing 23% of the total forborne loan portfolio and 41% of the non-performing portfolio).

c) Market, structural and liquidity risk

1. Activities subject to market risk and types of market risk

Activities exposed to market risk encompass transactions where risk is assumed as a consequence of potential changes in interest rates, inflation rates, exchange rates, stock prices, credit spreads, commodity prices, volatility and other market factors; the liquidity risk from our products and markets, and the balance-sheet liquidity risk. Therefore, they include trading risks and structural risks.

- Interest rate risk arises from movements in interest rates that reduce the value of a financial instrument, a portfolio or the Grupo Santander. It can affect loans, deposits, debt securities, most assets and liabilities held for trading, and derivatives.
- Inflation rate risk arises from movements in inflation that can reduce the value of a financial instrument, a portfolio or the entire group. It can affect loans, debt securities and derivatives (e.g. inflation swaps and futures) whose profitability is linked to inflation.
- Exchange rate risk is the possibility of loss because the currency of a long or open position will depreciate against the base currency. It can affect debt in subsidiaries whose local currency is not the euro, as well as loans denominated in a foreign currency.
- Equity risk is the possibility of loss from open positions in securities if their market price or expected future dividends fall. It affects shares, stock market indices, convertible bonds and derivatives with shares as the underlying asset (put, call, equity swaps, etc.).
- Credit spread risk is the possibility of loss from open positions in fixed-income securities or credit derivatives if their yield curve, or the recovery rate of their issuer or type change. A spread is the yield difference between financial instruments against a benchmark (e.g. the internal rate of return (IRR) of government bonds and interbank interest rates).
- Commodity price risk is the possibility of loss from movements in commodity prices. Grupo Santander's commodity exposure is minor and stems mainly from commodity derivatives.
- Volatility risk is the possibility of loss caused by movements in interest rates, exchange rates, the stock market, credit spreads and other risk factors affecting portfolio value. It is inherent to all financial instruments whose value considers volatility (especially options contracts).

Derivative contracts (such as options, futures, forwards and swaps) can mitigate market risks partially or fully.

Additionally, other more complex hedging market risks are considered, such as correlation risk, market liquidity risk, prepayment or cancellation risk, and underwriting risk.

Balance sheet liquidity risk (unlike market liquidity risk) is the possibility of loss caused by forced disposal of assets or cash flow imbalance if the bank meets its payment obligations late or at excessive cost. It can cause losses by forced asset sales or impacts on margins due to the mismatch between expected cash inflows and outflows.

Pension and actuarial risks (explained at the end of this section) also depend on market variables.

Grupo Santander aim to comply with the *Basel Committee's Fundamental Review of the Trading Book* (FRTB) and the EBA's Guidelines on the management of interest rate risk arising from non-trading book activities. The purpose of several projects Grupo Santander runs is to provide risk control managers and teams with the best market risk management tools under the right governance framework for the models Grupo Santander uses for metric reporting; and to comply with regulation on the risks mentioned above.

2. Trading market risk management

Setting market risk limits in a dynamic process according to the risk appetite in the annual limits plan prepared by senior management and extended to all subsidiaries.

The standard methodology for risk management and control in trading, measures the maximum expected loss with a specific level of confidence and time frame. The standard for historical simulation is a confidence level of 99% over one day. We apply statistical adjustments efficiently to incorporate recent developments affecting our levels of risk. Our time frame is two years or at least 520 days from the reference date of the VaR calculation.

The balance sheet items in the Group's consolidated position that are subject to market risk are shown below, distinguishing those positions for which the main risk metric is VaR from those for which risk monitoring is carried out using other metrics:

EUR million

		Main market risk metric		
	Balance sheet amount	VaR	Other	Main risk factor for 'Other' balance
Assets subject to market risk				
Cash, cash balances at central banks and other deposits on demand	210,689		210,689	Interest rate
Financial assets held for trading	116,953	116,953		
Non-trading financial assets mandatorily at fair value through profit or loss	5,536	4,042	1,494	Interest rate, spread
Financial assets designated at fair value through profit or loss	15,957	5,489	10,468	Interest rate, spread
Financial assets designated at fair value through other comprehensive income	108,038	2,453	105,585	Interest rate, spread
Financial assets at amortized cost	1,037,898		1,037,898	Interest rate, spread
Hedging derivatives	4,761		4,761	Interest rate, exchange rate
Changes in the fair value of hedged items in portfolio hedges of interest risk	410		410	Interest rate
Other assets	95,593			
Total assets	1,595,835			
Liabilities subject to market risk				
Financial liabilities held for trading	79,469	79,469		
Financial liabilities designated at fair value through profit or loss	32,733	390	32,343	Interest rate, spread
Financial liabilities at amortized cost	1,349,169		1,349,169	Interest rate, spread
Hedging derivatives	5,463		5,463	Interest rate, exchange rate
Changes in the fair value of hedged items in portfolio hedges of interest rate risk	248		248	Interest rate
Other liabilities	31,700			
Total liabilities	1,498,782			
Equity	97,053			

The following table displays the latest and average VaR values at 99% by risk factor over the last three years. It also shows the minimum and maximum VaR values in 2021 and 97.5% ES at the end of December 2021:

VaR STATISTICS AND EXPECTED SHORTFALL BY RISK FACTOR[A]

EUR million. VaR at 99% and ES at 97.5% with one day time horizon

	2021					2020		2019	
	VaR (99%)				ES (97.5%)	VaR		VaR	
	Min	Average	Max	Latest	Latest	Average	Latest	Average	Latest
Total Trading	**6.8**	**10.5**	**15.9**	**12.3**	**11.9**	**12.5**	**8.3**	**12.1**	**10.3**
Diversification effect	(6.3)	(12.9)	(26.6)	(13.4)	(15.0)	(13.0)	(11.8)	(8.1)	(9.8)
Interest rate	6.0	9.6	15.3	9.1	9.4	9.2	5.4	10.0	9.2
Equities	2.2	3.5	7.7	5.1	5.1	4.4	3.1	2.9	4.8
Exchange rate	1.9	4.2	8.0	5.7	5.6	5.9	6.0	3.9	2.6
Credit spread	2.6	4.8	8.0	5.1	6.0	5.5	4.5	3.4	3.5
Commodities	0.4	1.3	3.5	0.7	0.8	0.5	1.1	0.0	0.0
Total Europe	**6.1**	**9.3**	**16.1**	**9.9**	**9.7**	**10.5**	**8.0**	**6.3**	**10.1**
Diversification effect	(5.2)	(9.3)	(16.9)	(12.6)	(13.1)	(10.7)	(8.9)	(6.9)	(8.4)
Interest rate	5.3	7.7	11.7	7.1	6.7	7.9	6.5	6.0	8.2
Equities	1.8	3.3	8.3	5.8	5.2	4.3	3.0	1.9	4.9
Exchange rate	1.6	2.8	5.0	4.5	4.9	3.5	2.9	1.9	1.9
Credit spread	2.6	4.8	8.0	5.1	6.0	5.5	4.5	3.4	3.5
Commodities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total North America	**1.6**	**2.5**	**7.4**	**2.7**	**2.8**	**6.6**	**2.9**	**3.5**	**3.8**
Diversification effect	0.2	(0.7)	(2.9)	(0.6)	(0.5)	(2.2)	(1.0)	(1.3)	(2.1)
Interest rate	1.3	2.5	7.0	2.7	2.7	3.4	3.3	2.6	3.4
Equities	0.0	0.1	1.5	0.0	0.0	0.3	0.1	0.2	0.1
Exchange rate	0.1	0.6	1.8	0.6	0.6	5.1	0.5	2.0	2.4
Total South America	**3.3**	**5.9**	**10.5**	**6.3**	**6.4**	**5.6**	**4.5**	**9.5**	**6.0**
Diversification effect	(1.2)	(4.9)	(16.0)	(5.1)	(3.8)	(3.8)	(5.4)	(2.9)	(3.7)
Interest rate	3.0	5.5	12.2	5.8	6.3	5.2	4.1	7.8	5.9
Equities	0.4	1.2	3.2	1.1	1.0	1.0	0.5	2.0	1.7
Exchange rate	0.7	2.8	7.6	3.8	2.1	2.7	4.2	2.6	2.1
Commodities	0.4	1.3	3.5	0.7	0.8	0.5	1.1	0.0	0.0

A. In South and North America, VaR levels of credit spreads and commodities are not shown separately due to their low or null materiality.

At the end of December, VaR had increased by EUR 4 million higher than at the end of 2020; however, average VaR fell by EUR 2.0 million. Average VaR fell for most risk factors owing to low market volatility throughout the year. By region, average VaR decreased in Europe and especially in North America with lower exchange rate volatility.

By risk factor, VaR has followed a generally stable trend in recent years. For many factors, temporary VaR increases generally owe more to short-term price volatility than to significant changes in positions.

Backtesting

Actual losses can differ from predicted losses because of the VaR's limitations. Grupo Santander measures the accuracy of the VaR calculation model to make sure it is reliable. The most important tests Grupo Santander runs involve backtesting:

- Backtesting of hypothetical P/L and of the entire trading book showed no exceptions to 99% VaR and VaE in 2021.
- The exceptions observed in the past year are consistent with the assumptions of the VaR calculation model.

IBOR Reform

Regulatory and supervisory context

In 2013, IOSCO published the Principles for Financial Benchmarks (IOSCO Principles) that establish standards for the development of benchmarks. Subsequently, the FSB established the Official Sector Steering Group (OSSG) for the application of the IOSCO Principles to the IBOR (Interbank Offered Rates) indices. Since then, the central banks and regulators of various jurisdictions have organized working groups to recommend alternative indices to indices such as the EONIA (Euro Overnight Index Average) and the LIBORs (London Interbank Offered Rates).

On 13 September 2018, the European Central Bank's working group recommended that the euro short-term interest rate (€STR) replace the EONIA. From 2 October 2019, the date on which the €STR was made available, the EONIA changed its methodology to be calculated as €STR plus a spread of 8.5 basis points. This change in the EONIA methodology was intended to facilitate the transition of the EONIA market to €STR before its definitive cessation on 3 January 2022.

On 5 March 2021, the Financial Conduct Authority (FCA) announced the final dates for the cessation of LIBORs:

- On 31 December 2021, the publication of USD LIBOR (1 week and 2 months term), CHF LIBOR (all terms), GBP LIBOR (overnight term, 1 week, 2 months and 12 months), JPY LIBOR (overnight term, 1 week, 2 months, and 12 months) and EUR LIBOR (all terms).

- On 31 December 2021, the calculation methodology of some LIBORs was reformed to publish temporary synthetic LIBORs that became non-representative: GBP LIBOR (1-month, 3-month and 6-month terms) and JPY LIBOR (1-month term, 3 months and 6 months).

- On 30 June 2023, the publication of the USD LIBOR will cease (overnight terms, 1 month, 3 months, 6 months and 12 months).

In October 2020, the International Swaps and Derivatives Association (ISDA) launched the fallbacks Protocol and Supplement for IBORs (effective 25 January 2021), and provided market participants with of new derivatives fallbacks of LIBORs (among others IBOR, such as EURIBOR) for current derivative contracts and for new contracts. Additionally, on 19 August 2021, ISDA launched a new protocol that allowed entities to incorporate a fallback to the EONIA as the rate applicable to collateral in ISDA collateral agreements (known as CSAs). Banco Santander SA and various Santander Group entities have adhered to these protocols.

On December 2020, the Council of the European Union endorsed the modification of the EU Benchmark Regulation (BMR), giving the European Commission the power to establish a legislative solution that proposes a replacement rate to indices the cessation of which could cause a significant disturbance to the functioning of financial markets in the EU. In this context, on 14 and 21 October 2021, the European Commission published the Implementing Regulations regarding the designation of a substitute reference index for CHF LIBOR and EONIA.

Given the relevance of the IBOR indices, the volume of contracts and exposures is very high in the banking sector. Santander Group has a significant number of contracts linked to these interest rates. The most relevant are EURIBOR, EONIA, and LIBOR. These benchmarks are widely used, including derivative products, corporate loans, retail, discount products, deposits, repos, securities lending, collateral agreements, and floating rate notes, among others.

LIBOR and EONIA Reform

The main risks to which Santander is exposed arising from the transition of the EONIA and LIBORs are: (i) legal risks arising from potential changes in the documentation required for new or existing operations; (ii) financial and accounting risks derived from market risk models and from the valuation, coverage, cancellation and recognition of the financial instruments associated with the reference indices; (iii) business risk that revenues from LIBOR-linked products decline; (iv) pricing risks arising from how changes to benchmark indices could impact pricing mechanisms on some instruments; (v) operational risks arising from the potential requirement to adapt IT systems, trade reporting infrastructure and operational processes; (vi) conduct risks arising from the potential impact of communications with customers during the transition period and (vii) litigation risks regarding our existing products and services, which could adversely impact our profitability.

In order to monitor the risks and address the challenges of the transition, Santander launched the IBOR Transition Programme in 2019. The global program ensures that all affected business units and subsidiaries have a consistent understanding of the risks associated with the transition and can take appropriate steps to mitigate them.

This transition program incorporates the recommendations, guidelines and milestones defined by the regulators and working groups of the different jurisdictions. The structure of the program focuses on the following areas: Technology and Operations, Legal, Customer Relations, Risk Management and Models, Conduct and Communication, and Accounting and Finance.

During 2021, the IBOR Transition Program has focused on making all the contractual, commercial, operational and technological changes necessary to undertake the transition of the LIBOR and EONIA rates that have been discontinued in 2021. In 2022, the program will continue to attend to the next steps of the transition related to the management of the contract history and the milestone of the cessation of the LIBOR dollar of June 2023.

In addition, Grupo Santander continues to participate, throughout 2022, in the initiatives developed by the public and private sectors related to the reform of the interest rate reference indices.

Additionally, see information included in notes 1.b and 36.

3. Structural balance sheet risks

3.1. Main aggregates and variations

Consistent with previous years, the market risk profile of Grupo Santander's balance sheet remained moderate in 2021 in terms of asset, shareholders' equity and NII volumes. Each subsidiary's finance division manages interest rate risk from commercial banking and is responsible for handling structural risk from interest rate fluctuations.

To measure interest rate risk, Grupo Santander uses statistical models based on strategies to mitigate structural risk with interest-rate instruments (such as bonds and derivatives) to keep risk profile within risk appetite.

The NII and EVE sensitivities below are based on scenarios of parallel interest rate movements from -100 to +100 basis points.

Structural VaR

With such a homogeneous metric as VaR, we can fully monitor market risk in the banking book We differentiate fixed income based on interest rates and credit spreads in ALCO portfolios, FX rates and shares.

In general, the structural VaR of Grupo Santander total assets and equity is minor.

STRUCTURAL VaR

EUR million. Structural VaR 99% with a temporary horizon of one day.

	2021				2020		2019	
	Min	Average	Max	Latest	Average	Latest	Average	Latest
Structural VaR	**895.8**	**993.7**	**1,090.7**	**1,011.9**	**911.1**	**903.2**	**511.4**	**729.2**
Diversification effect	(158.8)	(327.3)	(431.4)	(240.2)	(349.8)	(263.4)	(304.2)	(402.0)
VaR Interest Rate*	224.2	400.7	540.5	287.8	465.1	345.5	345.6	629.7
VaR Exchange Rate	521.3	600.6	655.2	655.2	499.9	502.6	308.1	331.7
VaR Equities	309.1	319.7	326.4	309.1	295.9	318.5	161.9	169.8

* Includes credit spread VaR on ALCO portfolios.

Structural interest rate risk

- Europe

In general, the NII and EVE of Grupo Santander's main balance sheets (i.e. Santander España and Santander UK) show positive sensitivity to rising interest rates. Across our footprint, exposure was moderate in relation to annual budget and capital levels in 2021.

At the end of December 2021, under the scenarios previously described, the most significant NII sensitivity risk concentration in euros amounted to EUR 703 million; in pounds sterling, EUR 541 million; in Polish złoty EUR 65 million; and in the US dollar, EUR 54 million.

The most significant EVE risk concentration amounted to EUR 3,684 million; in the yield curve of the euro; of the pound sterling, EUR 1,056 million ; of the US dollar, EUR 221 million; and of the Polish zloty EUR 56 million, all relating to the interest rate cut risks.

- North America

In general, the NII and EVE of Grupo Santander's North American balance sheets tend to show positive sensitivity to rising interest rates. Exposure was moderate in relation to annual budget and capital levels in 2021.

At the end of December, the most significant risk to NII was mainly in the US and amounted to EUR 152 million.

- South America

The EVE and NII of our Grupo Santander's South American balance sheets are positioned for interest rate cuts.

Exposure in all countries was moderate in relation to the annual budget and capital levels in 2020.

In 2021, exposure was moderate in relation to annual budget and capital levels. At the end of December, the most significant risks to NII were mainly in Chile (EUR 86 million) and Brazil (EUR 83 million).

The most significant risks to EVE were recorded in Brazil (EUR 271 million) and Chile (EUR 258 million).

Structural foreign currency rate risk/results hedging

Grupo Santander's structural FX risk stems mainly from the income and hedging of foreign currency transactions for permanent financial investments. In the dynamic management of this risk, Grupo Santander aims to limit the impact of FX rate movements on the core capital ratio. In 2021, the hedged of the different currencies that have an impact on our core capital ratio was close to 100%.

In December 2021, the permanent exposures (with potential impact on shareholders' equity) were, from largest to smallest, in US dollars, British pounds sterling, Brazilian *reais*, Mexican pesos, Chilean *pesos* and Polish złoty.

Grupo Santander uses FX derivatives to hedge part of those permanent positions. The Finance division manages FX risk and hedging for the expected profits and dividends of subsidiaries whose base currency is not the euro.

Structural equity risk

Grupo Santander holds equity positions in its banking and trading books. They are either equity instruments or stock, depending on the share of ownership or control.

By the end of December 2021, the equities and shareholdings in the banking book were diversified among Spain, China, Morocco, Poland and other countries. Most of them invest in the financial and insurance sectors. Grupo Santander has minor equity exposure to property and other sectors.

Structural equity positions are exposed to market risk. VaR is calculated for these positions with a set of market prices and proxies. At the end of December 2021, VaR at a 99% confidence level over a one day horizon was EUR 325 million (EUR 319 million and EUR 170 million at the end of 2020 and 2019, respectively).

3.2. Methodologies

Structural interest rate risk

As part of structural risk, interest rate risk in the banking book (IRRBB) is the main source of balance sheet risk.

Grupo Santander measures the potential impact of interest rate movements on EVE and NII. Because changing rates may generate impacts, Grupo Santander must manage and control many subtypes of interest rate risk, such as repricing risk, curve risk, basis risk and option risk (e.g. behavioural or automatic). Interest rate risk in the balance sheet and market conditions and outlooks could necessitate certain financial measures to achieve Grupo Santander's desired risk profile (such as selling positions or setting interest rates on products we market). The metrics Grupo Santander uses to monitor IRRBB include NII and EVE sensitivity to interest rate movements.

- Net interest income sensitivity

Net interest income (NII) is the difference between interest income from assets and the interest cost of liabilities in the banking book over a typical one- to three-year horizon (one year being standard in Grupo Santander). Because NII sensitivity is the difference in income between a selected scenario and the base scenario, its values can be as many as considered scenarios. It enables us to see short-term risks and supplement economic value of equity (EVE) sensitivity.

- Economic value of equity sensitivity

Economic value of equity (EVE) is the difference between the current value of all assets minus the current value of all liabilities in the banking book. It does not include shareholders' equity and non-interest-bearing instruments. Because EVE sensitivity is the difference in EVE between a selected scenario and the base scenario, it can have as many values as considered scenarios. It enables us to see long-term risks and supplement NII sensitivity.

Structural exchange-rate risk/hedging of results

Every day, Grupo Santander measures FX positions, VaR and P/L.

Structural equity risk

Grupo Santander measures equity positions, VaR and P/L.

4. Liquidity risk

Structural **liquidity management** aims to fund the Group's recurring activity optimising maturities and costs, while avoiding taking on undesired liquidity risks.

Santander's liquidity management is based on the following principles:

- Decentralised liquidity model.
- Medium- and long-term (M/LT) funding needs must be covered by medium- and long-term instruments.
- High contribution from customer deposits due to the retail nature of the balance sheet.
- Diversification of wholesale funding sources by instruments/investors, markets/currencies and maturities.
- Limited recourse to short-term funding.
- Availability of sufficient liquidity reserves, including standing facilities/discount windows at central banks to be used in adverse situations.
- Compliance with regulatory liquidity requirements both at Group and subsidiary level, as a new factor conditioning management.

The effective application of these principles by all institutions comprising the Group required the development of a unique **management framework** built upon three fundamental pillars:

- A **solid organisational and governance model** that ensures the involvement of the subsidiaries' senior management in decision-taking and its integration into the Group's global strategy. The decision-making process for all structural risks, including liquidity and funding risk, is carried out by local Asset and Liability Committees (ALCOs) in coordination with the global ALCO, which is the body empowered by the Bank's board in accordance with the corporate Asset and Liability Management (ALM) framework.

This governance model has been reinforced as it has been included within Santander's Risk Appetite Framework. This framework meets demands from regulators and market players emanating from the financial crisis to strengthen banks' risk management and control systems.

- In-depth **balance sheet analysis and measurement of liquidity risk**, supporting decision-taking and its control. The objective is to ensure the Group maintains adequate liquidity levels necessary to cover its short- and long-term needs with stable funding sources, optimising the impact of their costs on the income statement. Grupo Santander's liquidity risk management processes are contained within a conservative risk appetite framework established in each geographic area in accordance with its commercial strategy. This risk appetite establishes the limits within which the subsidiaries can operate in order to achieve their strategic objectives.

- **Management adapted** in practice to the **liquidity needs of each business**. Every year, based on business needs, a liquidity plan is developed which seeks to achieve:
  - a solid balance sheet structure, with a diversified presence in the wholesale markets;
  - the use of liquidity buffers and limited encumbrance of assets;
  - compliance with both regulatory metrics and other metrics included in each entity's risk appetite statement.

Over the course of the year, all dimensions of the plan are monitored.

Grupo Santander continues to develop the **ILAAP** (Internal Liquidity Adequacy Assessment Process), an internal self-assessment of liquidity adequacy which must be integrated into the Group's other risk management and strategic processes. It focuses on both quantitative and qualitative matters and is used as an input to the SREP (Supervisory Review and Evaluation Process). The ILAAP evaluates the liquidity position both in ordinary and stressed scenarios.

i. Liquidity risk measurement

Grupo Santander measures liquidity risk with tools and metrics that account for the appropriate risk factors.

a) Liquidity buffer

The liquidity buffer is the total liquid assets a bank has to cope with cash outflows during periods of stress. The assets are free of encumbrances and can be used immediately to generate liquidity without losses or excessive discounts. The liquidity buffer is a tool for calculating most liquidity metrics. It is also a metric with defined limits for each subsidiary.

b) Liquidity Coverage Ratio (LCR)

The liquidity coverage ratio (LCR) is a regulatory metric. Its purpose is to promote the short-term resilience of a bank's liquidity profile and make sure it has enough high-quality liquid assets to withstand a considerable idiosyncratic or market stress scenario over 30 calendar days.

c) Wholesale liquidity metric

The wholesale liquidity metric measures the number of days Grupo Santander would survive if it used liquid assets to cover lost liquidity from a wholesale deposit run-off (without possible renewal) over a set time horizon. Grupo Santander also uses it as an internal short-term liquidity metric to reduce risk from dependence on wholesale funding.

d) Net Stable Funding Ratio (NSFR)

The net stable funding ratio (NSFR) is a regulatory metric we use to measure long-term liquidity risk. It is the ratio of available stable funding to required stable funding. It requires banks to keep a robust balance sheet, with off-balance-sheet assets and operations financed by stable liabilities.

e) Asset Encumbrance metrics

Grupo Santander calculates two metrics to measure asset encumbrance risk. On the one hand, the asset encumbrance ratio gives the proportion of encumbered assets to total assets; on the other, the structural asset encumbrance ratio gives the proportion of encumbered assets by structural funding transaction (namely long-term collateralized issues and credit transactions with central banks).

f) Other additional liquidity indicators

In addition to traditional tools to measure short and long-term liquidity and funding risk, Grupo Santander has a set of additional liquidity indicators to complement those and to measure other non-covered liquidity risk factors. These include concentration metrics, such as the main and the five largest funding counterparties, or the distribution of funding by maturity.

In addition, we calculate a number of metrics on the institution's ability to generate liquidity through collateralized financing, such as overcollateralization, eligibility ratios assets without charges and deadlines for their placement.

g) Liquidity scenario analysis

As liquidity stress tests, four standard scenarios have been defined:

i. An idiosyncratic scenario of events detrimental only to Santander;

ii. a local market scenario of events highly detrimental to a base country's financial system or real economy;

iii. a global market scenario of events highly detrimental to the global financial system; and

iv. combined scenario consisting of a combination of more severe idiosyncratic and market events (local and global) occurring simultaneously and interactively.

Grupo Santander uses these stress test outcomes as tools to determine risk appetite and support business decision-making.

h) Liquidity early warning indicators

The system of early warning indicators (EWI) consists of quantitative and qualitative liquidity indicators that help predict stress situations and weaknesses in the funding and liquidity structure of Grupo Santander entities. External indicators relate to market-based financial variables; internal indicators relate to our own performance.

i) Intraday liquidity metrics

Grupo Santander follows Basel regulation and calculates several metrics and stress scenarios for intraday liquidity risk to maintain a high level of control.

ii. Liquidity coverage ratio and net stable financing ratio

As regards the liquidity coverage ratio (LCR), the regulatory requirement for this ratio, set at 100%, has been at its maximum level since 2018.

Below is a breakdown of the composition of the Group's liquid assets under the criteria set out in the supervisory prudential reporting (Commission Implementing Regulation (EU) 2017/2114 of 9 November 2017) for the determination of high quality liquid assets for the calculation of the LCR ratio (HQLA):

EUR million

	2021	2020
	Amount weighted applicable	Amount weighted applicable
High-quality liquid assets-HQLAs		
Cash and reserves available at central banks	*206,507*	*149,893*
Marketable assets Level 1	*81,925*	*104,270*
Marketable assets Level 2A	*3,422*	*5,272*
Marketable assets Level 2B	*5,446*	*4,200*
Total high-quality liquid assets	**297,300**	**263,635**

In relation to the net stable funding ratio (NSFR), its definition was approved by the Basel Committee in October 2014. The transposition of this requirement to the European regulation took place in June 2019 with the publication in the Official Gazette of the European Union of Regulation (EU) 2019/876 of the European Parliament and of the Council of May 20, 2019. The Regulation establishes that entities must have a net stable financing ratio, as defined in the Regulation, higher 100% from June 2021. For this reason, the figures for 2019 and 2020 for this ratio are calculated using the Basel methodology, while those for 2021 already include the requirement as transposed into European regulations.

The liquidity coverage ratio, broken down by component, and the net stable funding ratio for the Group at year-end 2021 and 2020 are presented below:

EUR million

	2021	2020
High-quality liquid assets-HQLAs (numerator)	297,300	263,635
Total net cash outflows (denominator)	181,953	157,368
Cash outflows	*233,294*	*204,813*
Cash inflows	*51,341*	*47,445*
LCR ratio (%)	**163%**	**168%**
NSFR ratio (%)	**126%**	**120%**

As regards the funding structure, given the predominantly commercial nature of the Group's balance sheet, the loan portfolio is mainly financed by customer deposits. Note 22) 'Debt securities' shows the composition of these liabilities on the basis of their nature and classification, the movements and maturity profile of the debt securities issued by the Group, reflecting the strategy of diversification by products, markets, issuers and maturities followed by the Group in its approach to the wholesale markets.

iii. Asset encumbrance

In accordance with the guidelines established by the European Banking Authority (EBA) in 2014 on committed and uncommitted assets, the concept of assets committed in financing transactions (asset encumbrance) includes both on-balance sheet assets provided as collateral in transactions to obtain liquidity and off-balance sheet assets that have been received and reused for similar purposes, as well as other assets associated with liabilities for reasons other than financing.

The residual maturities of the liabilities associated with the assets and guarantees received and committed are presented below, as of 31 of December of 2021 (EUR thousand million):

Residual maturities of the liabilities	Unmatured	<=1month	>1 month <=3 months	>3 months <=12 months	>1 year <=2 years	>2 years <=3 years	3 years <=5 years	5 years <=10 years	>10 years	Total
Committed assets	39.5	32.7	8.2	29.6	106.8	37.1	80.1	20.7	10.4	365.1
Guarantees received committed	24.2	15.3	12.8	25.8	1.9	0.4	0.4	—	—	80.8

The reported Group information as required by the EBA at 2021 year-end is as follows:

ON-BALANCE-SHEET ENCUMBERED ASSETS

EUR billion

	Carrying amount of encumbered assets	Fair value of encumbered assets	Fair value of non-encumbered assets	Carrying amount of non-encumbered assets
Loans and advances	262.8		984.4	
Equity instruments	8.4	8.4	13.1	13.1
Debt securities	61.0	61.1	102.9	102.8
Other assets	32.9		130.3	
Total assets	365.1		1,230.7	

ENCUMBRANCE OF COLLATERAL RECEIVED

EUR billion

	Fair value of encumbered collateral received or own debt securities issued	Fair value of collateral received or own debt securities issued available for encumbrance
Collateral received	80.8	31.5
Loans and advances	1.2	—
Equity instruments	5.4	7.0
Debt securities	74.2	24.5
Other collateral received	—	—
Own debt securities issued other than own covered bonds or ABSs	—	0.6

ENCUMBERED ASSETS AND COLLATERAL RECEIVED AND MATCHING LIABILITIES

EUR billion

	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
Total sources of encumbrance (carrying amount)	325.2	445.9

On-balance-sheet encumbered assets amounted to EUR 365,100 million, of which 72% are loans (mortgage loans, corporate loans, etc.). Guarantees received committed amounted to EUR 80,800 million, relating mostly to debt securities received as security in asset purchase transactions and re-used.

Taken together, these two categories represent a total of EUR 445,900 million of encumbered assets, which give rise to EUR 325,200 million matching liabilities.

As of December 2021, total asset encumbrance in funding operations represented 26.1% of the Group's extended balance sheet under EBA criteria (total assets plus guarantees received: EUR 1,708,000 million as of December 2021). This percentage has decreased from 26.6% that presented the Group as of December 2020, mainly as a result of the increase in the balance sheet.

d) Capital risk

In the second line of defence, capital risk management can independently challenge business and first-line activities by:

- Supervising capital planning and adequacy exercises through a review of the main components affecting the capital ratios.
- Identifying key metrics to calculate the Group's regulatory capital, setting tolerance levels and analysing significant variations, as well as single transactions with impact on capital.
- Reviewing and challenging the execution of capital actions proposed in line with capital planning and risk appetite.

Grupo Santander commands a sound solvency position, above the levels required by regulators and by the European Central bank.

Regulatory capital

At 1 January 2022, at a consolidated level, the Group must maintain a minimum capital ratio of 8.85% of CET1 (4.50% being the requirement for Pillar I, 0.84% being the requirement for Pillar 2R (requirement), 2.50% being the requirement for capital conservation buffer, 1.00% being the requirement for G-SIB and 0.01% being the requirement for anti-cyclical capital buffer).

Grupo Santander must also maintain a minimum capital ratio of 10.64% of tier 1 and a minimum total ratio of 13.01%.

In 2021, the solvency target set was achieved. Santander's CET1 ratio stood at 12.51%[1] at the close of the year, demonstrating its organic capacity to generate capital. The key regulatory capital figures are indicated below:

RECONCILIATION OF ACCOUNTING CAPITAL WITH REGULATORY CAPITAL

EUR million

	2021	2020	2019
Subscribed capital	8,670	8,670	8,309
Share premium account	47,979	52,013	52,446
Reserves	56,606	62,777	56,526
Treasury shares	(894)	(69)	(31)
Attributable profit	8,124	(8,771)	6,515
Approved dividend***	(836)	—	(1,662)
Shareholders' equity on public balance sheet	**119,649**	**114,620**	**122,103**
Valuation adjustments	(32,719)	(33,144)	(22,032)
Non-controlling interests	10,123	9,846	10,588
Total Equity on public balance sheet	**97,053**	**91,322**	**110,659**
Goodwill and intangible assets	(16,132)	(15,711)	(28,478)
Eligible preference shares and participating securities	10,050	9,102	9,039
Accrued dividend***	(895)	(478)	(1,761)
Other adjustments*	(7,624)	(5,734)	(9,923)
Tier 1**	**82,452**	**78,501**	**79,536**

*Fundamentally for non-computable non-controlling interests and deductions and reasonable filters in compliance with CRR
** Figures calculated by applying the transitional provisions of IFRS 9.
***Assumes 20% of ordinary profit, see note 4.a for proposed distribution of results.

The following table shows the capital coefficients and a detail of the eligible internal resources of the Group:

	2021	2020	2019
Capital coefficients			
Level 1 ordinary eligible capital (EUR million)	72,402	69,399	70,497
Level 1 additional eligible capital (EUR million)	10,050	9,102	9,039
Level 2 eligible capital (EUR million)	14,865	12,514	11,531
Risk-weighted assets (EUR million)	578,930	562,580	605,244
Level 1 ordinary capital coefficient (CET 1)	12.51%	12.34%	11.65%
Level 1 additional capital coefficient (AT1)	1.73%	1.61%	1.49%
Level 1 capital coefficient (TIER1)	14.24%	13.95%	13.14%
Level 2 capital coefficient (TIER 2)	2.57%	2.23%	1.91%
Total capital coefficient	**16.81%**	**16.18%**	**15.05%**

1. Figures calculated by applying the transitional provisions of IFRS 9

ELIGIBLE CAPITAL

EUR million

	2021	2020	2019
Eligible capital			
Common Equity Tier I	72,402	69,399	70,497
Capital	8,670	8,670	8,309
(-) Treasure shares and own shares financed	(966)	(126)	(63)
Share Premium	47,979	52,013	52,446
Reserves	58,157	64,766	57,368
Other retained earnings	(34,784)	(34,937)	(22,933)
Minority interests	6,736	6,669	6,441
Profit net of dividends	6,394	(9,249)	3,092
Deductions	(19,784)	(18,407)	(34,163)
Goodwill and intangible assets	(16,064)	(15,711)	(28,478)
Others	(3,720)	(2,696)	(5,685)
Additional Tier I	10,050	9,102	9,039
Eligible instruments AT1	10,102	8,854	9,209
T1-excesses-subsidiaries	(52)	248	(170)
Residual value of dividends	—	—	—
Others	—	—	—
Tier II	14,865	12,514	11,531
Eligible instruments T2	15,424	13,351	12,360
Gen. funds and surplus loans loss prov. IRB	75	—	—
T2-excesses - subsidiaries	(634)	(837)	(829)
Others	—	—	—
Total eligible capital	**97,317**	**91,015**	**91,067**

Note: Banco Santander, S.A. and its affiliates had not taken part in any State aid programmes.

Leverage ratio

Basel III established the leverage ratio as a non-risk sensitive measure aimed at limiting excessive balance sheet growth relative to available capital.

The Group performs the calculation in accordance with Regulation (EU) 2019/876 of 20 May 2019 amending Regulation (EU) No 575/2013 as regards the leverage ratio.

This ratio is calculated as tier 1 capital divided by leverage exposure. Exposure is calculated as the sum of the following items:

- Accounting assets, excluding derivatives and items treated as deductions from tier 1 capital (for example, the balance of loans is included, but not that of goodwill) further excluding the exposures referred to in Article 429a(1) of the regulation.
- Off-balance-sheet items (mainly guarantees, unused credit limits granted and documentary credits) weighted using credit conversion factors.
- Inclusion of net value of derivatives (gains and losses are netted with the same counterparty, minus collaterals if they comply with certain criteria) plus a charge for the future potential exposure.
- A charge for the potential risk of security funding transactions.
- Lastly, it includes a charge for the risk of credit derivative swaps (CDS).

With the publication of Regulation (EU) 2019/876 of 20 May, 2019, amending Regulation (EU) n.º 575/2013 as regards the leverage ratio, the final calibration of the ratio is set at 3% for all entities and, for systemic entities G-SIB, an additional surcharge is also established which will be 50% of the cushion ratio applicable to the EISM. In addition, modifications are included in its calculation, including the exclusion of certain exposures from the total exposure measure: public loans, transfer loans and officially guaranteed export credits.

Banks implemented this final definition of the leverage ratio in June 2021, however, the new calibration of the ratio (the additional surcharge for G-SIBs) will take effect from January 2023.

EUR million

	2021	2020	2019
Leverage			
Level 1 Capital	82,452	78,501	79,536
Exposure	1,536,516	1,471,480	1,544,614
Leverage Ratio	5.37%	5.33%	5.15%

Global systemically important banks

Grupo Santander is one of 30 banks designated as global systemically important banks (G-SIBs).

The designation as a systemically important entity is based on the measurement set by regulators (the FSB and BCBS), based on 5 criteria (size, cross-jurisdictional activity, interconnectedness with other financial institutions, substitutability and complexity).

This definition means it has to fulfil certain additional requirements, which consist mainly of a capital buffer -1%, in TLAC requirements (total loss absorbing capacity), that we have to publish relevant information more frequently than other banks, greater regulatory requirements for internal control bodies, special supervision and drawing up of special reports to be submitted to supervisors.

The fact that Grupo Santander has to comply with these requirements makes it a more solid bank than its domestic rivals.

54. Explanation added for translation to English

These accompanying Consolidated Financial Statements, translation of the Consolidated Financial Statements originally issued in Spanish, are presented on the basis of the regulatory financial reporting framework applicable to the Group in Spain (see note 1.b).

Appendix



Appendix I

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
2 & 3 Triton Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Real estate	78	107	12
A & L CF (Guernsey) Limited (n)	Guernsey	0.00%	100.00%	100.00%	100.00%	Leasing	0	0	0
A & L CF June (2) Limited (e)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
A & L CF June (3) Limited (e)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Leasing	6	(2)	0
A & L CF March (5) Limited (d)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	1	0	0
A & L CF September (4) Limited (f)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	21	0	0
A3T Luxco 1 S.A.	Luxembourg	0.00%	100.00%	100.00%	—	Holding company	4	(1)	4
A3T Luxco 2 S.A.	Luxembourg	100.00%	0.00%	100.00%	—	Holding company	(18)	18	0
Abbey Business Services (India) Private Limited (d)	India	0.00%	100.00%	100.00%	100.00%	Holding company	0	0	0
Abbey Covered Bonds (Holdings) Limited	United Kingdom	—	(b)	—	—	Securitization	0	0	0
Abbey Covered Bonds (LM) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	0	0	0
Abbey Covered Bonds LLP	United Kingdom	—	(b)	—	—	Securitization	75	168	0
Abbey National Beta Investments Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Abbey National Business Office Equipment Leasing Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Abbey National International Limited	Jersey	0.00%	100.00%	100.00%	100.00%	Financial services	4	0	4
Abbey National Nominees Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Abbey National PLP (UK) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Abbey National Property Investments	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	296	(3)	165
Abbey National Treasury Services Investments Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Abbey National Treasury Services Overseas Holdings	United Kingdom	0.00%	100.00%	100.00%	100.00%	Holding company	0	0	0
Abbey National UK Investments	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	0	0	0
Abbey Stockbrokers (Nominees) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Abbey Stockbrokers Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securities company	0	0	0
Abent 3T, S.A.P.I de C.V.	Mexico	0.00%	100.00%	100.00%	—	Electricity production	115	(18)	5
Ablasa Participaciones, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	210	23	894
Aduro S.A.	Uruguay	0.00%	100.00%	100.00%	100.00%	Payments and collection services	0	0	2
Aevis Europa, S.L.	Spain	96.34%	0.00%	96.34%	96.34%	Cards	1	0	1
AFB SAM Holdings, S.L.	Spain	1.00%	99.00%	100.00%	100.00%	Holding company	0	0	0
Afisa S.A.	Chile	0.00%	100.00%	100.00%	100.00%	Fund management company	4	0	4
Aljardi SGPS, Lda.	Portugal	0.00%	100.00%	100.00%	100.00%	Holding company	1,195	(3)	1,148

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Allane Leasing GmbH	Austria	0.00%	46.95%	100.00%	100.00%	Renting	(2)	0	0
Allane Location Longue Durée S.a.r.l.	France	0.00%	46.95%	100.00%	100.00%	Renting	10	3	0
Allane Mobility Consulting AG	Switzerland	0.00%	46.95%	100.00%	100.00%	Consulting services	1	0	0
Allane Mobility Consulting B.V.	Netherlands	0.00%	46.95%	100.00%	100.00%	Consulting services	(2)	0	0
Allane Mobility Consulting GmbH	Germany	0.00%	46.95%	100.00%	100.00%	Consulting services	1	1	0
Allane Mobility Consulting Österreich GmbH	Austria	0.00%	46.95%	100.00%	100.00%	Consulting services	0	0	0
Allane Mobility Consulting S.a.r.l	France	0.00%	46.95%	100.00%	100.00%	Consulting services	(1)	0	0
Allane Schweiz AG	Switzerland	0.00%	46.95%	100.00%	100.00%	Renting	13	0	0
Allane SE	Germany	0.00%	46.95%	92.07%	92.07%	Leasing	192	0	175
Allane Services GmbH & co. KG	Germany	0.00%	46.95%	100.00%	100.00%	Services	1	0	0
Allane Services Verwaltungs GmbH	Germany	0.00%	46.95%	100.00%	100.00%	Management of portfolios	0	0	0
Alliance & Leicester Cash Solutions Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Alliance & Leicester Commercial Bank Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Alliance & Leicester Investments (Derivatives) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	0	0	0
Alliance & Leicester Investments (No.2) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Alliance & Leicester Investments Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Alliance & Leicester Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	0	0	0
Alliance & Leicester Personal Finance Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	(241)	0	0
Altamira Santander Real Estate, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Real estate	(369)	(161)	0
Alternative Leasing, FIL (Compartimento B)	Spain	100.00%	0.00%	100.00%	99.99%	Investment fund	75	3	75
Amazonia Trade Limited	United Kingdom	100.00%	0.00%	100.00%	100.00%	Holding company	0	0	0
AN (123) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Holding company	0	0	0
Andaluza de Inversiones, S.A.	Spain	0.00%	100.00%	100.00%	100.00%	Holding company	37	0	27
ANITCO Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Apê11 Tecnologia e Negócios Imobiliários S.A.	Brazil	0.00%	80.92%	90.00%	—	Real estate	6	0	9
Aquanima Brasil Ltda.	Brazil	0.00%	100.00%	100.00%	100.00%	E-commerce	2	1	0
Aquanima Chile S.A.	Chile	0.00%	100.00%	100.00%	100.00%	Services	2	1	0
Aquanima México S. de R.L. de C.V.	Mexico	0.00%	100.00%	100.00%	100.00%	E-commerce	2	1	2
Aquanima S.A.	Argentina	0.00%	100.00%	100.00%	100.00%	Services	0	0	0
Artarien S.A. (o)	Uruguay	0.00%	100.00%	100.00%	—	Insurance auxiliary services	0	0	0
Asto Digital Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	39	(26)	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Athena Corporation Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Financial services	(9)	0	0
Atlantes Azor No. 2	Portugal	—	(b)	—	—	Securitization	0	0	0
Atlantes Mortgage No. 2	Portugal	—	(b)	—	—	Securitization	0	0	0
Atlantes Mortgage No. 3	Portugal	—	(b)	—	—	Securitization	0	0	0
Atlantes Mortgage No. 4	Portugal	—	(b)	—	—	Securitization	0	0	0
Atlantes Mortgage No. 5	Portugal	—	(b)	—	—	Securitization	0	0	0
Atlantes Mortgage No. 7	Portugal	—	(b)	—	—	Securitization	0	0	0
Atual - Fundo de Invest Multimercado Crédito Privado Investimento no Exterior	Brazil	0.00%	89.91%	100.00%	100.00%	Investment fund	325	18	308
Atual Serviços de Recuperação de Créditos e Meios Digitais S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Financial services	410	15	383
Auto ABS Belgium Loans 2019, SA/NV	Belgium	—	(b)	—	—	Securitization	0	0	0
Auto ABS DFP Master Compartment France 2013	France	—	(b)	—	—	Securitization	0	0	0
Auto ABS French Leases 2018	France	—	(b)	—	—	Securitization	0	0	0
Auto ABS French Leases 2021	France	—	(b)	—	—	Securitization	0	0	0
Auto ABS French Leases Master Compartiment 2016	France	—	(b)	—	—	Securitization	0	0	0
Auto ABS French Loans Master	France	—	(b)	—	—	Securitization	0	0	0
Auto ABS French LT Leases Master	France	—	(b)	—	—	Securitization	0	0	0
Auto ABS Italian Balloon 2019-1 S.R.L.	Italy	—	(b)	—	—	Securitization	0	0	0
Auto ABS Italian Loans 2018-1 S.R.L.	Italy	—	(b)	—	—	Securitization	0	0	0
Auto ABS Italian Rainbow Loans 2020-1 S.R.L.	Italy	—	(b)	—	—	Securitization	0	0	0
Auto ABS Spanish Loans 2018-1, Fondo de Titulización	Spain	—	(b)	—	—	Securitization	0	0	0
Auto ABS Spanish Loans 2020-1, Fondo de Titulización	Spain	—	(b)	—	—	Securitization	0	0	0
Auto ABS UK Loans 2017 Holdings Limited	United Kingdom	—	(b)	—	—	Securitization	0	0	0
Auto ABS UK Loans 2017 Plc	United Kingdom	—	(b)	—	—	Securitization	0	0	0
Auto ABS UK Loans 2019 Holdings Limited	United Kingdom	—	(b)	—	—	Securitization	0	0	0
Auto ABS UK Loans 2019 Plc	United Kingdom	—	(b)	—	—	Securitization	(3)	0	0
Auto ABS UK Loans Holdings Limited	United Kingdom	—	(b)	—	—	Securitization	0	0	0
Auto ABS UK Loans PLC	United Kingdom	—	(b)	—	—	Securitization	(10)	2	0
Autodescuento, S.L.	Spain	0.00%	93.89%	93.89%	93.89%	Vehicles purchase by Internet	1	1	18
Autohaus24 GmbH	Germany	0.00%	46.95%	100.00%	100.00%	Renting	(2)	0	0
Auttar HUT Processamento de Dados Ltda.	Brazil	0.00%	89.91%	100.00%	100.00%	IT services	4	1	5
Aviación Antares, A.I.E.	Spain	99.99%	0.01%	100.00%	100.00%	Renting	48	5	28
Aviación Británica, A.I.E.	Spain	99.99%	0.01%	100.00%	100.00%	Renting	22	4	6
Aviación Centaurus, A.I.E.	Spain	99.99%	0.01%	100.00%	100.00%	Renting	7	18	25
Aviación Comillas, S.L. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Renting	7	0	8
Aviación Intercontinental, A.I.E.	Spain	99.97%	0.03%	100.00%	100.00%	Renting	66	(24)	42
Aviación Laredo, S.L.	Spain	99.00%	1.00%	100.00%	100.00%	Air transport	3	0	3
Aviación Oyambre, S.L. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Renting	1	0	1
Aviación Santillana, S.L.	Spain	99.00%	1.00%	100.00%	100.00%	Renting	3	1	2
Aviación Suances, S.L.	Spain	99.00%	1.00%	100.00%	100.00%	Air transport	5	1	3
Aviación Tritón, A.I.E.	Spain	99.99%	0.01%	100.00%	100.00%	Renting	22	7	19

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Aymoré Crédito, Financiamento e Investimento S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Finance company	205	160	328
Azor Mortgages PLC (j)	Ireland	—	(b)	—	—	Securitization	0	0	0
Banca PSA Italia S.p.A.	Italy	0.00%	50.00%	50.00%	50.00%	Banking	320	72	153
Banco Bandepe S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Banking	832	24	770
Banco de Albacete, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Banking	14	0	9
Banco Hyundai Capital Brasil S.A.	Brazil	0.00%	44.96%	50.00%	50.00%	Banking	51	5	25
Banco Madesant - Sociedade Unipessoal, S.A.	Portugal	0.00%	100.00%	100.00%	100.00%	Banking	1,076	(3)	1,073
Banco PSA Finance Brasil S.A.	Brazil	0.00%	44.96%	50.00%	50.00%	Banking	37	4	18
Banco Santander - Chile	Chile	0.00%	67.12%	67.18%	67.18%	Banking	2,963	803	2,827
Banco Santander (Brasil) S.A.	Brazil	0.04%	89.88%	90.50%	90.58%	Banking	10,104	2,373	10,795
Banco Santander (México), S.A., Institución de Banca Múltiple, Grupo Financiero Santander México como Fiduciaria del Fideicomiso 100740	Mexico	0.00%	96.24%	100.00%	100.00%	Finance company	66	11	74
Banco Santander (México), S.A., Institución de Banca Múltiple, Grupo Financiero Santander México como Fiduciaria del Fideicomiso 2002114	Mexico	0.00%	96.47%	100.00%	100.00%	Holding company	8	0	7
Banco Santander (México), S.A., Institución de Banca Múltiple, Grupo Financiero Santander México como Fiduciaria del Fideicomiso GFSSLPT	Mexico	0.00%	96.64%	100.00%	100.00%	Finance company	14	1	14
Banco Santander de Negocios Colombia S.A.	Colombia	94.90%	5.10%	100.00%	100.00%	Banking	134	6	141
Banco Santander International	United States	0.00%	100.00%	100.00%	100.00%	Banking	1,110	85	1,195
Banco Santander International SA	Switzerland	0.00%	100.00%	100.00%	100.00%	Banking	1,113	49	815
Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México	Mexico	21.19%	75.04%	96.24%	91.80%	Banking	6,376	778	7,425
Banco Santander Perú S.A.	Peru	100.00%	0.00%	100.00%	100.00%	Banking	194	37	122
Banco Santander Río S.A.	Argentina	0.00%	99.31%	99.26%	99.26%	Banking	1,532	92	550
Banco Santander S.A.	Uruguay	97.75%	2.25%	100.00%	100.00%	Banking	359	69	191
Banco Santander Totta, S.A.	Portugal	0.00%	99.86%	99.96%	99.96%	Banking	3,857	303	3,415
Bansa Santander S.A.	Chile	0.00%	100.00%	100.00%	100.00%	Real estate	21	1	22
BEN Benefícios e Serviços Instituição de Pagamento S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Payment services	11	(1)	9
Bilkreditt 6 Designated Activity Company (j)	Ireland	—	(b)	—	—	Securitization	0	0	0
Bilkreditt 7 Designated Activity Company	Ireland	—	(b)	—	—	Securitization	0	0	0
Bond Company Merger Sub LLC	United States	0.00%	100.00%	100.00%	—	Inactive	0	0	0
Bond First Merger Sub Inc.	United States	0.00%	100.00%	100.00%	—	Inactive	0	0	0
Bond Fourth Merger Sub LLC	United States	0.00%	100.00%	100.00%	—	Inactive	0	0	0
Bond Second Merger Sub LLC	United States	0.00%	100.00%	100.00%	—	Inactive	0	0	0
Bond Third Merger Sub LLC	United States	0.00%	100.00%	100.00%	—	Inactive	0	0	0
BRS Investments S.A.	Argentina	5.10%	94.90%	100.00%	100.00%	Finance company	41	23	35
Cántabra de Inversiones, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	(118)	262	187
Cántabro Catalana de Inversiones, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	275	3	267
Canyon Multifamily Impact Fund IV LLC (c)	United States	0.00%	98.00%	98.00%	98.00%	Real estate	26	0	27
Capital Street Delaware LP	United States	0.00%	100.00%	100.00%	100.00%	Holding company	0	0	0
Capital Street Holdings, LLC	United States	0.00%	100.00%	100.00%	100.00%	Holding company	14	0	14
Capital Street REIT Holdings, LLC	United States	0.00%	100.00%	100.00%	100.00%	Holding company	1,212	1	1,213

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Capital Street S.A.	Luxembourg	0.00%	100.00%	100.00%	100.00%	Finance company	0	0	0
Carfax (Guernsey) Limited (j) (n)	Guernsey	0.00%	100.00%	100.00%	100.00%	Insurance brokerage	0	0	0
Casa de Bolsa Santander, S.A. de C.V., Grupo Financiero Santander México	Mexico	0.00%	99.97%	99.97%	99.97%	Securities company	55	2	58
Cater Allen Holdings Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Cater Allen International Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Cater Allen Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Banking	685	34	265
Cater Allen Lloyd's Holdings Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Holding company	0	0	0
Cater Allen Syndicate Management Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
CCAP Auto Lease Ltd.	United States	0.00%	80.22%	100.00%	100.00%	Leasing	182	162	276
Centro de Capacitación Santander, A.C.	Mexico	0.00%	96.24%	100.00%	100.00%	Non-profit institute	1	0	1
Certidesa, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Aircraft rental	(59)	(5)	0
Chrysler Capital Auto Funding I LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	30	24	0
Chrysler Capital Auto Funding II LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	4	(4)	0
Chrysler Capital Auto Receivables LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	0	0	0
Chrysler Capital Master Auto Receivables Funding 2 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	(217)	(27)	0
Chrysler Capital Master Auto Receivables Funding 4 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	(3)	(4)	0
Chrysler Capital Master Auto Receivables Funding LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	61	48	0
Cobranza Amigable, S.A.P.I. de C.V.	Mexico	0.00%	85.00%	100.00%	100.00%	Collection services	4	0	3
Community Development and Affordable Housing Fund LLC (c)	United States	0.00%	96.00%	96.00%	96.00%	Asset management	0	0	0
Compagnie Generale de Credit Aux Particuliers - Credipar S.A.	France	0.00%	50.00%	100.00%	100.00%	Banking	363	161	428
Compagnie Pour la Location de Vehicules - CLV	France	0.00%	50.00%	100.00%	100.00%	Banking	20	2	26
Compartment German Auto Loans 2021-1	Luxembourg	—	(b)	—	—	Securitization	0	0	0
Comunidad Laboral Trabajando Argentina S.A. (j)	Argentina	0.00%	100.00%	100.00%	100.00%	Services	0	0	0
Consulteam Consultores de Gestão, Unipessoal, Lda.	Portugal	100.00%	0.00%	100.00%	100.00%	Real estate	0	0	0
Consumer Lending Receivables LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	0	0	0
Crawfall S.A. (g) (j)	Uruguay	100.00%	0.00%	100.00%	100.00%	Services	0	0	0
Darep Designated Activity Company	Ireland	100.00%	0.00%	100.00%	100.00%	Reinsurances	8	0	7
Decarome, S.A.P.I. de C.V.	Mexico	0.00%	100.00%	100.00%	100.00%	Finance company	50	5	51
Deva Capital Advisory Company, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Advisory services	1	1	2
Deva Capital Holding Company, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	226	(9)	228
Deva Capital Investment Company, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Holding company	111	4	111
Deva Capital Management Company, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Advisory services	17	(10)	7

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Deva Capital Servicer Company, S.L. Unipersonal	Spain	0.00%	100.00%	100.00%	100.00%	Holding company	97	4	96
Digital Procurement Holdings N.V.	Netherlands	0.00%	100.00%	100.00%	100.00%	Holding company	5	0	1
Diners Club Spain, S.A. Unipersonal	Spain	100.00%	0.00%	100.00%	75.00%	Cards	10	(1)	9
Dirección Estratega, S.C.	Mexico	0.00%	100.00%	100.00%	100.00%	Services	0	0	0
Drive Auto Receivables Trust 2017-3	United States	—	(b)	—	—	Securitization	38	53	0
Drive Auto Receivables Trust 2018-1	United States	—	(b)	—	—	Securitization	25	45	0
Drive Auto Receivables Trust 2018-2	United States	—	(b)	—	—	Securitization	(6)	77	0
Drive Auto Receivables Trust 2018-3	United States	—	(b)	—	—	Securitization	(31)	82	0
Drive Auto Receivables Trust 2018-4	United States	—	(b)	—	—	Securitization	(41)	82	0
Drive Auto Receivables Trust 2018-5	United States	—	(b)	—	—	Securitization	(37)	79	0
Drive Auto Receivables Trust 2019-1	United States	—	(b)	—	—	Securitization	(29)	83	0
Drive Auto Receivables Trust 2019-2	United States	—	(b)	—	—	Securitization	(51)	97	0
Drive Auto Receivables Trust 2019-3	United States	—	(b)	—	—	Securitization	(69)	136	0
Drive Auto Receivables Trust 2019-4	United States	—	(b)	—	—	Securitization	(92)	149	0
Drive Auto Receivables Trust 2020-1	United States	—	(b)	—	—	Securitization	(122)	156	0
Drive Auto Receivables Trust 2020-2	United States	—	(b)	—	—	Securitization	(135)	181	0
Drive Auto Receivables Trust 2021-1	United States	—	(b)	—	—	Securitization	0	(115)	0
Drive Auto Receivables Trust 2021-2	United States	—	(b)	—	—	Securitization	0	(310)	0
Drive Auto Receivables Trust 2021-3	United States	—	(b)	—	—	Securitization	0	(275)	0
Ductor S.à r.l. (f)	Luxembourg	100.00 %	0.00 %	100.00 %	—	Holding company	26	1	20
EDT FTPYME Pastor 3 Fondo de Titulización de Activos	Spain	—	(b)	—	—	Securitization	0	0	0
Elcano Renovables, S.L	Spain	0.00 %	70.00 %	70.00 %	—	Holding company	1	0	1
Electrolyser, S.A. de C.V.	Mexico	0.00%	96.24%	100.00%	100.00%	Services	0	0	0
Entidad de Desarrollo a la Pequeña y Micro Empresa Santander Consumo Perú S.A.	Peru	100.00%	0.00%	100.00%	100.00%	Finance company	27	6	33
Erestone S.A.S.	France	0.00%	90.00%	90.00%	90.00%	Inactive	1	0	1
Esfera Fidelidade S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Services	58	56	102
Evidence Previdência S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Insurance	132	(12)	95
Eyemobile Tecnologia S.A.	Brazil	0.00%	53.95%	60.00%	—	IT services	2	0	1
F1rst Tecnologia e Inovação Ltda.	Brazil	0.00%	89.91%	100.00%	100.00%	IT services	2	2	4
Financeira El Corte Inglés, Portugal, S.F.C., S.A.	Portugal	0.00%	51.00%	100.00%	100.00%	Finance company	8	0	4
Financiera El Corte Inglés, E.F.C., S.A.	Spain	0.00%	51.00%	51.00%	51.00%	Finance company	260	59	140
Finsantusa, S.L. Unipersonal	Spain	0.00%	100.00%	100.00%	100.00%	Holding company	1,259	(2)	1,020
First National Motor Business Limited (j)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Leasing	0	0	0
First National Motor Contracts Limited (j)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Leasing	0	0	0
First National Motor Facilities Limited (j)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Leasing	0	0	0
First National Motor Finance Limited (j)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Advisory services	0	0	0
First National Motor Leasing Limited (j)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Leasing	0	0	0
First National Motor plc	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
First National Tricity Finance Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	6	0	6
Fondation Holding Auto ABS Belgium Loans	Belgium	—	(b)	—	—	Securitization	0	0	0
Fondo de Titulización de Activos Santander Consumer Spain Auto 2014-1	Spain	—	(b)	—	—	Securitization	0	0	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Fondo de Titulización PYMES Santander 13	Spain	—	(b)	—	—	Securitization	0	0	0
Fondo de Titulización PYMES Santander 14	Spain	—	(b)	—	—	Securitization	0	0	0
Fondo de Titulización PYMES Santander 15	Spain	—	(b)	—	—	Securitization	0	0	0
Fondo de Titulización Santander Consumer Spain Auto 2016-1	Spain	—	(b)	—	—	Securitization	0	0	0
Fondo de Titulización Santander Consumer Spain Auto 2016-2	Spain	—	(b)	—	—	Securitization	0	0	0
Fondo de Titulización Santander Financiación 1	Spain	—	(b)	—	—	Securitization	0	0	0
Fondo de Titulización, RMBS Santander 7	Spain	—	(b)	—	—	Securitization	0	0	0
Fondos Santander, S.A. Administradora de Fondos de Inversión (en liquidación) (j)	Uruguay	0.00%	100.00%	100.00%	100.00%	Fund management company	0	0	0
Fortensky Trading, Ltd.	Ireland	0.00%	100.00%	100.00%	100.00%	Finance company	0	0	0
Fosse (Master Issuer) Holdings Limited	United Kingdom	—	(b)	—	—	Securitization	0	0	0
Fosse Funding (No.1) Limited	United Kingdom	0.00%	100.00 %	100.00 %	100.00 %	Securitization	(134)	136	0
Fosse Master Issuer PLC	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	5	(6)	0
Fosse PECOH Limited	United Kingdom	—	(b)	—	—	Inactive	0	0	0
Fosse Trustee (UK) Limited	United Kingdom	0.00%	100.00 %	100.00 %	100.00 %	Securitization	0	0	0
FTPYME Banesto 2, Fondo de Titulización de Activos	Spain	—	(b)	—	—	Securitization	0	0	0
Fundo de Investimento em Direitos Creditórios Atacado- Não Padronizado	Brazil	—	(b)	—	—	Investment fund	130	(6)	0
Fundo de Investimentos em Direitos Creditórios Multisegmentos NPL Ipanema VI – Não padronizado	Brazil	—	(b)	—	—	Investment fund	194	23	0
Gamma, Sociedade Financeira de Titularização de Créditos, S.A.	Portugal	0.00%	99.86 %	100.00 %	100.00 %	Securitization	7	0	8
GC FTPYME Pastor 4 Fondo de Titulización de Activos	Spain	—	(b)	—	—	Securitization	0	0	0
Gentium Payments Processing FZ-LLC	United Arab Emirates	0.00%	100.00%	100.00%	—	Financial services	4	(2)	2
Gesban México Servicios Administrativos Globales, S.A. de C.V.	Mexico	0.00%	100.00%	100.00%	100.00%	Services	1	0	0
Gesban Santander Servicios Profesionales Contables Limitada	Chile	0.00%	100.00%	100.00%	100.00%	Accounting services	1	0	0
Gesban Servicios Administrativos Globales, S.L.	Spain	99.99%	0.01%	100.00%	100.00%	Services	5	0	1
Gesban UK Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Payments and collection services	1	0	0
Gestión de Instalaciones Fotovoltaicas, S.L. Unipersonal	Spain	0.00%	100.00%	100.00%	100.00%	Renewable energies	1	0	0
Gestión de Inversiones JILT, S.A. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Services	5	(2)	5
Gestora de Procesos S.A. en liquidación (j)	Peru	0.00%	100.00%	100.00%	100.00%	Holding company	0	0	0
Getnet Adquirência e Serviços para Meios de Pagamento S.A.	Brazil	0.04%	89.88%	89.91%	100.00%	Payment services	340	75	297
Getnet Europe, Entidad de Pago, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Payment services	215	6	218
Getnet Sociedade de Credito Direto S.A.	Brazil	0.00%	89.91%	100.00%	—	Finance company	12	1	12

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Gira, Gestão Integrada de Recebíveis do Agronegócio S.A.	Brazil	0.00%	71.93%	80.00%	—	Consulting services	1	(1)	2
Golden Bar (Securitisation) S.R.L.	Italy	—	(b)	—	—	Securitization	0	0	0
Golden Bar Stand Alone 2016-1	Italy	—	(b)	—	—	Securitization	0	0	0
Golden Bar Stand Alone 2018-1	Italy	—	(b)	—	—	Securitization	0	0	0
Golden Bar Stand Alone 2019-1	Italy	—	(b)	—	—	Securitization	0	0	0
Golden Bar Stand Alone 2020-1	Italy	—	(b)	—	—	Securitization	0	0	0
Golden Bar Stand Alone 2020-2	Italy	—	(b)	—	—	Securitization	0	0	0
Golden Bar Stand Alone 2021-1	Italy	—	(b)	—	—	Securitization	0	0	0
Grupo Empresarial Santander, S.L.	Spain	99.62%	0.38%	100.00%	100.00%	Holding company	3,348	637	2,406
Grupo Financiero Santander México, S.A. de C.V.	Mexico	100.00%	0.00%	100.00%	100.00%	Holding company	4,837	584	4,510
Guaranty Car, S.A. Unipersonal	Spain	0.00%	100.00%	100.00%	100.00%	Automotive	2	1	2
Hipototta No. 13	Portugal	—	(b)	—	—	Securitization	0	0	0
Hipototta No. 4 FTC	Portugal	—	(b)	—	—	Securitization	(51)	(2)	0
Hipototta No. 4 plc	Ireland	—	(b)	—	—	Securitization	(3)	(1)	0
Hipototta No. 5 FTC	Portugal	—	(b)	—	—	Securitization	(39)	(2)	0
Hipototta No. 5 plc	Ireland	—	(b)	—	—	Securitization	(11)	(2)	0
Holbah II Limited	Bahamas	0.00%	100.00%	100.00%	100.00%	Holding company	404	0	557
Holbah Santander, S.L. Unipersonal	Spain	0.00%	100.00%	100.00%	100.00%	Holding company	213	349	785
Holmes Funding Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	(3)	11	0
Holmes Holdings Limited	United Kingdom	—	(b)	—	—	Securitization	0	0	0
Holmes Master Issuer plc	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	(11)	(1)	0
Holmes Trustees Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	0	0	0
Hyundai Capital Bank Europe GmbH	Germany	0.00%	51.00%	51.00%	51.00%	Banking	701	(6)	391
Ibérica de Compras Corporativas, S.L.	Spain	97.17%	2.83%	100.00%	100.00%	E-commerce	7	1	6
Independence Community Bank Corp.	United States	0.00%	100.00%	100.00%	100.00%	Holding company	3,501	85	3,587
Insurance Funding Solutions Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	0	0	0
Interfinance Holanda B.V.	Netherlands	100.00%	0.00%	100.00%	100.00%	Holding company	0	0	0
Inversiones Capital Global, S.A. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	105	(6)	111
Inversiones Marítimas del Mediterráneo, S.A.	Spain	0.00%	100.00%	100.00%	100.00%	Inactive	5	(1)	0
Isar Valley S.A.	Luxembourg	—	(b)	—	—	Securitization	0	0	0
Isla de los Buques, S.A.	Spain	99.98%	0.02%	100.00%	100.00%	Finance company	1	0	1
Klare Corredora de Seguros S.A.	Chile	0.00%	33.63%	50.10%	50.10%	Insurance brokerage	6	(3)	1
Landcompany 2020, S.L.	Spain	17.66%	82.34%	100.00%	100.00%	Real estate management	1,779	(78)	1,704
Langton Funding (No.1) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	(22)	22	0
Langton Mortgages Trustee (UK) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	0	0	0
Langton PECOH Limited	United Kingdom	—	(b)	—	—	Inactive	0	0	0
Langton Securities (2008-1) plc	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	1	(1)	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Langton Securities (2010-1) PLC	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	2	(2)	0
Langton Securities (2010-2) PLC	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	0	0	0
Langton Securities Holdings Limited	United Kingdom	—	(b)	—	—	Securitization	0	0	0
Laparanza, S.A.	Spain	61.59%	0.00%	61.59%	61.59%	Agricultural holding	28	0	16
Liderança Serviços Especializados em Cobranças Ltda.	Brazil	0.00%	89.91%	100.00%	—	Collection services	(1)	2	1
Liquetine, S.L	Spain	0.00%	70.00%	100.00%	—	Renewable energies	0	0	1
Liquidity Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Factoring	(1)	0	0
Luri 1, S.A., en liquidación (j) (m)	Spain	46.00%	0.00%	46.00%	46.00%	Real estate	0	0	0
Luri 6, S.A. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Real estate investment	1,366	(8)	1,373
MAC No. 1 Limited	United Kingdom	—	(b)	—	—	Mortgage credit company	0	0	0
Master Red Europa, S.L.	Spain	96.34%	0.00%	96.34%	96.34%	Cards	1	0	1
Mata Alta, S.L.	Spain	0.00%	61.59%	100.00%	100.00%	Real estate	0	0	0
Max Merger Sub, Inc.	United States	0.00%	100.00%	100.00%	—	Inactive	0	0	0
Mercadotecnia, Ideas y Tecnología, S.A. de C.V.	Mexico	0.00%	70.00%	70.00%	—	Payment methods	1	3	15
Merciver, S.L.	Spain	99.90%	0.10%	100.00%	100.00%	Financial advisory	1	0	1
Mercury Trade Finance Solutions S.A.S.	Colombia	0.00%	50.10%	100.00%	—	IT services	0	0	0
Mercury Trade Finance Solutions, S.A. de C.V.	Mexico	0.00%	50.10%	100.00%	100.00%	IT services	0	0	0
Mercury Trade Finance Solutions, S.L.	Spain	0.00%	50.10%	50.10%	50.10%	IT services	10	1	24
Mercury Trade Finance Solutions, S.p.A.	Chile	0.00%	50.10%	100.00%	100.00%	IT services	1	0	0
Merlion Aviation One Designated Activity Company	Ireland	—	(b)	—	—	Renting	25	6	0
Mortgage Engine Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Financial services	(7)	(4)	0
Motor 2016-1 Holdings Limited	United Kingdom	—	(b)	—	—	Securitization	0	0	0
Motor 2016-1 PLC	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	0	0	0
Motor 2017-1 Holdings Limited	United Kingdom	—	(b)	—	—	Securitization	0	0	0
Motor 2017-1 PLC	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	(6)	6	0
Motor Securities 2018-1 Designated Activity Company	Ireland	—	(b)	—	—	Securitization	(1)	(1)	0
Mouro Capital I LP	United Kingdom	0.00%	100.00%	100.00%	100.00%	Investment fund	281	211	249
Multiplica SpA	Chile	0.00%	100.00%	100.00%	100.00%	Payment services	4	0	4
Naviera Mirambel, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Finance company	0	0	0
Naviera Trans Gas, A.I.E.	Spain	99.99%	0.01%	100.00%	100.00%	Renting	21	(3)	40
Naviera Trans Iron, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	Leasing	24	0	21
Naviera Trans Ore, A.I.E.	Spain	99.99%	0.01%	100.00%	100.00%	Renting	25	3	17
Naviera Transcantábrica, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	Leasing	5	0	4
Naviera Transchem, S.L. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Leasing	1	0	1
NeoAuto S.A.C.	Peru	0.00%	55.00%	55.00%	55.00%	Vehicles purchase by Internet	1	0	1
Newcomar, S.L., en liquidación (j)	Spain	40.00%	40.00%	80.00%	80.00%	Real estate	1	0	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Novimovest – Fundo de Investimento Imobiliário	Portugal	0.00%	78.63%	78.74%	78.74%	Investment fund	254	4	203
NW Services CO.	United States	0.00%	100.00%	100.00%	100.00%	E-commerce	6	0	2
Open Bank Argentina S.A.	Argentina	0.00%	99.66%	100.00%	100.00%	Banking	35	(8)	33
Open Bank, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Banking	451	10	462
Open Digital Market, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Services	0	0	0
Open Digital Services Argentina S.A.U.	Argentina	0.00 %	100.00 %	100.00 %	—	IT services	0	0	0
Open Digital Services, S.L.	Spain	99.97%	0.03%	100.00%	100.00%	Services	176	(108)	18
Open Mx Servicios Administrativos, S.A. de C.V.	Mexico	0.00%	100.00%	100.00%	—	Financial services	0	0	0
Operadora de Carteras Gamma, S.A.P.I. de C.V.	Mexico	100.00%	0.00%	100.00%	100.00%	Holding company	8	1	6
Optimal Investment Services SA	Switzerland	100.00%	0.00%	100.00%	100.00%	Fund management company	33	9	29
Optimal Multiadvisors Ireland Plc / Optimal Strategic US Equity Ireland Euro Fund (e) (p)	Ireland	0.00%	0.00%	0.00%	54.10%	Fund management company	0	0	0
Optimal Multiadvisors Ireland Plc / Optimal Strategic US Equity Ireland US Dollar Fund (e) (p)	Ireland	0.00%	0.00%	0.00%	51.93%	Fund management company	0	0	0
PagoFX Europe S.A.	Belgium	0.00%	100.00%	100.00%	100.00%	Payment services	2	(1)	1
PagoFX UK Ltd	United Kingdom	0.00%	100.00%	100.00%	100.00%	Payment services	5	(3)	2
PagoNxt Ltd	United Kingdom	100.00%	0.00%	100.00%	—	Holding company	0	0	0
PagoNxt Merchant SoluçõesTecnológicas Brasil Ltda.	Brazil	0.00%	100.00%	100.00%	100.00%	IT services	57	(20)	37
PagoNxt Merchant Solutions, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Holding company	913	(46)	938
PagoNxt One Trade UK Ltd	United Kingdom	0.00%	100.00%	100.00%	—	Financial services	0	0	0
PagoNxt OneTrade España, E.D.E., S.L.	Spain	0.00%	100.00%	100.00%	—	Financial services	0	0	0
PagoNxt Solutions, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Payment services	90	(61)	29
PagoNxt Trade Services, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Services	197	(58)	140
PagoNxt Trade, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	IT services	244	(71)	172
PagoNxt, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	1,815	(153)	1,838
Parasant SA	Switzerland	100.00%	0.00%	100.00%	100.00%	Holding company	1,162	(2)	927
Paytec Logística e Armazém Ltda.	Brazil	0.00%	89.91%	100.00%	—	Logistics services	0	0	0
Paytec Tecnologia em Pagamentos Ltda.	Brazil	0.00%	89.91%	100.00%	—	Commerce	3	0	3
PBD Germany Auto 2018 UG (Haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0
PBD Germany Auto Lease Master 2019	Luxembourg	—	(b)	—	—	Securitization	0	0	0
PBD Germany Auto Lease Master S.A, Compartment 2021-1	Luxembourg	—	(b)	—	—	Securitization	0	0	0
PBD Germany Auto Loan 2021 UG (Haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0
PBE Companies, LLC	United States	0.00%	100.00%	100.00%	100.00%	Real estate	110	0	110
PECOH Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Pereda Gestión, S.A.	Spain	99.99%	0.01%	100.00%	100.00%	Holding company	45	35	4
Phoenix C1 Aviation Designated Activity Company	Ireland	—	(b)	—	—	Renting	13	4	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Phoenix S.A.	Uruguay	0.00%	100.00%	100.00%	—	Payment methods	0	0	3
PI Distribuidora de Títulos e Valores Mobiliários S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Securities company	79	(6)	66
Pingham International, S.A. (j)	Uruguay	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Pony S.A.	Luxembourg	—	(b)	—	—	Securitization	0	0	0
Portal Universia Argentina S.A.	Argentina	0.00%	75.75%	75.75%	75.75%	Internet	0	0	0
Portal Universia Portugal, Prestação de Serviços de Informática, S.A.	Portugal	0.00%	100.00%	100.00%	100.00%	Internet	0	0	0
Prime 16 – Fundo de Investimentos Imobiliário	Brazil	0.00%	89.91%	100.00%	100.00%	Investment fund	31	(2)	24
PSA Bank Deutschland GmbH	Germany	0.00%	50.00%	50.00%	50.00%	Banking	517	57	229
PSA Banque France	France	0.00%	50.00%	50.00%	50.00%	Banking	1,068	74	463
PSA Consumer Finance Polska Sp. z o.o.	Poland	0.00%	40.22%	100.00%	100.00%	Finance company	3	1	0
PSA Finance Belux S.A.	Belgium	0.00%	50.00%	100.00%	50.00%	Finance company	91	15	52
PSA Finance Polska Sp. z o.o.	Poland	0.00%	40.22%	50.00%	50.00%	Finance company	33	5	10
PSA Finance UK Limited	United Kingdom	0.00%	50.00%	100.00%	50.00%	Finance company	339	65	181
PSA Financial Services Nederland B.V.	Netherlands	0.00%	50.00%	100.00%	50.00%	Finance company	52	17	32
PSA Financial Services Spain, E.F.C., S.A.	Spain	0.00%	50.00%	50.00%	50.00%	Finance company	739	53	363
PSA Renting Italia S.p.A.	Italy	0.00%	50.00%	100.00%	100.00%	Renting	9	11	3
PSRT 2019-A	United States	—	(b)	—	—	Securitization	58	53	0
Punta Lima Wind Farm, LLC	United States	0.00%	100.00%	100.00%	100.00%	Renewable energies	44	(1)	43
Punta Lima, LLC	United States	0.00%	100.00%	100.00%	100.00%	Leasing	44	(1)	43
Retail Company 2021, S.L. Unipersonal	Spain	100.00%	0.00%	100.00%	—	Real estate	262	(3)	262
Retop S.A. (f)	Uruguay	100.00%	0.00%	100.00%	100.00%	Finance company	14	14	45
Return Capital S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Collection services	(1)	4	3
Riobank International (Uruguay) SAIFE (p)	Uruguay	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Roc Aviation One Designated Activity Company	Ireland	—	(b)	—	—	Renting	(2)	(2)	0
Roc Shipping One Designated Activity Company	Ireland	—	(b)	—	—	Renting	(4)	0	0
Rojo Entretenimento S.A.	Brazil	0.00%	85.06%	94.60%	94.60%	Services	21	0	17
SAM Asset Management, S.A. de C.V., Sociedad Operadora de Fondos de Inversión	Mexico	0.00%	100.00%	100.00%	100.00%	Fund management company	20	21	162
SAM Investment Holdings, S.L.	Spain	92.37%	7.63%	100.00%	100.00%	Management of funds	1,326	74	1,597
SANB Promotora de Vendas e Cobrança S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Finance company	3	(1)	2
Sancap Investimentos e Participações S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Holding company	139	39	142
Santander (CF Trustee Property Nominee) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Santander (CF Trustee) Limited (d)	United Kingdom	—	(b)	—	—	Inactive	0	0	0
Santander (UK) Group Pension Schemes Trustees Limited (d)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Santander Ahorro Inmobiliario 1, S.A.	Spain	98.53%	0.00%	98.53%	98.53%	Real estate rental	1	0	1
Santander Ahorro Inmobiliario 2, S.A.	Spain	99.91%	0.00%	99.91%	99.91%	Real estate rental	1	0	1

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Asesorías Financieras Limitada	Chile	0.00%	67.44%	100.00%	100.00%	Securities company	53	2	37
Santander Asset Finance (December) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Leasing	73	5	0
Santander Asset Finance plc	United Kingdom	0.00%	100.00%	100.00%	100.00%	Leasing	287	11	173
Santander Asset Management - S.G.O.I.C., S.A.	Portugal	0.00%	100.00%	100.00%	100.00%	Fund management company	7	5	12
Santander Asset Management Chile S.A.	Chile	0.01%	99.94%	100.00%	100.00%	Securities investment	(5)	0	0
Santander Asset Management Luxembourg, S.A.	Luxembourg	0.00%	100.00%	100.00%	100.00%	Fund management company	4	4	0
Santander Asset Management S.A. Administradora General de Fondos	Chile	0.00%	100.00%	100.00%	100.00%	Fund management company	13	9	132
Santander Asset Management UK Holdings Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Holding company	195	5	186
Santander Asset Management UK Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Management of funds and portfolios	41	15	201
Santander Asset Management, LLC (j)	Puerto Rico	0.00%	100.00%	100.00%	100.00%	Management	0	(1)	0
Santander Asset Management, S.A., S.G.I.I.C.	Spain	0.00%	100.00%	100.00%	100.00%	Fund management company	248	61	393
Santander Back-Offices Globales Mayoristas, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Services	2	1	1
Santander Banca de Inversión Colombia, S.A.S.	Colombia	100.00%	0.00%	100.00%	100.00%	Advisory services	2	0	2
Santander Bank & Trust Ltd.	Bahamas	0.00%	100.00%	100.00%	100.00%	Banking	66	(1)	22
Santander Bank Polska S.A.	Poland	67.41%	0.00%	67.41%	67.41%	Banking	4,984	199	4,270
Santander Bank, National Association	United States	0.00%	100.00%	100.00%	100.00%	Banking	10,197	444	10,637
Santander Brasil Administradora de Consórcio Ltda.	Brazil	0.00%	89.91%	100.00%	100.00%	Services	107	53	144
Santander Brasil Gestão de Recursos Ltda.	Brazil	0.08%	99.92%	100.00%	100.00%	Securities investment	396	30	470
Santander Capital Desarrollo, SGEIC, S.A. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Management company of investment entities	5	0	3
Santander Capital Structuring, S.A. de C.V.	Mexico	0.00%	100.00%	100.00%	100.00%	Investment companies	11	0	0
Santander Capitalização S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Insurance	9	58	60
Santander Cards Ireland Limited	Ireland	0.00%	100.00%	100.00%	100.00%	Cards	(8)	0	0
Santander Cards Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Cards	100	0	100
Santander Cards UK Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	163	0	115
Santander Chile Holding S.A.	Chile	22.11%	77.73%	99.84%	99.84%	Holding company	1,490	310	1,208
Santander Consulting (Beijing) Co., Ltd.	China	0.00%	100.00%	100.00%	100.00%	Advisory services	9	0	4
Santander Consumer (UK) plc	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	853	296	310
Santander Consumer Auto Receivables Funding 2013-B2 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	(283)	200	0
Santander Consumer Auto Receivables Funding 2013-B3 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	101	70	0
Santander Consumer Auto Receivables Funding 2018-L1 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	182	75	0
Santander Consumer Auto Receivables Funding 2018-L3 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	63	49	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Consumer Auto Receivables Funding 2018-L5 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	53	99	0
Santander Consumer Auto Receivables Funding 2019-B1 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	(140)	190	0
Santander Consumer Auto Receivables Funding 2019-L2 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	58	87	0
Santander Consumer Auto Receivables Funding 2019-L3 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	32	36	0
Santander Consumer Auto Receivables Funding 2020-B1 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	(98)	82	0
Santander Consumer Auto Receivables Funding 2020-L1 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	71	39	0
Santander Consumer Auto Receivables Funding 2020-L2 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	7	11	0
Santander Consumer Auto Receivables Funding 2021-B1 LLC	United States	0.00%	80.22%	100.00%	—	Inactive	0	0	0
Santander Consumer Auto Receivables Funding 2021-B2 LLC	United States	0.00%	80.22%	100.00%	—	Inactive	0	0	0
Santander Consumer Auto Receivables Funding 2021-L1 LLC	United States	0.00%	80.22%	100.00%	—	Inactive	0	0	0
Santander Consumer Auto Receivables Grantor Trust 2021-D	United States	0.00%	80.22%	100.00%	—	Inactive	0	0	0
Santander Consumer Auto Receivables Trust 2021-D	United States	0.00%	80.22%	100.00%	—	Inactive	0	0	0
Santander Consumer Bank AG	Germany	0.00%	100.00%	100.00%	100.00%	Banking	3,313	461	5,070
Santander Consumer Bank AS	Norway	0.00%	100.00%	100.00%	100.00%	Banking	2,540	202	2,313
Santander Consumer Bank GmbH	Austria	0.00%	100.00%	100.00%	100.00%	Banking	399	45	363
Santander Consumer Bank S.A.	Poland	0.00%	80.44%	100.00%	100.00%	Banking	743	35	484
Santander Consumer Bank S.p.A.	Italy	0.00%	100.00%	100.00%	100.00%	Banking	824	178	603
Santander Consumer Banque S.A.	France	0.00%	100.00%	100.00%	100.00%	Banking	544	40	492
Santander Consumer Credit Services Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	(39)	0	0
Santander Consumer Finance Global Services, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	IT	6	2	5
Santander Consumer Finance Inc.	Canada	96.42%	0.00%	96.42%	96.42%	Holding company	63	0	94
Santander Consumer Finance Limitada	Chile	49.00%	34.23%	100.00%	100.00%	Finance company	63	20	41
Santander Consumer Finance Oy	Finland	0.00%	100.00%	100.00%	100.00%	Finance company	314	54	165
Santander Consumer Finance Schweiz AG	Switzerland	0.00%	100.00%	100.00%	100.00%	Leasing	50	7	60
Santander Consumer Finance, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Banking	8,807	601	10,022
Santander Consumer Financial Solutions Sp. z o.o.	Poland	0.00%	80.44%	100.00%	100.00%	Leasing	2	0	2
Santander Consumer Finanse Sp. z o.o. w likwidacji (j)	Poland	0.00%	80.44%	100.00%	100.00%	Services	16	0	12
Santander Consumer Holding Austria GmbH	Austria	0.00%	100.00%	100.00%	100.00%	Holding company	364	20	518
Santander Consumer Holding GmbH	Germany	0.00%	100.00%	100.00%	100.00%	Holding company	5,564	309	6,077
Santander Consumer Inc.	Canada	0.00%	96.42%	100.00%	100.00%	Finance company	66	16	46
Santander Consumer International Puerto Rico LLC	Puerto Rico	0.00%	80.22%	100.00%	100.00%	Services	9	0	7
Santander Consumer Leasing GmbH	Germany	0.00%	100.00%	100.00%	100.00%	Leasing	20	109	101
Santander Consumer Mobility Services, S.A.	Spain	0.00%	100.00%	100.00%	100.00%	Renting	12	0	12
Santander Consumer Multirent Sp. z o.o.	Poland	0.00%	80.44%	100.00%	100.00%	Leasing	27	4	5
Santander Consumer Operations Services GmbH	Germany	0.00%	100.00%	100.00%	100.00%	Services	11	1	18

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Consumer Receivables 10 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	764	286	0
Santander Consumer Receivables 11 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	420	196	0
Santander Consumer Receivables 3 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	315	60	0
Santander Consumer Receivables 7 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	303	369	0
Santander Consumer Receivables Funding LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	1	3	0
Santander Consumer Renting, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Leasing	37	1	38
Santander Consumer S.A.	Argentina	0.00%	99.31%	100.00%	100.00%	Finance company	7	(2)	6
Santander Consumer S.A. Compañía de Financiamiento	Colombia	79.02%	20.98%	100.00%	—	Finance company	6	(1)	6
Santander Consumer Services GmbH	Austria	0.00%	100.00%	100.00%	100.00%	Services	0	0	0
Santander Consumer Services, S.A.	Portugal	0.00%	100.00%	100.00%	100.00%	Finance company	11	2	6
Santander Consumer Spain Auto 2019-1, Fondo de Titulización	Spain	—	(b)	—	—	Securitization	0	0	0
Santander Consumer Spain Auto 2020-1, Fondo de Titulización	Spain	—	(b)	—	—	Securitization	0	0	0
Santander Consumer Spain Auto 2021-1, Fondo de Titulización	Spain	—	(b)	—	—	Securitization	0	0	0
Santander Consumer Technology Services GmbH	Germany	0.00%	100.00%	100.00%	100.00%	IT services	21	3	22
Santander Consumer USA Holdings Inc.	United States	0.00%	80.22%	80.22%	80.24%	Holding company	4,688	2,871	6,705
Santander Consumer USA Inc.	United States	0.00%	80.22%	100.00%	100.00%	Finance company	5,257	(917)	3,481
Santander Consumo 4, F.T.	Spain	—	(b)	—	—	Securitization	0	0	0
Santander Consumo, S.A. de C.V., S.O.F.O.M., E.R., Grupo Financiero Santander México	Mexico	0.00%	96.24%	100.00%	100.00%	Cards	1,123	222	1,295
Santander Corredora de Seguros Limitada	Chile	0.00%	67.20%	100.00%	100.00%	Insurance brokerage	72	2	50
Santander Corredores de Bolsa Limitada	Chile	0.00%	83.23%	100.00%	100.00%	Securities company	47	2	40
Santander Corretora de Câmbio e Valores Mobiliários S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Securities company	114	13	115
Santander Corretora de Seguros, Investimentos e Serviços S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Holding company	567	166	656
Santander Customer Voice, S.A.	Spain	99.50%	0.50%	100.00%	100.00%	Services	2	0	1
Santander de Titulización, S.G.F.T., S.A.	Spain	81.00%	19.00%	100.00%	100.00%	Fund management company	5	3	2
Santander Digital Assets, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	IT services	0	2	4
Santander Drive Auto Receivables LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	0	0	0
Santander Drive Auto Receivables Trust 2017-3	United States	—	(b)	—	—	Securitization	52	29	0
Santander Drive Auto Receivables Trust 2018-1	United States	—	(b)	—	—	Securitization	41	39	0
Santander Drive Auto Receivables Trust 2018-2	United States	—	(b)	—	—	Securitization	18	37	0
Santander Drive Auto Receivables Trust 2018-3	United States	—	(b)	—	—	Securitization	1	52	0
Santander Drive Auto Receivables Trust 2018-4	United States	—	(b)	—	—	Securitization	4	46	0
Santander Drive Auto Receivables Trust 2018-5	United States	—	(b)	—	—	Securitization	(4)	50	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Drive Auto Receivables Trust 2019-1	United States	—	(b)	—	—	Securitization	(15)	58	0
Santander Drive Auto Receivables Trust 2019-2	United States	—	(b)	—	—	Securitization	(23)	80	0
Santander Drive Auto Receivables Trust 2019-3	United States	—	(b)	—	—	Securitization	(38)	86	0
Santander Drive Auto Receivables Trust 2020-1	United States	—	(b)	—	—	Securitization	(111)	134	0
Santander Drive Auto Receivables Trust 2020-2	United States	—	(b)	—	—	Securitization	(131)	175	0
Santander Drive Auto Receivables Trust 2020-3	United States	—	(b)	—	—	Securitization	(241)	271	0
Santander Drive Auto Receivables Trust 2020-4	United States	—	(b)	—	—	Securitization	(242)	233	0
Santander Drive Auto Receivables Trust 2021-1	United States	—	(b)	—	—	Securitization	0	(43)	0
Santander Drive Auto Receivables Trust 2021-2	United States	—	(b)	—	—	Securitization	0	(162)	0
Santander Drive Auto Receivables Trust 2021-3	United States	—	(b)	—	—	Securitization	0	(263)	0
Santander Drive Auto Receivables Trust 2021-4	United States	—	(b)	—	—	Securitization	0	(272)	0
Santander Drive Auto Receivables Trust 2022-1	United States	—	(b)	—	—	Inactive	0	0	0
Santander Drive Auto Receivables Trust 2022-2	United States	—	(b)	—	—	Inactive	0	0	0
Santander Drive Auto Receivables Trust 2022-3	United States	—	(b)	—	—	Inactive	0	0	0
Santander Drive Auto Receivables Trust 2022-4	United States	—	(b)	—	—	Inactive	0	0	0
Santander Equity Investments Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	41	(11)	35
Santander España Servicios Legales y de Cumplimiento, S.L.	Spain	99.97%	0.03%	100.00%	100.00%	Services	9	1	8
Santander Estates Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Real estate	3	(10)	0
Santander European Hospitality Opportunities	Luxembourg	100.00%	0.00%	100.00%	—	Investment fund	1	0	1
Santander F24 S.A.	Poland	0.00%	67.41%	100.00%	100.00%	Finance company	0	0	0
Santander Facility Management España, S.L. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Real estate	417	(3)	392
Santander Factoring S.A.	Chile	0.00%	99.84%	100.00%	100.00%	Factoring	37	0	37
Santander Factoring Sp. z o.o.	Poland	0.00%	67.41%	100.00%	100.00%	Financial services	27	11	1
Santander Factoring y Confirming, S.A., E.F.C.	Spain	100.00%	0.00%	100.00%	100.00%	Factoring	208	70	126
Santander Finance 2012-1 LLC	United States	0.00%	100.00%	100.00%	100.00%	Financial services	3	0	3
Santander Financial Exchanges Limited	United Kingdom	100.00%	0.00%	100.00%	100.00%	Inactive	0	0	0
Santander Financial Services plc	United Kingdom	0.00%	100.00%	100.00%	100.00%	Banking	356	32	401
Santander Financial Services, Inc.	Puerto Rico	0.00%	100.00%	100.00%	100.00%	Finance company	22	(7)	14
Santander Financiamientos S.A.	Peru	100.00%	0.00%	100.00%	—	Finance company	8	(1)	8
Santander Financing S.A.S.	Colombia	100.00%	0.00%	100.00%	100.00%	Financial advisory	1	(1)	1
Santander Finanse Sp. z o.o.	Poland	0.00%	67.41%	100.00%	100.00%	Financial services	60	7	19
Santander Fintech Holdings, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	79	(14)	61

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Fintech Limited	United Kingdom	100.00%	0.00%	100.00%	100.00%	Finance company	218	(7)	144
Santander Fundo de Investimento Santillana Multimercado Crédito Privado Investimento No Exterior (e)	Brazil	—	(b)	—	—	Investment fund	413	19	432
Santander Fundo de Investimento SBAC Referenciado di Crédito Privado (h)	Brazil	0.00%	89.91%	100.00%	100.00%	Investment fund	1,440	11	1,303
Santander Gestión de Recaudación y Cobranzas Ltda.	Chile	0.00%	99.84%	100.00%	100.00%	Financial services	6	0	5
Santander Global Cards & Digital Solutions Brasil S.A.	Brazil	0.00%	100.00%	100.00%	100.00%	IT consulting	0	0	0
Santander Global Consumer Finance Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	7	0	7
Santander Global Facilities, S.A. de C.V.	Mexico	100.00%	0.00%	100.00%	100.00%	Real estate management	125	3	127
Santander Global Facilities, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	Real estate	73	2	70
Santander Global Services S.A. (j)	Uruguay	0.00%	100.00%	100.00%	100.00%	Services	0	0	0
Santander Global Sport, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Sports activity	21	(2)	19
Santander Global Technology and Operations Brasil Ltda.	Brazil	0.00%	100.00%	100.00%	100.00%	IT services	3	0	1
Santander Global Technology and Operations Chile Limitada	Chile	0.00%	100.00%	100.00%	100.00%	IT services	22	2	20
Santander Global Technology and Operations, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	IT services	434	19	370
Santander Green Investment, S.L.	Spain	99.97%	0.03%	100.00%	—	Holding company	14	0	14
Santander Guarantee Company	United Kingdom	0.00%	100.00%	100.00%	100.00%	Leasing	5	0	3
Santander Hipotecario 1 Fondo de Titulización de Activos	Spain	—	(b)	—	—	Securitization	0	0	0
Santander Hipotecario 2 Fondo de Titulización de Activos	Spain	—	(b)	—	—	Securitization	0	0	0
Santander Hipotecario 3 Fondo de Titulización de Activos	Spain	—	(b)	—	—	Securitization	0	0	0
Santander Holding Imobiliária S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Real estate	71	1	65
Santander Holding Internacional, S.A.	Spain	99.95%	0.05%	100.00%	100.00%	Holding company	4,031	26	2,247
Santander Holdings USA, Inc.	United States	100.00%	0.00%	100.00%	100.00%	Holding company	17,120	2,633	12,579
Santander Inclusión Financiera, S.A. de C.V., S.O.F.O.M., E.R., Grupo Financiero Santander México	Mexico	0.00%	96.24%	100.00%	100.00%	Finance company	14	(7)	7
Santander Insurance Agency, U.S., LLC	United States	0.00%	100.00%	100.00%	100.00%	Insurance	1	0	1
Santander Insurance Services UK Limited	United Kingdom	100.00%	0.00%	100.00%	100.00%	Asset management	44	0	44
Santander Intermediación Correduría de Seguros, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Insurance brokerage	24	2	18
Santander International Products, Plc. (l)	Ireland	99.99%	0.01%	100.00%	100.00%	Finance company	1	0	0
Santander Inversiones S.A.	Chile	0.00%	100.00%	100.00%	100.00%	Holding company	968	201	1,032
Santander Investment Bank Limited	Bahamas	0.00%	100.00%	100.00%	100.00%	Banking	577	15	529
Santander Investment Chile Limitada	Chile	0.00%	100.00%	100.00%	100.00%	Finance company	473	6	321
Santander Investment Securities Inc.	United States	0.00%	100.00%	100.00%	100.00%	Securities company	456	32	488
Santander Investment, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Banking	1,408	77	245
Santander Investments GP 1 S.à.r.l.	Luxembourg	0.00%	100.00%	100.00%	100.00%	Management of funds	1	0	1
Santander Inwestycje Sp. z o.o.	Poland	0.00%	67.41%	100.00%	100.00%	Securities company	17	1	7

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander ISA Managers Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Management of funds and portfolios	37	8	6
Santander Lease, S.A., E.F.C.	Spain	100.00%	0.00%	100.00%	100.00%	Leasing	61	11	51
Santander Leasing Poland Securitization 01 Designated Activity Company	Ireland	—	(b)	—	—	Securitization	0	0	0
Santander Leasing S.A.	Poland	0.00%	67.41%	100.00%	100.00%	Leasing	133	9	28
Santander Leasing S.A. Arrendamento Mercantil	Brazil	0.00%	89.91%	100.00%	100.00%	Leasing	1,709	59	1,590
Santander Leasing, LLC	United States	0.00%	100.00%	100.00%	100.00%	Leasing	0	1	2
Santander Lending Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Mortgage credit company	243	10	247
Santander Mediación Operador de Banca-Seguros Vinculado, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Insurance intermediary	49	1	3
Santander Merchant Platform Operations, S.A. de C.V.	Mexico	0.00%	98.16%	100.00%	100.00%	Financial services	1	1	2
Santander Merchant Platform Services, S.A. de C.V.	Mexico	0.00%	98.16%	100.00%	100.00%	Financial services	1	0	1
Santander Merchant Platform Solutions México, S.A. de C.V.	Mexico	0.00%	98.16%	100.00%	100.00%	Holding company	119	28	134
Santander Merchant Platform Solutions S.A.	Argentina	0.00%	99.66%	100.00%	100.00%	Payment methods	15	(6)	10
Santander Merchant Platform Solutions Uruguay S.A.	Uruguay	0.00%	100.00%	100.00%	100.00%	Payment methods	5	0	5
Santander Merchant S.A.	Argentina	5.10%	94.90%	100.00%	100.00%	Finance company	1	0	2
Santander Mortgage Holdings Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Financial services	(1)	(23)	0
Santander Paraty Qif PLC	Ireland	0.00%	89.91%	100.00%	100.00%	Investment companies	261	0	235
Santander Pensiones, S.A., E.G.F.P.	Spain	0.00%	100.00%	100.00%	100.00%	Pension fund management company	83	16	184
Santander Pensões - Sociedade Gestora de Fundos de Pensões, S.A.	Portugal	100.00%	0.00%	100.00%	100.00%	Pension fund management company	3	0	3
Santander Prime Auto Issuance Notes 2018-A Designated Activity Company	Ireland	—	(b)	—	—	Securitization	(15)	10	0
Santander Prime Auto Issuance Notes 2018-B Designated Activity Company	Ireland	—	(b)	—	—	Securitization	(17)	(12)	0
Santander Prime Auto Issuance Notes 2018-C Designated Activity Company	Ireland	—	(b)	—	—	Securitization	(6)	(1)	0
Santander Prime Auto Issuance Notes 2018-D Designated Activity Company	Ireland	—	(b)	—	—	Securitization	(24)	(2)	0
Santander Prime Auto Issuance Notes 2018-E Designated Activity Company	Ireland	—	(b)	—	—	Securitization	(10)	(4)	0
Santander Private Banking Gestión, S.A., S.G.I.I.C.	Spain	100.00%	0.00%	100.00%	100.00%	Fund management company	52	12	35
Santander Private Banking s.p.a. in Liquidazione (j)	Italy	100.00%	0.00%	100.00%	100.00%	Finance company	13	1	7
Santander Private Banking UK Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Holding company	304	0	414
Santander Private Real Estate Advisory & Management, S.A.	Spain	99.99%	0.01%	100.00%	100.00%	Real estate	4	0	4
Santander Private Real Estate Advisory, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Real estate	14	1	15
Santander Real Estate, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Inactive	1	0	1
Santander Retail Auto Lease Funding LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	0	0	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Retail Auto Lease Trust 2019-A	United States	—	(b)	—	—	Securitization	67	89	0
Santander Retail Auto Lease Trust 2019-B	United States	—	(b)	—	—	Securitization	42	71	0
Santander Retail Auto Lease Trust 2019-C	United States	—	(b)	—	—	Securitization	45	59	0
Santander Retail Auto Lease Trust 2020-A	United States	—	(b)	—	—	Securitization	48	33	0
Santander Retail Auto Lease Trust 2020-B	United States	—	(b)	—	—	Securitization	26	40	0
Santander Retail Auto Lease Trust 2021-A	United States	—	(b)	—	—	Securitization	0	63	0
Santander Retail Auto Lease Trust 2021-B	United States	—	(b)	—	—	Securitization	0	63	0
Santander Retail Auto Lease Trust 2021-C	United States	—	(b)	—	—	Securitization	0	88	0
Santander Retail Auto Lease Trust 2022-A	United States	—	(b)	—	—	Inactive	0	0	0
Santander Retail Auto Lease Trust 2022-B	United States	—	(b)	—	—	Inactive	0	0	0
Santander Retail Auto Lease Trust 2022-C	United States	—	(b)	—	—	Inactive	0	0	0
Santander Revolving Auto Loan Trust 2019-A	United States	—	(b)	—	—	Securitization	(112)	111	0
Santander Revolving Auto Loan Trust 2021-A	United States	—	(b)	—	—	Inactive	0	0	0
Santander Río Asset Management Gerente de Fondos Comunes de Inversión S.A.	Argentina	0.00%	100.00%	100.00%	100.00%	Fund management company	6	7	3
Santander Río Trust S.A.	Argentina	0.00%	99.97%	100.00%	100.00%	Services	0	0	0
Santander Río Valores S.A.	Argentina	5.10%	94.25%	100.00%	100.00%	Securities company	3	1	4
Santander RMBS 6, Fondo de Titulización	Spain	—	(b)	—	—	Securitization	0	0	0
Santander S.A. Sociedad Securitizadora	Chile	0.00%	67.24%	100.00%	100.00%	Fund management company	0	0	0
Santander Secretariat Services Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Holding company	0	0	0
Santander Securities LLC	United States	0.00%	100.00%	100.00%	100.00%	Securities company	39	4	43
Santander Seguros y Reaseguros, Compañía Aseguradora, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Insurance	1,434	191	1,188
Santander Servicios Corporativos, S.A. de C.V.	Mexico	0.00%	96.24%	100.00%	100.00%	Services	11	0	11
Santander Servicios Especializados, S.A. de C.V.	Mexico	0.00%	96.24%	100.00%	100.00%	Services	3	0	3
Santander Technology USA, LLC	United States	0.00%	100.00%	100.00%	100.00%	IT services	80	(12)	69
Santander Tecnología Argentina S.A.	Argentina	0.00%	99.35%	100.00%	100.00%	IT services	3	2	4
Santander Tecnología México, S.A. de C.V.	Mexico	0.00%	96.24%	100.00%	100.00%	IT services	45	1	45
Santander Tecnología y Operaciones España, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	IT services	46	(4)	37
Santander Totta Seguros, Companhia de Seguros de Vida, S.A.	Portugal	0.00%	99.91%	100.00%	100.00%	Insurance	117	25	47
Santander Totta, SGPS, S.A.	Portugal	99.91 %	0.00 %	99.91 %	99.91 %	Holding company	3,550	54	5,351

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Towarzystwo Funduszy Inwestycyjnych S.A.	Poland	50.00 %	33.70 %	100.00 %	100.00 %	Fund management company	4	25	15
Santander Trade Services Limited	Hong Kong	0.00 %	100.00 %	100.00 %	100.00 %	Inactive	19	3	16
Santander UK Group Holdings plc	United Kingdom	77.67 %	22.33 %	100.00 %	100.00 %	Finance company	14,302	1,783	16,444
Santander UK Investments	United Kingdom	100.00 %	0.00 %	100.00 %	100.00 %	Finance company	53	(2)	48
Santander UK Operations Limited	United Kingdom	0.00 %	100.00 %	100.00 %	100.00 %	Services	27	2	18
Santander UK plc	United Kingdom	0.00 %	100.00 %	100.00 %	100.00 %	Banking	16,029	937	15,741
Santander UK Technology Limited	United Kingdom	0.00 %	100.00 %	100.00 %	100.00 %	IT services	39	4	7
Santander Wealth Management International SA	Switzerland	0.00 %	100.00 %	100.00 %	100.00 %	Asset management	0	0	0
Santusa Holding, S.L.	Spain	69.76 %	30.24 %	100.00 %	100.00 %	Holding company	8,423	637	6,524
SC Austria Finance 2020-1 Designated Activity Company	Ireland	—	(b)	—	—	Securitization	0	0	0
SC Germany Auto 2014-2 UG (haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0
SC Germany Auto 2016-2 UG (haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0
SC Germany Auto 2018-1 UG (haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	(1)	0	0
SC Germany Auto 2019-1 UG (haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0
SC Germany Consumer 2014-1 UG (haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0
SC Germany Consumer 2018-1 UG (haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0
SC Germany Mobility 2019-1 UG (haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0
SC Germany S.A.	Luxembourg	—	(b)	—	—	Securitization	0	0	0
SC Germany S.A., Compartment Consumer 2020-1	Luxembourg	—	(b)	—	—	Securitization	0	0	0
SC Germany S.A., Compartment Consumer 2021-1	Luxembourg	—	(b)	—	—	Securitization	0	0	0
SC Germany S.A., Compartment Mobility 2020-1	Luxembourg	—	(b)	—	—	Securitization	0	0	0
SC Germany Vehicles 2013-1 UG (haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0
SC Germany Vehicles 2015-1 UG (haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0
SC Poland Consumer 15-1 Sp. z.o.o. (j)	Poland	—	(b)	—	—	Securitization	0	0	0
SC Poland Consumer 16-1 Sp. z o.o.	Poland	—	(b)	—	—	Securitization	0	0	0
SCF Ajoneuvohallinto I Limited (j)	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Ajoneuvohallinto II Limited (j)	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Ajoneuvohallinto IX Limited	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Ajoneuvohallinto KIMI VI Limited (j)	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Ajoneuvohallinto VII Limited	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Ajoneuvohallinto VIII Limited	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Ajoneuvohallinto X Limited	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Eastside Locks GP Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Real estate management	0	0	0
SCF Rahoituspalvelut I Designated Activity Company (j)	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Rahoituspalvelut II Designated Activity Company (j)	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Rahoituspalvelut IX DAC	Ireland	—	(b)	—	—	Securitization	1	0	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
SCF Rahoituspalvelut KIMI VI Designated Activity Company (j)	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Rahoituspalvelut VII Designated Activity Company	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Rahoituspalvelut VIII Designated Activity Company	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Rahoituspalvelut X DAC	Ireland	—	(b)	—	—	Securitization	0	0	0
SCM Poland Auto 2019-1 DAC	Ireland	—	(b)	—	—	Securitization	0	0	0
SDMX Superdigital, S.A. de C.V.	Mexico	0.00%	100.00%	100.00%	100.00%	Payment platform	0	0	2
Secucor Finance 2013-I Designated Activity Company (i) (j)	Ireland	—	(b)	—	—	Securitization	0	0	0
Secucor Finance 2021-1, DAC	Ireland	—	(b)	—	—	Securitization	0	0	0
Services and Promotions Delaware Corp.	United States	0.00%	100.00%	100.00%	100.00%	Holding company	58	2	60
Services and Promotions Miami LLC	United States	0.00%	100.00%	100.00%	100.00%	Real estate	51	3	53
Servicio de Alarmas Controladas por Ordenador, S.A.	Spain	99.99%	0.01%	100.00%	100.00%	Security	2	0	1
Servicios de Cobranza, Recuperación y Seguimiento, S.A. de C.V.	Mexico	0.00%	85.00%	85.00%	85.00%	Finance company	34	1	32
Sheppards Moneybrokers Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Shiloh III Wind Project, LLC	United States	0.00%	100.00%	100.00%	100.00%	Renewable energies	324	1	325
Silk Finance No. 5	Portugal	—	(b)	—	—	Securitization	1	9	0
SMPS Merchant Platform Solutions México, S.A de C.V	Mexico	0.00%	98.16%	100.00%	100.00%	Payments and collection services	112	27	141
Sociedad Integral de Valoraciones Automatizadas, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Appraisals	1	1	1
Sociedad Operadora de Tarjetas de Pago Santander Getnet Chile S.A.	Chile	0.00%	67.12%	100.00%	100.00%	Payments and collection services	20	(8)	8
Socur S.A. (f)	Uruguay	100.00%	0.00%	100.00%	100.00%	Finance company	43	23	59
Solarlaser Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Solution 4Fleet Consultoria Empresarial S.A.	Brazil	0.00%	71.93%	80.00%	—	Vehicle rental	3	0	2
Sovereign Community Development Company	United States	0.00%	100.00%	100.00%	100.00%	Holding company	38	1	39
Sovereign Delaware Investment Corporation	United States	0.00%	100.00%	100.00%	100.00%	Holding company	134	1	135
Sovereign Lease Holdings, LLC	United States	0.00%	100.00%	100.00%	100.00%	Financial services	221	1	221
Sovereign REIT Holdings, Inc.	United States	0.00%	100.00%	100.00%	100.00%	Holding company	7,501	74	7,575
Sovereign Spirit Limited (n)	Bermudas	0.00%	100.00%	100.00%	100.00%	Leasing	0	0	0
SSA Swiss Advisors AG	Switzerland	0.00%	100.00%	100.00%	—	Asset management	0	0	3
Sterrebeeck B.V.	Netherlands	100.00%	0.00%	100.00%	100.00%	Holding company	4,058	713	10,331
Suleyado 2003, S.L. Unipersonal	Spain	0.00%	100.00%	100.00%	100.00%	Securities investment	25	0	24
Summer Empreendimentos Ltda.	Brazil	0.00%	89.91%	100.00%	100.00%	Real estate management	3	0	3
Super Pagamentos e Administração de Meios Eletrônicos S.A.	Brazil	0.00%	100.00%	100.00%	100.00%	Payment services	30	(7)	79
Superdigital Argentina S.A.U.	Argentina	0.00%	100.00%	100.00%	100.00%	IT services	1	(1)	1
Superdigital Colombia S.A.S.	Colombia	0.00%	100.00%	100.00%	99.97%	IT services	0	0	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Superdigital Holding Company, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Holding company	103	3	106
Superdigital Perú S.A.C.	Peru	0.00%	100.00%	100.00%	100.00%	Financial services	1	0	0
Suzuki Servicios Financieros, S.L.	Spain	0.00%	51.00%	51.00%	51.00%	Intermediation	9	3	0
Svensk Autofinans WH 1 Designated Activity Company	Ireland	—	(b)	—	—	Securitization	0	0	0
Swesant SA	Switzerland	0.00%	100.00%	100.00%	100.00%	Holding company	19	42	0
SX Negócios Ltda.	Brazil	0.00%	89.91%	100.00%	100.00%	Telemarketing	10	2	11
Tabasco Energía España, S.L. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	6	0	0
Taxagest Sociedade Gestora de Participações Sociais, S.A.	Portugal	0.00%	99.87%	100.00%	100.00%	Holding company	56	0	0
Teatinos Siglo XXI Inversiones S.A.	Chile	50.00%	50.00%	100.00%	100.00%	Holding company	1,497	277	2,064
Tekutina Private Limited	India	0.00%	100.00%	100.00%	—	Financial services	1	0	1
The Alliance & Leicester Corporation Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Real estate	14	0	14
The Best Specialty Coffee, S.L. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Restaurant services	3	0	2
Time Retail Finance Limited (j)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Services	0	0	0
TIMFin S.p.A.	Italy	0.00%	51.00%	51.00%	51.00%	Finance company	53	(8)	28
Tonopah Solar I, LLC	United States	0.00%	100.00%	100.00%	100.00%	Holding company	5	0	5
Tornquist Asesores de Seguros S.A. (j)	Argentina	0.00%	99.99%	99.99%	99.99%	Inactive	0	0	0
Toro Corretora de Títulos e Valores Mobiliários Ltda.	Brazil	0.00%	53.95%	60.00%	—	Securities investment	11	(2)	5
Toro Investimentos S.A.	Brazil	0.00%	53.95%	100.00%	—	Consulting services	5	(1)	2
Totta (Ireland), PLC (h)	Ireland	0.00%	99.86%	100.00%	100.00%	Finance company	451	9	450
Totta Urbe - Empresa de Administração e Construções, S.A.	Portugal	0.00%	99.86%	100.00%	100.00%	Real estate	102	(5)	100
Trabajando.com Mexico, S.A. de C.V. en liquidación (j)	Mexico	0.00%	100.00%	100.00%	100.00%	Services	0	0	0
Trade Maps 3 Hong Kong Limited	Hong-Kong	—	(b)	—	—	Securitization	0	0	0
Trade Maps 3 Ireland Limited (j)	Ireland	—	(b)	—	—	Securitization	0	0	0
Trans Rotor Limited (j)	United Kingdom	100.00%	0.00%	100.00%	100.00%	Renting	0	0	0
Transolver Finance EFC, S.A.	Spain	0.00%	51.00%	51.00%	51.00%	Leasing	67	4	17
Tresmares Growth Fund Santander, SCR, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	32	0	32
Tresmares Santander Direct Lending, SICC, S.A.	Spain	99.60%	0.00%	99.60%	99.60%	Management of funds	414	6	413
Tuttle and Son Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Universia Brasil S.A.	Brazil	0.00%	100.00%	100.00%	100.00%	Internet	0	0	0
Universia Chile S.A.	Chile	0.00%	86.84%	86.84%	86.84%	Internet	0	0	0
Universia Colombia S.A.S.	Colombia	0.00%	100.00%	100.00%	100.00%	Internet	0	0	0
Universia España Red de Universidades, S.A.	Spain	0.00%	89.45%	89.45%	89.45%	Internet	2	0	2
Universia Holding, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	19	(3)	17

Subsidiaries of Banco Santander, S.A.[1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Universia México, S.A. de C.V.	Mexico	0.00%	100.00%	100.00%	100.00%	Internet	0	0	0
Universia Perú, S.A.	Peru	0.00%	99.76%	99.76%	100.00%	Internet	0	0	0
Universia Uruguay, S.A.	Uruguay	0.00%	100.00%	100.00%	100.00%	Internet	0	0	0
Uro Property Holdings, SOCIMI, S.A. (c)	Spain	99.99%	0.00%	99.99%	99.99%	Real estate investment	163	9	179
Verbena FCVS - Fundo de Investimentos em Direitos Creditórios	Brazil	—	(b)	—	—	Investment fund	(3)	3	0
Wallcesa, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Financial services	(936)	9	0
Wave Holdco, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Holding company	0	0	0
Waypoint Insurance Group, Inc.	United States	0.00%	100.00%	100.00%	100.00%	Holding company	9	0	9
WIM Servicios Corporativos, S.A. de C.V.	Mexico	0.00%	100.00%	100.00%	100.00%	Advisory services	0	0	0
WTW Shipping Designated Activity Company	Ireland	100.00%	0.00%	100.00%	100.00%	Leasing	15	1	9
Yera Servicer Company 2021, S.L. Unipersonal	Spain	0.00%	100.00%	100.00%	—	Real estate management	19	(1)	18

a. Amount according to the provisional books of each company at the date of publication of these annexes generally referring to 31 December 2021 without taking into account, where applicable, interim dividends paid during the year. In the carrying amount (cost net of provision), the Group's percentage ownership has been applied to the figure for each holding company, disregarding goodwill impairments made in the consolidation process. The figures for foreign companies are converted into euros at the year-end exchange rate.
b. Companies over which effective control is maintained.
c. Data as at 31 December 2020, latest available accounts.
d. Data as at 31 March 2021, latest accounts available.
e. Data as at 30 June 2021, last accounts available.
f. Data as at 30 September 2021, last accounts available.
g. Data as at 31 July 2021, last accounts available.
h. Data as at 30 November 2021, last accounts available.
i. Data as at 31 January 2021, latest available accounts.
j. Company in liquidation as at 31 December 2021.
k. Pursuant to Article 3 of Royal Decree 1159/ 2010, of 17 September, approving the rules for the preparation of consolidated annual accounts, in order to determine the voting rights, voting rights held directly by the parent company have been added to those held by companies controlled by the parent company or by other persons acting in their own name but on behalf of a Group company. For these purposes, the number of votes corresponding to the parent company, in relation to the companies indirectly dependent on it, is that corresponding to the dependent company that directly participates in the share capital of the latter.
l. Company resident for tax purposes in Spain.
m. See note 2.b.i.
n. Company resident for tax purposes in the United Kingdom.
o. Data as at 28 February 2021, last accounts available.
p. Companies in liquidation. Pending registration.

(1) Companies issuing preference shares are listed in Annex III, together with other relevant information.

Appendix II

Societies of which Grupo Santander owns more than 5% (g) , entities associated with Grupo Santander and jointly controlled entities

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (f)		Activity	Type of company	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020			Asset	Capital + reserves	Net results
Abra 1 Limited (k)	Caymand Island	—	(h)	—	—	Leasing	Joint venture	—	—	—
Achmea Tussenholding, B.V. (b)	Netherlands	8.89%	0.00%	8.89%	8.89%	Holding company	-	356	356	20
Administrador Financiero de Transantiago S.A.	Chile	0.00%	13.42%	20.00%	20.00%	Payment and collection services	Associated	56	18	2
Aegon Santander Portugal Não Vida - Companhia de Seguros, S.A.	Portugal	0.00%	48.95%	49.00%	49.00%	Insurance	Joint venture	56	14	9
Aegon Santander Portugal Vida - Companhia de Seguros Vida, S.A.	Portugal	0.00%	48.95%	49.00%	49.00%	Insurance	Joint venture	129	23	18
Aeroplan - Sociedade Construtora de Aeroportos, Lda. (e)	Portugal	0.00%	19.97%	20.00%	20.00%	Inactive	-	0	0	0
Aguas de Fuensanta, S.A. (e) (k)	Spain	36.78%	0.00%	36.78%	36.78%	Food	-	—	—	—
Alcuter 2, S.L. (k)	Spain	37.23%	0.00%	37.23%	37.23%	Technical services	-	—	—	—
Alma UK Holdings Ltd	United Kingdom	30.00%	0.00%	30.00%	—	Holding company	Joint venture	4	4	(1)
Altamira Asset Management, S.A. (consolidado)	Spain	0.00%	15.00%	15.00%	15.00%	Real estate	-	236	3	(2)
Apolo Fundo de Investimento em Direitos Creditórios	Brazil	0.00%	29.97%	33.33%	33.33%	Investment fund	Joint venture	454	421	33
Arena Communications Network, S.L. (consolidado) (b)	Spain	20.00%	0.00%	20.00%	20.00%	Advertising	Associated	296	99	(6)
Attijariwafa Bank Société Anonyme (consolidado) (b)	Morocco	0.00%	5.10%	5.10%	5.11%	Banking	-	54,011	4,809	352
Autopistas del Sol S.A. (b)	Argentina	0.00%	14.17%	14.17%	14.17%	Motorway concession	-	169	82	0
Banco RCI Brasil S.A.	Brazil	0.00%	35.87%	39.89%	39.89%	Banking	Joint venture	1,699	217	25
Banco S3 Caceis México, S.A., Institución de Banca Múltiple	Mexico	0.00%	50.00%	50.00%	50.00%	Banking	Joint venture	157	67	4
Bank of Beijing Consumer Finance Company	China	0.00%	20.00%	20.00%	20.00%	Finance company	Associated	1,369	120	8
Bank of Shanghai Co., Ltd. (consolidado) (b)	China	6.54%	0.00%	6.54%	6.54%	Banking	-	342,252	23,563	2,903
CACEIS (consolidado)	France	0.00%	30.50%	30.50%	30.50%	Custody services	Associated	122,132	3,979	187
Câmara Interbancária de Pagamentos - CIP	Brazil	0.00%	16.07%	17.87%	17.65%	Payment and collection services	-	342	235	69
Cantabria Capital, SGEIC, S.A.	Spain	50.00%	0.00%	50.00%	50.00%	Venture capital	Associated	0	0	0
Car10 Tecnologia e Informação S.A.	Brazil	0.00%	41.96%	46.67%	—	Internet	Joint venture	8	2	(1)
CCPT - ComprarCasa, Rede Serviços Imobiliários, S.A.	Portugal	0.00%	49.98%	49.98%	49.98%	Real estate services	Joint venture	0	0	0
Centro de Compensación Automatizado S.A.	Chile	0.00%	22.37%	33.33%	33.33%	Payment and collection services	Associated	14	9	3
Centro para el Desarrollo, Investigación y Aplicación de Nuevas Tecnologías, S.A. (b)	Spain	0.00%	49.00%	49.00%	49.00%	Technology	Associated	3	2	0
CNP Santander Insurance Europe Designated Activity Company	Ireland	49.00%	0.00%	49.00%	49.00%	Insurance brokerage	Associated	1,004	191	42
CNP Santander Insurance Life Designated Activity Company	Ireland	49.00%	0.00%	49.00%	49.00%	Insurance brokerage	Associated	1,294	151	43
CNP Santander Insurance Services Ireland Limited	Ireland	49.00%	0.00%	49.00%	49.00%	Services	Associated	31	4	1
Comder Contraparte Central S.A	Chile	0.00%	8.37%	12.47%	12.47%	Financial services	Associated	34	11	1
Companhia Promotora UCI	Brazil	0.00%	25.00%	25.00%	25.00%	Financial services	Joint venture	1	(1)	0

Societies of which Grupo Santander owns more than 5% (g) , entities associated with Grupo Santander and jointly controlled entities

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (f)		Activity	Type of company	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020			Asset	Capital + reserves	Net results
Compañia Española de Financiación de Desarrollo, Cofides, S.A., SME (b)	Spain	20.18%	0.00%	20.18%	20.18%	Finance company	-	153	140	10
Compañía Española de Seguros de Crédito a la Exportación, S.A., Compañía de Seguros y Reaseguros (consolidado) (b)	Spain	23.33%	0.55%	23.88%	23.88%	Credit insurance	-	942	385	34
Compañía Española de Viviendas en Alquiler, S.A.	Spain	24.07%	0.00%	24.07%	24.07%	Real estate	Associated	528	333	14
Compañía para los Desarrollos Inmobiliarios de la Ciudad de Hispalis, S.L., en liquidación (l) (e)	Spain	21.98%	0.00%	21.98%	21.98%	Real estate development	-	38	6	0
Connecting Visions Ecosystems, S.L.	Spain	19.90%	0.00%	19.90%	19.90%	Consulting services	Joint venture	2	2	(1)
Corkfoc Cortiças, S.A. (c)	Portugal	0.00%	27.55%	27.58%	27.58%	Cork industry	-	3	20	0
Corridor Texas Holdings LLC (consolidado) (b)	United States	0.00%	33.40%	33.40%	36.30%	Holding company	-	190	163	(5)
Desarrollo Eólico las Majas VI, S.L.	Spain	45.00%	0.00%	45.00%	—	Renewable energies	Joint venture	28	6	0
Ebury Partners Limited (consolidado) (d) (m)	United Kingdom	0.00%	44.06%	51.28%	50.41%	Payment services	Associated	781	55	(69)
Energias Renovables de Ormonde 25, S.L.	Spain	0.00%	55.00%	55.00%	—	Renewable energies	Joint venture	0	0	0
Energias Renovables de Ormonde 26, S.L.	Spain	0.00%	55.00%	55.00%	—	Renewable energies	Joint venture	0	0	0
Energias Renovables de Ormonde 27, S.L.	Spain	0.00%	55.00%	55.00%	—	Renewable energies	Joint venture	0	0	0
Energias Renovables de Ormonde 30, S.L.	Spain	0.00%	55.00%	55.00%	—	Renewable energies	Joint venture	1	0	0
Energias Renovables de Titania, S.L.	Spain	0.00%	55.00%	55.00%	—	Renewable energies	Joint venture	0	0	0
Energias Renovables Gladiateur 45, S.L.	Spain	0.00%	55.00%	55.00%	—	Renewable energies	Joint venture	0	0	0
Energias Renovables Prometeo, S.L.	Spain	0.00%	55.00%	55.00%	—	Renewable energies	Joint venture	0	0	0
Euro Automatic Cash Entidad de Pago, S.L.	Spain	50.00%	0.00%	50.00%	50.00%	Payment services	Associated	57	46	(12)
European Hospitality Opportunities S.à r.l. (o)	Luxembourg	0.00%	49.00%	49.00%	—	Holding company	Joint venture	—	—	—
Evolve SPV S.r.l.	Italy	—	(h)	—	—	Securitizations	Joint venture	105	0	7
FAFER- Empreendimentos Urbanisticos e de Construção, S.A. (b) (e)	Portugal	0.00%	36.57%	36.62%	36.62%	Real estate	-	0	1	0
Federal Reserve Bank of Boston (b)	United States	0.00%	20.09%	20.09%	25.73%	Banking	-	194,429	1,573	(1)
Fondo de Titulización de Activos UCI 11	Spain	—	(h)	—	—	Securitizations	Joint venture	133	0	0
Fondo de Titulización de Activos UCI 14	Spain	—	(h)	—	—	Securitizations	Joint venture	346	0	0
Fondo de Titulización de Activos UCI 15	Spain	—	(h)	—	—	Securitizations	Joint venture	426	0	0
Fondo de Titulización de Activos UCI 16	Spain	—	(h)	—	—	Securitizations	Joint venture	597	0	0
Fondo de Titulización de Activos UCI 17	Spain	—	(h)	—	—	Securitizations	Joint venture	517	0	0
Fondo de Titulización Hipotecaria UCI 12	Spain	—	(h)	—	—	Securitizations	Joint venture	189	0	0
Fondo de Titulización, RMBS Prado III	Spain	—	(h)	—	—	Securitizations	Joint venture	0	0	0
Fondo de Titulización, RMBS Prado IV	Spain	—	(h)	—	—	Securitizations	Joint venture	288	0	0
Fondo de Titulización, RMBS Prado IX	Spain	—	(h)	—	—	Securitizations	Joint venture	499	0	0

Societies of which Grupo Santander owns more than 5% (g) , entities associated with Grupo Santander and jointly controlled entities

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (f)		Activity	Type of company	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020			Asset	Capital + reserves	Net results
Fondo de Titulización, RMBS Prado V	Spain	—	(h)	—	—	Securitizations	Joint venture	309	0	0
Fondo de Titulización, RMBS Prado VI	Spain	—	(h)	—	—	Securitizations	Joint venture	340	0	0
Fondo de Titulización, RMBS Prado VII	Spain	—	(h)	—	—	Securitizations	Joint venture	481	0	0
Fondo de Titulización, RMBS Prado VIII	Spain	—	(h)	—	—	Securitizations	Joint venture	467	0	0
Fortune Auto Finance Co., Ltd	China	0.00%	50.00%	50.00%	50.00%	Finance company	Joint venture	3,181	384	61
Fremman limited	United Kingdom	33.00%	0.00%	4.99%	4.99%	Finance company	Associated	2	0	(3)
Gestora de Inteligência de Crédito S.A.	Brazil	0.00%	17.98%	20.00%	20.00%	Collection	Joint venture	186	21	(10)
Gire S.A.	Argentina	0.00%	57.93%	58.33%	58.33%	Payment and collection services	Associated	158	25	13
HCUK Auto Funding 2017-2 Ltd	United Kingdom	—	(h)	—	—	Securitizations	Joint venture	833	0	0
Healthy Neighborhoods Equity Fund I LP (b)	United States	0.00%	22.37%	22.37%	22.37%	Real estate	-	14	14	(2)
Hyundai Capital UK Limited	United Kingdom	0.00%	50.01%	50.01%	50.01%	Finance company	Joint venture	4,338	323	79
Hyundai Corretora de Seguros Ltda.	Brazil	0.00%	44.96%	50.00%	50.00%	Insurance brokerage	Joint venture	1	0	0
Imperial Holding S.C.A. (e) (i)	Luxembourg	0.00%	36.36%	36.36%	36.36%	Securities investment	-	0	(112)	0
Imperial Management S.à r.l. (b) (e)	Luxembourg	0.00%	40.20%	40.20%	40.20%	Holding company	-	0	0	0
Indice Iberoamericano de Investigación y Conocimiento, A.I.E.	Spain	0.00%	51.00%	51.00%	51.00%	Information system	Joint venture	1	(6)	(1)
Inmoalemania Gestión de Activos Inmobiliarios, S.A.	Spain	0.00%	20.00%	20.00%	20.00%	Holding company	-	0	0	0
Innohub S.A.P.I. de C.V.	Mexico	0.00%	20.00%	20.00%	20.00%	IT services	Associated	1	3	(2)
Inverlur Aguilas I, S.L.	Spain	0.00%	50.00%	50.00%	50.00%	Real estate	Joint venture	0	0	0
Inverlur Aguilas II, S.L.	Spain	0.00%	50.00%	50.00%	50.00%	Real estate	Joint venture	1	1	0
Inversiones Ibersuizas, S.A. (b)	Spain	25.42%	0.00%	25.42%	25.42%	Venture capital	-	31	19	10
Inversiones ZS América Dos Ltda.	Chile	0.00%	49.00%	49.00%	49.00%	Real estate and securities investment	Associated	269	269	34
Inversiones ZS América SpA	Chile	0.00%	49.00%	49.00%	49.00%	Real estate and securities investment	Associated	395	396	35
J.C. Flowers I L.P. (b)	United States	0.00%	11.10%	0.00%	0.00%	Holding company	-	2	2	(1)
JCF AIV P L.P. (b)	Canada	0.00%	7.67%	4.99%	4.99%	Holding company	-	5	5	0
LB Oprent, S.A.	Spain	40.00%	0.00%	40.00%	38.33%	Industrial machinery rent	Associated	4	1	1
Loop Gestão de Pátios S.A.	Brazil	0.00%	32.10%	35.70%	35.70%	Business services	Joint venture	7	2	(1)
Mapfre Santander Portugal - Companhia de Seguros, S.A.	Portugal	0.00%	49.94%	49.99%	49.99%	Insurance	Associated	13	8	(3)
Massachusetts Business Development Corp. (consolidado) (b)	United States	0.00%	21.61%	21.61%	21.61%	Finance company	-	55	11	1
MB Capital Fund IV, LLC (b)	United States	0.00%	21.51%	21.51%	21.51%	Finance company	-	18	17	1
Merlin Properties, SOCIMI, S.A. (consolidado) (b)	Spain	19.07%	5.70%	24.77%	24.81%	Real estate investment	Associated	13,478	6,640	56

Societies of which Grupo Santander owns more than 5% (g) , entities associated with Grupo Santander and jointly controlled entities

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (f)		Activity	Type of company	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020			Asset	Capital + reserves	Net results
Metrovacesa, S.A. (consolidado) (b)	Spain	31.94%	17.50%	49.44%	49.45%	Real estate development	Associated	2,927	2,343	(164)
New PEL S.à r.l. (c) (e)	Luxembourg	0.00%	7.67%	0.00%	0.00%	Holding company	-	0	0	0
NIB Special Investors IV-A LP (n)	Canada	0.00%	0.00%	0.00%	4.99%	Holding company	-	—	—	—
NIB Special Investors IV-B LP (n)	Canada	0.00%	0.00%	0.00%	4.99%	Holding company	-	—	—	—
Niuco 15, S.L. (k)	Spain	37.23%	0.00%	37.23%	37.23%	Technical services	-	—	—	—
Ocyener 2008, S.L.	Spain	0.00%	45.00%	45.00%	—	Holding company	Associated	2	1	1
Operadora de Activos Beta, S.A. de C.V.	Mexico	49.99%	0.00%	49.99%	49.99%	Finance company	Associated	0	0	0
Pag10 Fomento Mercantil Eireli	Brazil	0.00%	41.96%	46.67%	—	Factoring	Joint venture	0	0	0
Payever GmbH	Germany	0.00%	10.00%	10.00%	10.00%	Software	Associated	3	2	0
Play Digital S.A.	Argentina	0.00%	15.59%	15.70%	—	Payment platform	Associated	11	23	(12)
POLFUND - Fundusz Poręczeń Kredytowych S.A.	Poland	0.00%	33.70%	50.00%	50.00%	Management	Associated	28	20	0
Portland SPV S.r.l.	Italy	—	(h)	—	—	Securitizations	Joint venture	234	0	0
Procapital - Investimentos Imobiliários, S.A. (c) (e)	Portugal	0.00%	39.96%	40.00%	40.00%	Real estate	-	2	13	0
Project Quasar Investments 2017, S.L. (consolidado) (b)	Spain	49.00%	0.00%	49.00%	49.00%	Holding company	-	6,984	2,638	(1,852)
Promontoria Manzana, S.A. (consolidado) (b)	Spain	20.00%	0.00%	20.00%	20.00%	Holding company	Associated	1,068	319	(38)
PSA Corretora de Seguros e Serviços Ltda.	Brazil	0.00%	44.96%	50.00%	50.00%	Insurance	Joint venture	0	0	0
PSA Insurance Europe Limited	Malta	0.00%	50.00%	50.00%	50.00%	Insurance	Joint venture	254	59	26
PSA Life Insurance Europe Limited	Malta	0.00%	50.00%	50.00%	50.00%	Insurance	Joint venture	110	13	20
Redbanc S.A.	Chile	0.00%	22.44%	33.43%	33.43%	Services	Associated	29	9	1
Redsys Servicios de Procesamiento, S.L. (consolidado)	Spain	24.90%	0.06%	24.96%	20.06%	Cards	Associated	108	71	4
Relevante e Astuto, S.A.	Portugal	0.00%	70.00%	70.00%	—	Real estate management	Joint venture	5	0	0
Retama Real Estate, S.A.	Spain	0.00%	50.00%	50.00%	50.00%	Services	Joint venture	30	(45)	(1)
Rías Redbanc S.A.	Uruguay	0.00%	25.00%	25.00%	25.00%	Services	-	3	1	0
RMBS Green Belem I	Portugal	—	(h)	—	—	Securitizations	Joint venture	309	0	0
S3 Caceis Brasil Distribuidora de Títulos e Valores Mobiliários S.A.	Brazil	0.00%	50.00%	50.00%	50.00%	Securities investment	Joint venture	207	143	18
S3 Caceis Brasil Participações S.A.	Brazil	0.00%	50.00%	50.00%	50.00%	Holding company	Joint venture	163	145	18
Sancus Green Investments II, S.C.R., S.A. (o)	Spain	0.00%	43.29%	43.29%	—	Venture capital	-	—	—	—
Santander Alternatives SICAV RAIF (c)	Luxembourg	0.00%	48.03%	48.03%	100.00%	Investment company	-	13	12	0
Santander Assurance Solutions, S.A.	Spain	0.00%	66.67%	66.67%	73.99%	Insurance intermediary	Joint venture	10	4	1
Santander Auto S.A.	Brazil	0.00%	44.96%	50.00%	50.00%	Insurance	Associated	25	5	2
Santander Aviva Towarzystwo Ubezpieczeń na Życie S.A.	Poland	0.00%	33.03%	49.00%	49.00%	Insurance	Associated	299	20	21
Santander Aviva Towarzystwo Ubezpieczeń S.A.	Poland	0.00%	33.03%	49.00%	49.00%	Insurance	Associated	94	39	12
Santander Caceis Colombia S.A. Sociedad Fiduciaria	Colombia	0.00%	50.00%	50.00%	50.00%	Finance company	Joint venture	7	7	(1)

Societies of which Grupo Santander owns more than 5% (g) , entities associated with Grupo Santander and jointly controlled entities

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (f)		Activity	Type of company	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020			Asset	Capital + reserves	Net results
Santander Caceis Latam Holding 1, S.L.	Spain	0.00%	50.00%	50.00%	50.00%	Holding company	Joint venture	722	716	5
Santander Caceis Latam Holding 2, S.L.	Spain	0.00%	50.00%	50.00%	50.00%	Holding company	Joint venture	2	2	0
Santander Generales Seguros y Reaseguros, S.A.	Spain	0.00%	49.00%	49.00%	49.00%	Insurance	Joint venture	732	206	39
Santander Mapfre Seguros y Reaseguros, S.A.	Spain	0.00%	49.99%	49.99%	49.99%	Insurance	Associated	90	57	(13)
Santander Vida Seguros y Reaseguros, S.A.	Spain	0.00%	49.00%	49.00%	49.00%	Insurance	Joint venture	1,036	367	36
Sedesa Seguros de Depósitos S.A. (b)	Argentina	0.00%	13.47%	13.56%	—	Fund management	-	2	2	0
Sepacon 31, S.L. (k)	Spain	37.23%	0.00%	37.23%	37.23%	Technical services	-	—	—	—
Servicios de Infraestructura de Mercado OTC S.A	Chile	0.00%	8.37%	12.48%	12.48%	Services	Associated	37	13	0
SIBS-SGPS, S.A. (b)	Portugal	0.00%	16.52%	16.55%	16.55%	Portfolio management	-	365	59	41
Siguler Guff SBIC Fund LP (b)	United States	0.00%	20.00%	20.00%	20.00%	Investment fund	-	8	1	0
Sistema de Tarjetas y Medios de Pago, S.A. (b)	Spain	20.61%	0.00%	20.61%	18.11%	Payment methods	Associated	673	4	0
Sistemas Técnicos de Encofrados, S.A. (consolidado) (b)	Spain	27.15%	0.00%	27.15%	27.15%	Building materials	-	89	14	0
Sociedad Conjunta para la Emisión y Gestión de Medios de Pago, E.F.C., S.A.	Spain	45.70%	0.00%	45.70%	45.70%	Payment services	Joint venture	107	36	1
Sociedad de Garantía Recíproca de Santander, S.G.R. (b)	Spain	25.35%	0.25%	25.60%	25.73%	Financial services	-	17	11	0
Sociedad de Gestión de Activos Procedentes de la Reestructuración Bancaria, S.A. (b)	Spain	22.21%	0.00%	22.21%	22.21%	Financial services	-	27,586	230	(1,073)
Sociedad Interbancaria de Depósitos de Valores S.A.	Chile	0.00%	19.66%	29.29%	29.29%	Securities deposit	Associated	7	6	1
Solar Maritime Designated Activity Company (b)	Ireland	—	(h)	—	—	Leasing	Joint venture	113	(7)	0
Stephens Ranch Wind Energy Holdco LLC (consolidado) (b)	United States	0.00%	17.10%	17.10%	19.20%	Renewable energies	-	218	208	(7)
Tbforte Segurança e Transporte de Valores Ltda.	Brazil	0.00%	17.06%	18.98%	19.81%	Security	Associated	101	62	2
Tbnet Comércio, Locação e Administração Ltda.	Brazil	0.00%	17.06%	18.98%	19.81%	Telecommunications	Associated	69	66	2
Tecban Serviços Integrados Ltda.	Brazil	0.00%	17.06%	18.98%	—	IT services	Associated	0	0	0
Tecnologia Bancária S.A.	Brazil	0.00%	17.06%	19.81%	19.81%	ATM	Associated	428	115	26
Tikgi Aviation One Designated Activity Company	Ireland	—	(h)	—	—	Renting	-	224	(2)	1
Tonopah Solar Energy Holdings I, LLC (consolidado) (b)	United States	0.00%	26.80%	26.80%	26.80%	Holding company	Joint venture	0	0	0
Trabajando.com Chile S.A.	Chile	0.00%	33.33%	33.33%	33.33%	Services	Associated	2	(1)	1
Transbank S.A.	Chile	0.00%	16.78%	25.00%	25.00%	Cards	Associated	1,366	101	(13)
Tresmares Growth Fund II, SCR, S.A.	Spain	40.00%	0.00%	40.00%	40.00%	Holding company	-	49	45	(2)
Tresmares Growth Fund III, SCR, S.A.	Spain	40.00%	0.00%	40.00%	40.00%	Holding company	-	38	34	(2)
U.C.I., S.A.	Spain	50.00%	0.00%	50.00%	50.00%	Holding company	Joint venture	448	127	(6)
UCI Hellas Credit and Loan Receivables Servicing Company S.A.	Greece	0.00%	50.00%	50.00%	50.00%	Financial services	Joint venture	1	1	0
UCI Holding Brasil Ltda.	Brazil	0.00%	50.00%	50.00%	50.00%	Holding company	Joint venture	1	0	0
UCI Mediação de Seguros Unipessoal, Lda.	Portugal	0.00%	50.00%	50.00%	50.00%	Insurance brokerage	Joint venture	0	0	0

Societies of which Grupo Santander owns more than 5% (g) , entities associated with Grupo Santander and jointly controlled entities

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (f)		Activity	Type of company	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020			Asset	Capital + reserves	Net results
UCI Servicios para Profesionales Inmobiliarios, S.A.	Spain	0.00%	50.00%	50.00%	50.00%	Real estate services	Joint venture	1	0	0
Unicre-Instituição Financeira de Crédito, S.A.	Portugal	0.00%	21.83%	21.86%	21.86%	Finance company	Associated	409	99	20
Unión de Créditos Inmobiliarios, S.A., EFC	Spain	0.00%	50.00%	50.00%	50.00%	Mortgage credit company	Joint venture	11,294	459	7
VCFS Germany GmbH	Germany	0.00%	50.00%	50.00%	50.00%	Marketing	Joint venture	1	0	0
Venda de Veículos Fundo de Investimento em Direitos Creditórios	Brazil	—	(h)	—	—	Securitizations	Joint venture	107	103	4
Volvo Car Financial Services UK Limited	United Kingdom	0.00%	50.01%	50.01%	50.00%	Leasing	Joint venture	927	81	(4)
Webmotors S.A.	Brazil	0.00%	62.94%	70.00%	70.00%	Services	Joint venture	54	32	10
Zurich Santander Brasil Seguros e Previdência S.A.	Brazil	0.00%	48.79%	48.79%	48.79%	Insurance	Associated	11,892	365	106
Zurich Santander Brasil Seguros S.A.	Brazil	0.00%	48.79%	48.79%	48.79%	Insurance	Associated	156	(2)	29
Zurich Santander Holding (Spain), S.L.	Spain	0.00%	49.00%	49.00%	49.00%	Holding company	Associated	1,182	936	246
Zurich Santander Holding Dos (Spain), S.L.	Spain	0.00%	49.00%	49.00%	49.00%	Holding company	Associated	587	384	204
Zurich Santander Insurance América, S.L.	Spain	49.00%	0.00%	49.00%	49.00%	Holding company	Associated	1,996	1,490	475
Zurich Santander Seguros Argentina S.A. (j)	Argentina	0.00%	49.00%	49.00%	49.00%	Insurance	Associated	60	18	18
Zurich Santander Seguros de Vida Chile S.A.	Chile	0.00%	49.00%	49.00%	49.00%	Insurance	Associated	213	23	30
Zurich Santander Seguros Generales Chile S.A.	Chile	0.00%	49.00%	49.00%	49.00%	Insurance	Associated	249	45	13
Zurich Santander Seguros México, S.A.	Mexico	0.00%	49.00%	49.00%	49.00%	Insurance	Associated	887	34	88
Zurich Santander Seguros Uruguay S.A.	Uruguay	0.00%	49.00%	49.00%	49.00%	Insurance	Associated	32	14	7

a. Amount according to the provisional books at the date of publication of these annexes of each company generally referring to 31 December 2021, unless otherwise indicated because the annual accounts have not yet been prepared. Data for foreign companies are converted into euros at the year-end exchange rate.
b. Data as at 31 December 2020, latest available accounts.
c. Data as at 31 December 2019, latest available accounts.
d. The Group is entitled to receive 51.28% of the dividends distributed by the company.
e. Company in liquidation as at 31 December 2021.
f. Pursuant to Article 3 of Royal Decree 1159/ 2010, of 17 September, approving the rules for the preparation of consolidated annual accounts, in order to determine the voting rights, voting rights held directly by the parent company have been added to those held by companies controlled by the parent company or by other persons acting in their own name but on behalf of a group company. For these purposes, the number of votes corresponding to the parent company, in relation to the companies indirectly dependent on it, is that corresponding to the dependent company that directly participates in the share capital of the latter.
g. Excluding the Group companies listed in Appendix I, as well as those which are of negligible interest with respect to the true and fair view that the consolidated financial statements must give (in accordance with articles 48 of the Commercial Code and 260 of the Spanish Companies Act).
h. Companies over which joint control is maintained.
i. Data as at 31 October 2020, latest available accounts.
j. Data as at 30 June 2021, latest available accounts.
k. Company with no financial information available.
l. Data as at 30 November 2018, latest available accounts.
m. Data as at 30 April 2021, latest available accounts.
n. Company in liquidation. Pending registration.
o. Company recently incorporated, no accounts available.

Appendix III

Issuing subsidiaries of shares and preference shares

		% of ownership held by Banco Santander			EUR million (a)			
Company	Location	Direct	Indirect	Activity	Capital	Reserves	Cost of preferred	Net results
Emisora Santander España, S.A. Unipersonal	Spain	100.00%	0.00%	Finance company	2	0	0	0
Santander UK (Structured Solutions) Limited	United Kingdom	0.00%	100.00%	Finance company	0	0	0	0
Sovereign Real Estate Investment Trust	United States	0.00%	100.00%	Finance company	4,931	(3,219)	43	74

a. Amount according to the books of each interim company as at 31 December 2021, converted into euro (in the case of foreign companies) at the year-end exchange rate.

Appendix IV

Notifications of acquisitions and disposals of investments in 2021

Details of the notifications of acquisitions and disposals of participations for 2021 in accordance with Article 125 of the Securities Market Law may be found below:

On 10 May 2021, Banco Santander, S.A. notified to the CNMV of the increase of its stake in REPSOL above the 3% threshold up to 3.584%, dated as of 4 May 4 2021.

On 25 June 2021, Banco Santander, S.A. notified to the CNMV of the decrease of its stake in REPSOL, S.A. below the 3% threshold up to 2.718%, dated as of 21 June 2021.

On 26 November 2021, Banco Santander, S.A. notified to the CNMV of the increase of its stake in REPSOL above the 3% threshold up to 3.829%, dated as of 22 November 2021.

In relation to the information required by 155 of the Corporate Enterprises Act, on the shareholdings in which Grupo Santander owns more than 10% of the capital of another company, and the successive acquisitions of more than 5% of the share capital, see appendices I, II and III.

Appendix V

Other information on the Group's banks

Following is certain information on the share capital of the Group's main banks based on their total assets.

1. Santander UK plc

a) Number of financial equity instruments held by the Group.

At 31 December 2021, the Company was a subsidiary of Banco Santander, S.A. and Santusa Holding, S.L.

On 12 November 2004 Banco Santander, S.A. acquired the then entire issued ordinary share capital of 1,485,893,636 Ordinary shares of 10p. each. On 12 October 2008 a further 10 billion Ordinary shares of 10p. each were issued to Banco Santander, S.A. and an additional 12,631,375,230 Ordinary shares of 10p. each were issued to Banco Santander, S.A. on 9 January on 2009. On 3 August 2010, 6,934,500,000 Ordinary shares of 10p. each were issued to Santusa Holding, S.L. With effect from 10 January 2014, Santander UK Group Holdings Limited, a subsidiary of Banco Santander, S.A. and Santusa Holding, S.L., became the beneficial owner of 31,051,768,866 Ordinary shares of 10p. each, being the entire issued ordinary share capital of the Company, by virtue of a share exchange agreement between Santander UK Group Holdings Limited, Banco Santander, S.A. and Santusa Holding, S.L. Santander UK Group Holdings Limited became the legal owner of the entire issued Ordinary share capital of the Company on 1 April 2014 and on 25 March 2015 became a public limited company and changed its name from Santander UK Group Holdings Limited to Santander UK Group Holdings plc. In addition to this, there are 325,000,000 Non-Cumulative Non-Redeemable 10.375% and 8.625% Sterling Preference Shares of GBP 1.00 each. In addition to this there were 13,780 Series A Fixed (6.222%)/Floating Rate Non-Cumulative Callable Preference Shares of GBP 1.00 each which were redeemed and cancelled in their entirety on 24 May 2019. The legal and beneficial title to the entire issued Preference share capital is held by third parties and is not held by Banco Santander, S.A.

b) Capital increases in progress

At 31 December 2021, there were no approved capital increases.

c) Share capital authorised by the shareholders at the general meeting

The shareholders resolved at the Annual General Meeting held on 18 March 2021, to authorise unconditionally, the company to carry out the following repurchases of the share capital:

(1) To buy back its own 8.625% Sterling Preference shares on the following terms:

(a) The Company may buy back up to 125,000,000 8.625% Sterling Preference shares;

(b) The lowest price which the Company can pay for 8.625% Sterling Preference shares is 75% of the average of the market values of the preference shares for five business days before the purchase is made; and

(c) The highest price (not including expenses) which the Company can pay for each 8.625% Sterling Preference share is 125% of the average of the market values of the preference shares for five business days before the purchase is made.

This authority shall begin on the date of the passing of this resolution and end on the conclusion of the next Annual General Meeting of the Company. The Company may agree, before this authorisation ends, to buy back its own 8.625% preference shares even though the purchase may be completed after this authorisation ends.

(2) To buy back its own 10.375% Sterling Preference shares on the following terms:

(a) The Company may buy up to 200,000,000 10.375% Sterling Preference shares;

(b) The lowest price which the Company can pay for 10.375% Sterling Preference shares is 75% of the average of the market values of the preference shares for five business days before the purchase is made; and

(c) The highest price (not including expenses) which the Company can pay for each 10.375% Sterling Preference share is 125% of the average of the market values of the preference shares for five business days before the purchase is made.

This authority shall begin on the date of the passing of this resolution and end on the conclusion of the next Annual General Meeting of the Company. The Company may agree, before this authorisation ends, to buy back its own 10.375% preference shares even though the purchase may be completed after this authorisation ends.

d) Rights on founder's shares, "rights" bonds, convertible debentures and similar securities or rights

Not applicable.

e) Specific circumstances that restrict the availability of reserves

Not applicable.

f) Non-Group entities which hold, directly or through subsidiaries, 10% or more of equity

Not applicable.

g) Quoted equity instruments

The preference share capital of Santander UK plc is traded on the London Stock Exchange under the following details:

- 10.375% Sterling Preference - ISIN: GB0000064393
- 8.625% Sterling Preference - ISIN: GB0000044221

2. Santander Financial Services plc

a) Number of financial equity instruments held by the Group

The Group holds ordinary shares amounting to GBP 249,998,000 through Santander UK Group Holdings plc (249,998,000 ordinary shares with a par value of GBP 1 each).

The Group also holds 1,000 tracker shares (shares without voting rights but with preferential dividend rights) amounting to GBP 1,000 and 1,000 B tracker shares amounting to GBP 1,000 through Santander UK Group Holdings plc, both with a par value of GBP 1 each.

b) Capital increases in progress

No approved capital increases are in progress.

c) Capital authorised by the shareholders at the general meeting

Not applicable.

d) Rights on founder's shares, "rights" bonds, convertible debentures and similar securities or rights

Not applicable.

e) Specific circumstances that restrict the availability of reserves
Not applicable.

f) Non-Group entities which hold, directly or through subsidiaries, 10% or more of equity
Not applicable.

g) Quoted equity instruments
Not applicable.

3. Banco Santander (Brasil) S.A.

a) Number of financial equity instruments held by the Group
The Group holds 3,440,170,512 ordinary shares and 3,273,507,089 preference shares through Banco Santander, S.A. and its subsidiaries Sterrebeeck B.V., Grupo Empresarial Santander, S.L., Banco Santander, S.A..

The shares composing the share capital of Banco Santander (Brasil) S.A. have no par value and there are no pending payments. At 2021 year-end, the bank's treasury shares consisted of 15,755,205 ordinary shares and 15,755,205 preferred shares, with a total of 31,510,410 shares.

In accordance with current Bylaws (Article 5.7), the preference shares do not confer voting rights on their holders, except under the following circumstances:

a) In the event of transformation, merger, consolidation or spin-off of the company.

b) In the event of approval of agreements between the company and the shareholders, either directly, through third parties or other companies in which the shareholders hold a stake, provided that, due to legal or bylaw provisions, they are submitted to a general meeting.

c) In the event of an assessment of the assets used to increase the company's share capital.

The General Assembly may, at any moment decide to convert the preference shares into ordinary shares, establishing a reason for the conversion.

However, the preference shares do have the following advantages (Article 5.6):

a) Their dividends are 10% higher than those distributed to ordinary shares.

b) Priority in the dividends distribution.

c) Participation, on the same terms as ordinary shares, in capital increases resulting from the reserves and profits capitalization and in the distribution of bonus shares arising from the capitalization of retained earnings, reserves or any other funds.

d) Priority in the reimbursement of capital in the event company's dissolution.

e) In the event of a public offering due to a change in control of the company, the holders of preferred shares are guaranteed the right to sell the shares at the same price paid for the block of shares transferred as part of the change of control, i.e. they are treated the same as shareholders with voting rights.

b) Capital increases in progress
No approved capital increases are in progress.

c) Capital authorised by the shareholders at the general meeting
The company is authorised to increase share capital, subject to approval by the Board of Directors, up to a limit of 9,090,909,090 ordinary shares or preferred shares, and without need to maintain any ratio between any of the different classes of shares, provided they remain within the limits of the maximum number of preferred shares provided in Law.

As of 31 December 2021, the share capital consists of 7,498,531,051 shares (3,818,695,031 ordinary shares and 3,679,836,020 preferred shares).

d) Rights on founder's shares, "rights" bonds, convertible debentures and similar securities or rights
At the general meeting held on 21 December 2016 the shareholders approved the rules relating to the deferred remuneration plans for the directors, management and other employees of the company and of companies under its control. Shares delivery is linked to achievement of certain targets.

e) Specific circumstances that restrict reserves availability
The only restriction on the availability of Banco Santander (Brasil) S.A.'s reserves is connected to the requirement for the legal reserve formation (restricted reserves), which can only be used to offset losses or to increase capital.

The legal reserve requirement is set-forth in Article 193 of the Brazilian Corporations Law, which establishes that before allocating profits to any other purpose, 5% of profits must be transferred to the legal reserve, which must not exceed 20% of the company's share capital.

f) Non-Group entities which hold, directly or through subsidiaries, 10% or more of equity
Not applicable.

g) Listed capital instruments
All the shares are listed on the São Paulo Stock Exchange (B3 - Brasil, Bolsa, Balcão) and the shares deposit certificates (American Depositary Receipts - ADR) are listed on the New York Stock Exchange (NYSE).

4. Santander Bank, National Association

a) Number of financial equity instruments held by the Group
At 31 December 2021, the Group held 530,391,043 ordinary shares that carry the same voting and dividend acquisition rights over Santander Holdings USA, Inc. (SHUSA). This holding company and Independence Community Bank Corp. (ICBC) hold 1,237 ordinary shares with a par value of USD 1 each, which carry the same voting rights. These shares constitute all the share capital of Santander Bank, National Association (SBNA). SHUSA holds an 80.84% ownership interest in SBNA, and the remaining 19.16% belongs to ICBC. ICBC is wholly owned by SHUSA. There is no shareholders' meeting for the ordinary shares of SBNA.

b) Capital increases in progress
At 31 December 2021 there were no approved capital increases.

c) Capital authorised by the shareholders at the general meeting
Not applicable.

d) Rights on founder's shares, "rights" bonds, convertible debentures and similar securities or rights

Not applicable.

e) Specific circumstances that restrict the availability of reserves

Not applicable.

f) Non-Group entities which hold, directly or through subsidiaries, 10% or more of equity

Not applicable.

g) Quoted equity instruments

Not applicable.

5. Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México

a) Number of financial instruments of capital held by the group.

On December 8, 2021 the period for the acceptance of the public offering to acquire up to 561,353,228 shares of Banco Santander México that were not held directly by Banco Santander, S.A., which represented the 8.27% of the capital stock Banco Santander Méxcio. As a result of the offer Banco Santander, S.A. increased its position in Banco Santander México from 91.64% to 96.15%, with the remaining 3.76% held by minority shareholders, 0.08% in own shares and 0.01% to Gesban México Servicios Administrativos Globales, S.A. de C.V.

On June 15, 2020, Gesban México Servicios Administrativos Globales, S.A. de C.V., acquired the 1,340 shares of Banco Santander México owned by Santander Global Facilities, S.A. de C.V.

As a result Grupo Financiero Santander México, S.A. de C.V. ('Grupo Financiero') and Gesban México Servicios Administrativos Globales,, S.A. de C.V. (México), hold 5,087,801,602 shares which represent the 74.97% of the capital stock of Banco Santander México and Banco Santander, S.A. holds 1,438,256,710 shares which represent the 21.19% of such capital stock.

On September 30, 2020, the General Extraordinary Shareholders' Meetings of Banco Santander México and Santander Vivienda, S.A. de C.V., SOFOM E.R., GFSM, were held. In such meetings the merger by absorption of Banco Santander México with Santander Vivienda, S.A. de C.V., SOFOM E.R., GFSM, was approved. This merger did not result in a movement of the share capital of Banco Santander México, since it was a shareholder of 99.99998% of the shares representative of the share capital of Santander Vivienda , S.A. de C.V., SOFOM, E.R., GFSM, and such circumstance results in the material and legal impossibility for Banco Santander México, S.A., Institución de Banca Multiple, Grupo Financiero Santander México to perform the redemption of the shares, since these shares are already integrated into the assets of the merger.

b) Ongoing capital stock increases.

To this date there are not on going capital stock increases.

c) Authorized Capital by the Shareholders Meeting.

The capital stock of the Bank is 32,485,600,110.00 Mexican pesos (thirty-two thousand four hundred eighty-five million six hundred thousand one hundred ten Mexican pesos) represented by a total of 8,592,294,357 (eight thousand five hundred ninety-two million two hundred ninety-four thousand three hundred fifty-seven) shares with a nominal value of 3.780782962 Mexican pesos (three Mexican pesos 780782962/1000000000) each one; divided in 4,385,824,012 (four thousand three hundred eighty-five million eight hundred twenty-four thousand twelve) stocks "F" Series and 4,206,470,345 four thousand two hundred six million four hundred seventy thousand three hundred forty-five) shares "B" Series. The capital stock is constituted as follows:

- Paid-in and subscribed capital of the Bank is 25,660,152,629.00 Mexican pesos (twenty five thousand six hundred sixty million one hundred fifty two thousand six hundred and twenty nine Mexican pesos) represented by a total of 6,786,994,357 (six thousand seven hundred eighty six million nine hundred ninety four thousand three hundred and fifty seven) shares with a nominal value of 3.780782962 Mexican pesos (three Mexican pesos 780782962/1000000000) each one; divided in 3,464,309,145 (three thousand four hundred sixty four million three hundred and nine thousand one hundred and forty five) shares "F" Series and 3,322,685,212 (three thousand three hundred twenty two million six hundred eighty five thousand two hundred and twelve) shares Series.

- The authorized capital stock for the conversion of obligations into shares of the Company is 6,825,447,481.00 Mexican pesos, (six thousand eight hundred twenty-five million four hundred forty-seven thousand four hundred eighty-one), represented by a total of 1,805 ,300,000 (one thousand eight hundred five million three hundred thousand) shares with a nominal value of 3,780782962 Mexican pesos (three pesos 780782962/1000000000) each; divided into 921,514,867 (nine hundred twenty-one million five hundred fourteen thousand eight hundred sixty-seven) Series "F" shares and 883,785,133 (eight hundred eighty-three million seven hundred eighty-five thousand one hundred thirty-three) Series "B shares ". which are kept in the treasury of the Bank.

d) Rights incorporated into parts of founder, bonds or debt, convertible obligations and securities or similar rights.

(i) The Board of Directors on its meeting held on October 22, 2015, was updated regarding the situation of the debt issuance of Banco Santander Mexico, S.A. , which had been previously ratified in the meeting held on October 17, 2013, in order to issue debt for the amount of 6,500 million dollars in local or international markets, for a maximum period of 15 years, senior or subordinated debt including debt instruments qualifying for purposes of capital in accordance with the legislation in force, which can be implemented individually or through several issuance programs.

The approved debt issuance of Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México is currently composed as follows:

Instrument	Type	Term	Amount	Available
Issuance Program of unsecured bonds and unsecured certificates of deposit	*Revolving*	4-Mar-26	55,000 million Mexican pesos, or its equivalent in UDIs, dollars or any other foreign currency	$27,461 million Mexican pesos
				With fix rate according to Banxico 31/Dec/ 2021
Private banking structured bonds Act	*Not Revolving**	16-Ago-34	20,000 million Mexican pesos	$3,356 million Mexican pesos
Structured bonds without public offering	Not Revolving	16-Feb-32	10,000 million Mexican pesos	$10,000 million Mexican pesos
Senior Bonds	*Not Revolving*	09-Nov-22	1,000 million American dollars	N/A
Capital Notes (Tier 2 Capital)	*Not Revolving*	1-Oct-2028	1,300 million American dollars	N/A
Senior notes 144.ª/RegS	*Not Revolving*	17-Abr-2025	1,750 million American dollars	N/A
Subordinated Notes, perpetual and convertible (Tier 1)	Not Revolving	Perpetual	700 million American dollars	N/A

* The issuance of the structured private banking bonds isn't revolving. Once placed the amount laid down in the corresponding brochure a new certificate will be issued on the authorized amount.

(ii) The Board of Directors on its meeting held on January 27, 2011 approved the general conditions for the senior debt issue among international markets. On October 18, 2012 such issuance was approved on the amount of 500 and 1000 million American dollars, for a term of 5 to 10 years. The issuance was approved with the purpose of obtaining resources to finance the increase in business assets and the liquidity of the Bank. Under these agreements adopted by the Board of Directors, the debt was issued for an amount of 1,000 million American dollars on November 9, 2012.

(iii) On December 27, 2013 Banco Santander México, S.A., issued subordinated notes (subordinated notes 2013) for a total amount of 1,300,000,000 American dollars, in accordance with the capital requirements established in the Basilea III criteria for complementary capital/ Tier 2 at a rate of 5.95% with redemption date of January, 30, 2024. The controlling shareholder, Banco Santander, S.A., agreed to buy 975,000,000 American dollars of such notes equivalent to the 75% of the latter.

Such notes were offered through a private offering only to qualified institutional buyers, in accordance with Rule 144A of the U.S. Securities Act of 1933 and it´s modifications, and outside the U.S. under the Regulation S of the Market Law.

The issuance was approved with the purpose of increasing the efficiency of the capital of the Bank, to adequate its capital profile to its main competitors, as well as to increase the cost effectiveness of resources with the same capital strength and capacity for growth in risk-weighted assets.

(iv) The Board of Director on its meeting held on October 27, 2016 approved the issuance in Mexico of debt up to 500 million American dollars or its equivalent in Mexican pesos. The Ordinary and Extraordinary Shareholder´s meeting held on December 5, 2016, approved to issuance of a financial instrument complying with the requirements of regulatory capital established in Basilea III, which was considered as not fundamental basic capital, for up to 500 million American dollars.

On December 29, 2016, Banco Santander México made an overseas private offering of subordinated, non preferred, perpetual and convertible obligations ("2016 Obligations") representing the share capital by a total amount of 500,000,000 American dollars, which had the character of a 'mirror issuance'(back-to-back), as a guarantee of liquidity of the subordinated non preferred perpetual and convertible obligations, issued by Grupo Financiero Santander Mexico.

It is worth mentioning that in September, 2019, it was requested before the Registro Nacional de Valores of the National Banking and Securities Commission (Comision Nacional Bancaria y de Valores) ("CNBV"), the registry cancellation of the above mentioned 2016 Obligations, as well as the list cancellation of such notes in the Bolsa Mexicana de Valores, S.A.B. de C.V. ("BMV"). By means of official note No. 153/12251/2019 dated November 4, 2019, CNBV authorized such cancellation.

(v) As a result of the corporate restructure which included, among others, the merger of Banco Santander México, as the merging entity with Grupo Financiero Santander Mexico as the merged entity, the subordinated obligations referred to in paragraph (iv), were acquired entirely by Banco Santander México; therefore the subordinate obligations of Banco Santander Mexico became extinct by confusion of rights and obligations, since the Bank as a merging party met the quality of debtor and creditor in these instruments at the moment that the merger was finalized.

(vi) On September 20, 2018, Banco Santander México, issued and placed equity instruments, subordinated, preferential, and not convertible into shares, governed by foreign law, representative of the complementary part of the net capital of Banco Santander Mexico (Tier 2 subordinated preferred capital notes), for the amount of 1,300,000,000.00 American dollars (the "Instruments"), whose resources were used mainly for the acquisition of the 94.07% of the Subordinated Notes 2013.

The amount issued of 1,300,000,000.00 American dollars covers in full the sum of the repurchase of the Subordinated Notes 2013, for 1,222,907,000.00 American dollars.

Regarding the acquisition of the Subordinated Notes 2013: (a) the acquired total amount was 1,222,907,000.00 American dollars (nominal value), at a price of 1,010.50 American dollars and (b) the amount acquired by Banco Santander, S.A. (Spain), was a nominal 1,078,094,000.00 American dollars.

In connection with the issuance of the Instruments, the total amount distributed with Banco Santander, S.A. (Spain), was 75% of such issuance; that is, the placed amount was 975,000,000.00.

Therefore, the Bank's General Extraordinary Shareholder´s Meeting held on September 10, 2018, among other subjects, approved to ratify the issuance limit for up to 6,500 million and a term of 15 years, senior or subordinate, in local and/or international markets, instrumented individually or through issuance programs, which was previously authorized by the Board of Directors on its meeting held on April 26, 2018.

On January 30, 2019, Banco Santander México paid off the total remaining due amount of the Subordinated Notes 2013.

On April 17th., 2020, Banco Santander Mexico issued an international Senior Note, due on five years in the global market, on the amount of 1,750 million dollars, with a rate of 5.375 per cent, whereas the demand exceeded three times the placed amount. The due date of such notes will be April 17th, 2025.

On September 15, 2021, Banco Santander Mexico issued abroad the "Perpetual Subordinated Non-Preferred Contingent Convertible Additional Tier 1 Notes", up to an amount of 700,000,000.00. American dollars. On the same date, the Bank paid the "2016 Obligations" above mentioned, on a fixed initial rate of 4.625% up to an amount of 700,000,000.00.American dollars.

e) Specific circumstances restricting the availability of reserves.

According to the Law of Financial Institutions, general dispositions applicable to financial institutions, General Corporations law and the bylaws, the Bank has to constitute or increase its capital reserves to ensure the solvency to protect the payments system and the public savings.

The Bank increases its legal reserve annually accordingly to the results obtained in the fiscal year (benefits).

The Bank must constitute the different reserves established in the legal provisions applicable to financial institutions, which are determined accordingly to the qualification granted to credits and they are released when the credit rating improves, or when it is settled.

f) Entities outside the Group which own, directly or through subsidiaries, a stake equal to or greater than 10% of the equity.

Not applicable.

g) Equity instruments admitted to trading.

Not applicable.

6. Banco Santander Totta, S.A

a) Number of equity instruments held by the Group

The Group holds 1,256,195,888 ordinary shares through its subsidiaries: Santander Totta, SGPS, S.A. with 1,241,179,513 shares, Taxagest Sociedade Gestora de Participações Sociais, S.A. with 14,593,315 shares, and Banco Santander Totta, S.A. with 423,060 treasury shares, all of which have a par value of EUR 1 each and identical voting and dividend rights and are subscribed and paid in full.

b) Capital increases in progress

At 31 December 2021, there were no equity increases in progress.

c) Capital authorised by the shareholders at the general meeting

Not applicable.

d) Rights on founder's shares, "rights" bonds, convertible debentures and similar securities or rights

Not applicable.

e) Specific circumstances that restrict the availability of reserves

Under Article 296 of the Portuguese Companies' Code, the legal and merger reserves can only be used to offset losses or to increase capital.

Non-current asset revaluation reserves are regulated by Decree- Law 31/98, under which losses can be offset or capital increased by the amounts for which the underlying asset is depreciated, amortised or sold.

f) Non-Group entities which hold, directly or through subsidiaries, 10% or more of equity

Not applicable.

g) Equity instruments

Not applicable.

7. Santander Consumer Bank AG

a) Number of financial equity instruments held by the Group

At 31 December 2021, through Santander Consumer Holding GmbH, the Group held 30,002 ordinary shares with a par value of EUR 1,000 each, all of which carry the same voting rights.

b) Capital increases in progress

Not applicable.

c) Capital authorised by the shareholders at the general meeting

Not applicable.

d) Rights on founder's shares, "rights" bonds, convertible debentures and similar securities or rights

Not applicable.

e) Specific circumstances that restrict the availability of reserves

Not applicable.

f) Non-Group entities which hold, directly or through subsidiaries, 10% or more of equity

Not applicable.

g) Quoted equity instruments

Not applicable.

8. Banco Santander - Chile

a) Number of equity instruments held by the Group

The Group holds a 67.18% ownership interest in its subsidiary in Chile corresponding to 126,593,017,845 ordinary shares of Banco Santander - Chile through its subsidiaries: Santander Chile Holding S.A. with 66,822,519,695 ordinary shares, Teatinos Siglo XXI Inversiones S.A., with 59,770,481,573 ordinary shares and Santander Inversiones S.A. with 16,577 fully subscribed and paid ordinary shares that carry the same voting and dividend rights.

b) Capital increases in progress

At 31 December 2021, there were no approved capital increases.

c) Capital authorised by the shareholders at the general meeting

Share capital at 31 December 2021 amounted to CLP 891,302,881,691.

d) Rights on founder's shares, "rights" bonds, convertible debentures and similar securities or rights

Not applicable.

e) Specific circumstances that restrict the availability of reserves

Remittances to foreign investors in relation to investments made under the Statute of Foreign Investment (Decree-Law 600/1974) and the amendments thereto require the prior authorisation of the foreign investment promotion agency.

f) Non-Group entities which hold, directly or through subsidiaries, 10% or more of equity

Not applicable.

g) Quoted equity instruments

All the shares are listed on the Chilean stock exchanges and, through American Depositary Receipts (ADRs), on the New York Stock Exchange (NYSE).

9. Santander Bank Polska S.A.

a) Number of financial equity instruments held by the Group

At 31 December, 2021, Banco Santander, S.A. held 68,880,774 ordinary shares with a par value of PLN 10 each, all of which carry the same voting rights.

b) Capital increases in progress

At 31 December, 2021, there were no equity increases in progress.

c) Capital authorised by the shareholders at the general meeting

There was no share capital increase in 2021.

d) Rights on founder's shares, "rights" bonds, convertible debentures and similar securities or rights

Not applicable.

e) Specific circumstances that restrict the availability of reserves

Not applicable.

f) Non-Group entities, which hold, directly or through subsidiaries, 10% or more of equity

Not applicable.

g) Quoted equity instruments

All the shares of Santander Bank Polska S.A. are listed on the Warsaw Stock Exchange.

Appendix VI

Annual banking report

Grupo Santander's total tax contribution (taxes incurred directly and by third parties, generated in the course of business) is around EUR 16,200 million, including more than EUR 7,600 million in taxes incurred directly (corporate income tax, non-recoverable VAT and other indirect taxes, employer Social Security contributions, payroll taxes and other taxes and levies).

This report complies with Article 89 of Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, and its transposition into Spanish law pursuant to Article 87 of Act 10/2014 of 26 June on the regulation, supervision and capital adequacy of credit institutions.

The criteria used to prepare this report were:

a) Name(s), activities and location

Appendices I to III to the consolidated financial statements contain details of the companies operating in each jurisdiction, including their name(s), location and activities.

Santander main activity in the jurisdictions where operate is commercial banking. The Group primarily operates in ten markets through subsidiaries that are autonomous in capital and liquidity. This has clear strategic and regulatory advantages, since it limits the risk of contagion between units, imposes a double layer of global and local oversight, and facilitates crisis management and resolution.

b) Turnover and profit or loss before tax

Turnover in this report is Total income, and profit or loss before tax, Operating profit/(loss) before tax, both as defined and presented in the consolidated income statement that forms part of the consolidated financial statements.

c) Number of full time equivalent employees

The data on full-time equivalent employees stem from the average headcount of each jurisdiction.

d) Tax on profit or loss

In the absence of specific criteria, we have included the amount effectively paid (EUR 4,012 million in 2021, with an effective tax rate of 27.6%) in respect of taxes whose effect is recognized under Income tax in the consolidated income statement.

Taxes effectively paid by the companies in each jurisdiction include:

- Supplementary payments relating to income tax returns, usually for prior years.
- Advances, prepayments, withholdings made or borne in respect of tax on profit or loss for the year. We included taxes borne abroad in the jurisdiction of the company that bore them.
- Refunds received with respect to prior years' returns.
- Where appropriate, the amount payable from assessments and litigation relating to these taxes.

The foregoing form part of the cash flow statement and differ from the corporate income tax expense recognized in the consolidated income statement (EUR 4,894 million in 2021, representing an effective rate of 33.6%, or, discounting extraordinary results, EUR 5,076 million, which represents an effective rate of 33.3%, see note 27 and 51.c). This is because each country's tax regulations establish:

- when taxes must be paid. There is often a mismatch between the payment dates and the generation of the income bearing the tax.
- their own calculation criteria to define temporary or permanent restrictions on expense deduction, exemptions and relief or deferrals of certain income, generating the differences between the accounting profit (or loss) and taxable profit (or tax loss) which is ultimately taxed; tax loss carry forwards from prior years, tax credits and/or relief, etc., must also be added. In certain cases, special regimes such as the tax consolidation of companies in the same jurisdiction are established.

e) Public subsidies

In the context of the legally-required disclosures, this was interpreted as any aid or subsidy in line with the European Commission's Guidance on the notion of State aid. Grupo Santander did not receive public subsidies in 2021.

The breakdown of information is as follows :

	2021			
Jurisdiction	Turnover (millions of euros)	Employees	Gross profit or loss before tax (EUR million)	Tax on profit or loss (EUR million)
Germany	1,659	5,097	650	204
Argentina	1,362	8,637	274	115
Austria	177	348	86	17
Bahamas	4	26	(2)	2
Belgium	75	171	58	3
Brazil[1]	10,585	45,191	4,383	1,385
Canada	55	203	20	5
Chile	2,406	10,334	1,140	180
China	22	72	1	—
Colombia	49	334	6	4
United Arab Emirates	—	24	(2)	—
Spain[2]	7,026	33,408	(1,588)	399
United States	7,389	14,994	3,693	376
Denmark	176	218	113	10
Finland	117	166	64	14
France	823	975	474	93
Greece	—	18	(4)	—
Hong Kong	94	172	13	3
India	—	47	—	—
Ireland	(37)	2	(31)	1
Isle of Man	15	67	5	1
Italy	507	937	279	46
Jersey	36	73	21	1
Luxembourg	179	18	158	41
Mexico	3,529	25,428	1,086	207
Norway	255	524	95	22
Netherlands	95	268	55	51
Peru	110	292	56	26
Poland	1,929	12,314	435	206
Portugal	1,371	6,189	477	17
Puerto Rico	4	18	(12)	—
United Kingdom	5,722	20,820	2,292	525
Singapore	12	19	6	1
Sweden	180	251	58	26
Switzerland	138	280	45	4
Uruguay	340	1,457	143	27
Consolidated Group Total	**46,404**	**189,392**	**14,547**	**4,012**

1. Including the information relating to a branch in the Cayman Islands, the profits of which are taxed in full in Brazil. The contribution of this branch profit before tax from continuing operations is EUR 432 million.
2. Includes the Corporate Centre.

At 31 December 2021, the Group's return on assets (ROA) was 0.62%.

Pursuant to Article 253, section 1 of the revised Spanish Companies Act (*Ley de Sociedades de Capital*), the board of directors of Banco Santander, S.A. draws up the consolidated financial statements (comprising the consolidated balance sheet, income statement, statement of recognized income and expense, statement of changes in total equity, statement of cash flows and the notes to the consolidated financial statements) and the consolidated directors' report for the 2021 fiscal year in eXtensible HyperText Markup Language (XHTML) format and, with respect to the main financial statements, with tags in the standard eXtensible Business Reporting Language (XBRL), all of which conforms to the single electronic reporting format required under Directive 2004/109/EC and Delegated Regulation (EU) 2019/815.

The directors of Banco Santander, S.A., listed below with an indication of their respective positions, declare that, to the best of their knowledge, the company's consolidated financial statements for the 2021 financial year were drawn up in accordance with the applicable accounting principles and give a true and fair view of the assets, liabilities, financial position and profit or loss of the company and of the undertakings included in the consolidation taken as a whole, and that the consolidated directors' report includes a fair review of the development, performance and position of the company and of the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face.

Boadilla del Monte (Madrid), 24 February 2022

ANA PATRICIA BOTÍN-SANZ DE SAUTUOLA Y O'SHEA

Chair

BRUCE CARNEGIE-BROWN

Vice Chair

JOSÉ ANTONIO ÁLVAREZ ÁLVAREZ

Vice Chair and Chief Executive Officer

MEMBERS:

HOMAIRA AKBARI

LUIS ISASI FERNÁNDEZ DE BOBADILLA

FRANCISCO JAVIER BOTÍN-SANZ DE SAUTUOLA Y O'SHEA

HENRIQUE MANUEL DRUMMOND BORGES CIRNE DE CASTRO

SOL DAURELLA COMADRÁN

SERGIO AGAPITO LIRES RIAL

GINA DÍEZ BARROSO

R. MARTÍN CHÁVEZ MÁRQUEZ

RAMIRO MATO GARCÍA-ANSORENA

BELÉN ROMANA GARCÍA

ÁLVARO ANTONIO CARDOSO DE SOUZA

PAMELA ANN WALKDEN

General information

Corporate information

Banco Santander, S.A. is a Spanish bank, incorporated as sociedad anónima in Spain and is the parent company of Grupo Santander. Banco Santander, S.A. operates under the commercial name Santander.

The Bank's Legal Entity Identifier (LEI) is 5493006QMFDDMYWIAM13 and its Spanish tax identification number is A-39000013. The Bank is registered with the Companies Registry of Cantabria, and its Bylaws have been adapted to the Spanish Companies Act by means of the notarial deed instrument executed in Santander on 29 July 2011 before the notary Juan de Dios Valenzuela García, under number 1209 of his book and filed with the Companies Registry of Cantabria in volume 1006 of the archive, folio 28, page number S-1960, entry 2038.

The Bank is also registered in the Official registry of entities of Bank of Spain with code number 0049.

The Bank's registered office is at:

Paseo de Pereda, 9-12
39004 Santander
Spain

The Bank's principal executive offices are located at:

Santander Group City
Avda. de Cantabria s/n
28660 Boadilla del Monte
Madrid
Spain
Telephone: (+34) 91 259 65 20

Corporate history

The Bank was established in the city of Santander by public deed before the notary José Dou Martínez on 3 March 1856, which was later ratified and amended in part by a second public deed dated 21 March 1857 executed before the notary José María Olarán. The Bank commenced operations upon incorporation on 20 August 1857 and, according to article 4 of the Bylaws, its duration shall be for an indefinite period. It was transformed into a credit corporation (sociedad anónima de crédito) by public deed, executed before notary Ignacio Pérez, on 14 January 1875 and registered in the Companies Registry Book of the Government's Trade Promotion Section in the province of Santander. The Bank amended its Bylaws to conform to the Spanish public companies act of 1989 by means of a public deed executed in Santander on 8 June 1992 before the notary José María de Prada Díez and recorded in his notarial record book under number 1316.

On 15 January 1999, the boards of directors of Santander and Banco Central Hispanoamericano, S.A. agreed to merge Banco Central Hispanoamericano, S.A. into Santander, and to change Banco Santander's name to Banco Santander Central Hispano, S.A. The shareholders of Santander and Banco Central Hispanoamericano, S.A. approved the merger on 6 March 1999, at their respective general meetings and the merger became effective in April 1999.

The Bank's general shareholders' meeting held on 23 June 2007 approved the proposal to change back the name of the Bank to Banco Santander, S.A.

As indicated above, the Bank brought its Bylaws into line with the Spanish Companies Act by means of a public deed executed in Santander on 29 July 2011.

The Bank's general shareholders' meeting held on 22 March 2013 approved the merger by absorption of Banco Español de Crédito, S.A.

On 7 June 2017, Santander acquired the entire share capital of Banco Popular Español, S.A. in an auction in connection with a resolution plan adopted by the European Single Resolution Board (the European banking resolution authority) and executed by the FROB (the Spanish banking resolution authority) following a determination by the European Central Bank that Banco Popular was failing or likely to fail, in accordance with Regulation (EU) 806/2014 establishing a framework for the recovery and resolution of credit institutions and investment firms. On 24 April 2018, the Bank announced that the boards of directors of Banco Santander, S.A. and Banco Popular Español, S.A.U. had agreed to an absorption of Banco Popular by Banco Santander. The legal absorption was effective on 28 September 2018.

Shareholder and investor relations

Santander Group City
Pereda, 2ª planta
Avda. de Cantabria, s/n
28660 Boadilla del Monte
Madrid
Spain
Telephone: (+34) 91 259 65 14
investor@gruposantander.com

Hard copies of the Bank's annual report can be requested by shareholders free of charge at the address and phone number indicated above.

Media enquiries

Santander Group City
Arrecife, 2ª planta
Avda. de Cantabria, s/n
28660 Boadilla del Monte
Madrid
Spain
Telephone: (+34) 91 289 52 11
comunicacion@gruposantander.com

Customer service department

Calle Princesa, 25
Edificio Hexágono, 2ª planta
28008 Madrid
Spain
Telephone: (+34) 91 759 48 36
atenclie@gruposantander.com

Banking Ombudsman in Spain (Defensor del cliente en España)

Mr José Luis Gómez-Dégano
Apartado de Correos 14019
28080 Madrid
Spain



Santander

santander.com

Part 2.
Supplemental information

Table of contents:

1.	**Supplemental information to the consolidated directors' report**	813
	Corporate governance code	813
	Branches	813
	Important events	813
2.	**Financial statements of Banco Santander, S.A.**	814
	Auditor's report	
	Annual accounts	

1. Supplemental information to the consolidated directors' report

1.1. Corporate governance code

The CNMV's Good Governance Code for Listed Companies (Spanish Corporate Governance Code), referred to in section 9 of the 'Corporate governance' chapter and to which Banco Santander is subject, is publicly available on the website of the CNMV (Comisión Nacional del Mercado de Valores), https://www.cnmv.es/DocPortal/Publicaciones/CodigoGov/CBG_2020_ENen.PDF.

1.2. Branches

Details of Santander's branches are set out in note 3 to the consolidated annual accounts.

1.3. Important events

No significant events occurred from 1 January 2022 to 24 February 2022, being the date on which the consolidated financial statements were authorized for issue (see note 1.g to the consolidated financial statements).

The following significant events occurred from 25 February 2022 to the date of filing of this report:

Early redemption of CoCos

On 1 March 2022, we announced our decision to carry out the optional early redemption of all outstanding Non-Step-Up Non-Cumulative Contingent Convertible Perpetual Preferred Tier 1 Securities, with a nominal total value of EUR 750 million, with ISIN code XS1602466424 and common code 160246642, which are traded on the Global Exchange Market of the Irish Stock Exchange (the 'CoCos').

The redemption of all of the outstanding CoCos, which was authorized by the European Central Bank, will be carried out on the First Reset Date falling on 25 April 2022 (the 'First Reset Date'), pursuant to Conditions of the Preferred Securities of the relevant prospectus of the CoCos (Offering Circular dated 19 April 2017) (the 'Terms and Conditions'). Our decision to exercise the optional early redemption right is irrevocable.

The early redemption price, which will be equal to the outstanding nominal value (liquidation preference in the terminology of the prospectus) of each CoCo plus any accrued and unpaid distribution associated to each CoCo up to (but excluding) the First Reset Date, will be paid to the holders of the Preferred Securities by the Principal Paying Agent, in accordance with the Terms and Conditions, on 25 April 2022.

Buy-Back Programme

On 14 March 2022, Banco Santander announced the commencement of a new program to repurchase own shares (the "Buy-Back Programme" or the "Programme") for a maximum amount of 865 million euros. The Buy-Back Programme will be executed pursuant to the resolutions adopted by the general shareholders´ meeting held on 3 April 2020, and will have the following characteristics:

- Purpose of the Buy-Back Programme: to reduce the Bank's share capital through the redemption of the shares acquired under the Programme in the share capital reduction submitted for approval by the 2022 Annual Shareholders' Meeting.
- Maximum investment: the Buy-Back Programme will have a maximum monetary amount of €865 million (equivalent to approximately 20% of the Group's underlying profit in the second half of 2021).
- Maximum price: Banco Santander intends to implement the Buy-Back Programme in a way that causes the average purchase price of shares not to exceed 4.12 euro, corresponding to the tangible book value per share at 31 December 2021.
- Maximum number of shares: The maximum number of shares that may be acquired pursuant to the Programme will depend on the average price at which they are acquired, but will not exceed 10 % of the Bank's share capital.
- Other conditions: shares will be purchased at market price, subject to some restrictions.

2. Financial statements of Banco Santander, S.A.

Banco Santander, S.A.

Auditor's report, Annual accounts and directors' report for the year ended 31 December 2021

Translation of annual accounts originally issued in Spanish and prepared in accordance with the regulatory financial reporting framework applicable to Banco Santander in Spain (see notes 1 and 49). In the event of a discrepancy, the Spanish-language version prevails.

Santander

pwc

This version of our report is a free translation of the original, which was prepared in Spanish. All possible care has been taken to ensure that the translation is an accurate representation of the original. However, in all matters of interpretation of information, views or opinions, the original language version of our report takes precedence over this translation

Independent auditor's report on the annual accounts

To the shareholders of Banco Santander, S.A.,

Report on the annual accounts

Opinion

We have audited the annual accounts of Banco Santander, S.A. (the Bank), which comprise the balance sheet as at December 31, 2021, and the income statement, statement of recognised income and expenses, statement of changes in total equity, statement of cash flows and related notes for the year then ended.

In our opinion, the accompanying annual accounts present fairly, in all material respects, the equity and financial position of the Bank as at December 31, 2021, as well as its financial performance and cash flows for the year then ended, in accordance with the applicable financial reporting framework (as identified in note 1 of the notes to the annual accounts), and in particular, with the accounting principles and criteria included therein.

Basis for opinion

We conducted our audit in accordance with legislation governing the audit practice in Spain. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the annual accounts* section of our report.

We are independent of the Bank in accordance with the ethical requirements, including those relating to independence, that are relevant to our audit of the annual accounts in Spain, in accordance with legislation governing the audit practice. In this regard, we have not rendered services other than those relating to the audit of the accounts, and situations or circumstances have not arisen that, in accordance with the provisions of the aforementioned legislation, have affected our necessary independence such that it has been compromised.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the annual accounts of the current period. These matters were addressed in the context of our audit of the annual accounts as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

R. M. Madrid, hoja 87.250-1, folio 75, tomo 9.267, libro 8.054, sección 3ª
Inscrita en el R.O.A.C. con el número S0242 - CIF: B-79 031290

Key audit matter	How our audit addressed the key audit matter
Estimation of impairment of financial assets at amortised cost - loans and advances to customers – for credit risk	

The models used to estimate the expected credit losses along with the adaptations made in the context of the current environment, imply a high complexity by incorporating new estimates and judgments, especially those related to the updates and adjustments made to the models to determine the expected credit loss. These estimates require an elevated component of judgment by management and are one of the most significant and complex estimates in the preparation of the annual accounts as at December 31, 2021 included herein, therefore they have been considered one of the key audit matters.

The main judgements and assumptions used by management are the following:

- The estimation of the Probability of Default (PD) and Loss Given Default (LGD) parameters.
- Identification and classification of the staging criteria of loans and advances to customers.
- The definition and evaluation of updates and adjustments to adapt the parameters estimated by the models to the conditions and current environment.
- The main assumptions used in the determination of provisions for risks estimated individually.

The Bank's business is focused primarily on commercial banking products.

As a result, during fiscal year 2021 the Bank has recognised an amount of 2,286 million euros of impairment of financial assets at amortised cost.

Please refer to notes 2, 6, 10 and 49 of the annual accounts as at December 31, 2021.

We have obtained, in collaboration with our credit risk experts, an understanding of management's process to estimate the impairment of financial assets at amortised cost - loans and advances to customers – over the estimation of impairment of financial assets assessed collectively and individually. In addition, and as a part of our audit procedures, we have made inquiries to management to understand the extent of the potential impact of climate change on credit risk.

In regards with the internal control, we have focused on testing the design and operating effectiveness of key controls over the following processes:

- Calculation methodologies, calibrations, monitoring and back-testing performed by management.
- Compliance with internal policies and functionality of the internal models approved by management.
- Reliability of the data sources used in the calculations and the suitability of the models taking into account the circumstances.
- Periodic review process of borrower to determine proper staging criteria.
- Review process over the calculation of the principal models and portfolios.
- Review process of the updates and adjustments to the expected credit loss models made by management due to the conditions and current environment.
- Loan collateral assignment and valuation process associated with mortgage collateral operations, including collateral recovery process.

Key audit matter	How our audit addressed the key audit matter
	In addition, we performed the following tests of details: • Tests of principal models with respect to: i) calculation and segmentation methods; ii) methodology used for the estimation of the expected loss parameters; iii) data and main assumptions used, iv) staging criteria and v) scenario information and assumptions. • For a sample of loans, covered by government guarantees, evaluation of both documentation and payment behaviour presented since the moment of their concession. • Reperformance of collective impairment losses based on the expected credit loss models parameters. • Evaluation of the updates and adjustments to the expected credit loss models made by management due to the conditions and current environment. • Verification of the correct assignment of the loan collaterals, especially those that are classified as doubtful. • On a sample basis, evaluating individual credit files to determine the adequacy of their accounting and classification, discounted cash flows and, where appropriate, corresponding impairment. In the procedures described above, no exceptions were identified outside of a reasonable range.
Litigation provisions and contingencies	
The Bank is party to a range of tax and legal proceedings - administrative and judicial – which primarily arose in the ordinary course of its operations. Also, there are other situations not yet subject to any judicial process that, however, have required the recognition of provisions, such as aspects of conduct with clients and the possible compensations that could be derived. These procedures generally take a long period of time to run their course, giving rise to complex processes in accordance with the applicable legislation, therefore it has been considered one of the key audit matters.	We have obtained, in collaboration with our experts, an understanding of the estimation process performed by management for litigation provisions and contingencies. In regards with the internal control, we have focused on testing the design and operating effectiveness of key controls over the following processes: • Additions, logs and updates over the completeness of the legal matters in the systems. • Accuracy of the key data, maintained in the systems, used in the calculation of the litigations provisions and contingencies.

Key audit matter	How our audit addressed the key audit matter
The management decides when to recognise a provision for these contingent liabilities, based on an amount estimated using certain procedures consistent with the nature of the uncertainty of the obligations. Among these provisions, some of the most significant are those for customer compensation for the sale of certain products; these estimates are based on the number of claims expected to be received, the number expected to be accepted, and the estimated average pay out per case. The amount of the litigation provisions and contingencies as at December 31, 2021 is 990 million euros. Please refer to notes 2 and 23 of the annual accounts as at December 31, 2021.	• Assessment of the criteria used to estimate the expected losses from litigation provisions and contingencies and evaluation of the adequacy over the calculation of the provisions for regulatory, legal or tax procedures and their recognition. • Reconciliation between the minutes of the inspections and the amounts accounted for. In addition, we performed the following tests of details: • Analysis for reasonableness of the expected outcomes of the most significant tax and legal proceedings. • Assessment of possible contingencies relating to compliance with the tax obligations for all the years open to inspection, of the communications with the regulatory bodies and analysis of the ongoing regulatory inspections. • Obtaining confirmation letters from external and internal lawyers and external tax advisors who work with the Bank and performing alternative procedures. • Analysis of the recognition and reasonableness of the provisions recorded. In the procedures described above, no exceptions were identified outside of a reasonable range.

Impairment of investments in subsidiaries

As indicated in note 13 of the accompanying annual accounts, Banco Santander, S.A. is the parent company of a group of entities, whose fundamental activities are in the financial services sector. The carrying value of the investments in subsidiaries as at December 31, 2021 is 85,272 million euros.

Management performs an analysis of the potential losses in investments in subsidiaries that it has registered in its accounting records. This analysis is performed using different parameters such as the market price or the net equity adjusted for the unrealised gains existing at the valuation date, including goodwill net of its corresponding impairment.

We have obtained an understanding of the valuation process of the investment in subsidiaries. In addition, where the valuation of investment requires the use of an elevated component of judgment, we have relied on the assistance of our valuation experts.

With respect to internal controls, we have focused on the design and operating effectiveness of the controls in the valuation process and over the methodology, inputs and relevant assumptions used by management for the year-end estimates, including the controls performed to supervise the process and the related approvals.

Key audit matter	How our audit addressed the key audit matter
The valuation or analysis of the impairment of some of these investments require an elevated component of judgment, principally for those investments measured using the net equity adjusted for the unrealised gains existing at the valuation date including its goodwill, therefore it has been considered one of the key audit matters. This valuation, performed by Bank's management, is based on the analysis performed as part of the goodwill impairment assessment, where assumptions such as financial projections, discount rates, perpetual growth rates and market quotes (if available). Management's assessment has considered the updated economic and business environment resulting from covid-19, the current market conditions and the existing economic uncertainty. Please refer to note 13 of the annual accounts as at December 31, 2021.	Additionally, we have performed tests of details consisting of the following: • Verify the valuation performed by the Bank, using as a reference the recoverable balance of the investments in subsidiaries. • Verify that management's valuation methodology is in line with the applicable accounting standards, market practice and the specific expectations of the sector. • For investments whose valuation is calculated considering goodwill, we evaluated the reasonableness of the valuation models based on projected discounted cash flows. In the procedures described above, no exceptions were identified outside of a reasonable range.
Information systems	
The Bank's financial information is highly dependent on information technology (IT) systems, therefore an adequate control of these systems is crucial to ensuring correct data processing. In this context, it is vital to evaluate aspects such as the organization of the Bank's Technology and Operations department, controls over software maintenance and development, physical and logical security controls, and controls over computer operations, therefore it has been considered one of the key audit matters. In this respect, management continues monitoring the internal controls over IT systems, including the access controls that support the Bank´s technology processes.	We have evaluated, in collaboration with our IT system specialists, the internal controls over the IT systems, databases and applications that support the Bank's financial reporting. For this purpose, we have performed procedures over internal control and test of details related to: • The function of the IT governance framework. • Access and logical security controls over the applications, operating systems and databases that support the relevant financial information. • Application development and change management. • Maintenance of computer operations.

Key audit matter	How our audit addressed the key audit matter
	In addition, considering the monitoring carried out by management over its internal controls over IT systems, our approach and audit plan focused on the following aspects: • Evaluation of the monitoring made by management as part of its internal control environment of the Bank. • Testing of the design and operating effectiveness of the controls implemented by management, including access controls. In the procedures described above, no relevant exceptions were identified related to this matter.

Other information: Director's report

Other information comprises only the management report for the 2021 financial year, the formulation of which is the responsibility of the Bank's directors and does not form an integral part of the annual accounts.

Our audit opinion on the annual accounts does not cover the management report. Our responsibility regarding the management report, in accordance with legislation governing the audit practice, is to:

a) Verify only that the statement of non-financial information, certain information included in the Annual Corporate Governance Report and the Annual Report on Directors' Remuneration, as referred to in the Auditing Act, has been provided in the manner required by applicable legislation and, if not, we are obliged to disclose that fact.

b) Evaluate and report on the consistency between the rest of the information included in the management report and the annual accounts as a result of our knowledge of the Company obtained during the audit of the aforementioned financial statements, as well as to evaluate and report on whether the content and presentation of this part of the management report is in accordance with applicable regulations. If, based on the work we have performed, we conclude that material misstatements exist, we are required to report that fact.

On the basis of the work performed, as described above, we have verified that the information mentioned in section a) above has been provided in the manner required by applicable legislation and that the rest of the information contained in the management report is consistent with that contained in the annual accounts for the 2021 financial year, and its content and presentation are in accordance with applicable regulations.

Responsibility of the directors and the audit committee for the annual accounts

The directors are responsible for the preparation of the accompanying annual accounts, such that they fairly present the equity, financial position and financial performance of the Bank, in accordance with the financial reporting framework applicable to the entity in Spain, and for such internal control as the aforementioned directors determine is necessary to enable the preparation of annual accounts that are free from material misstatement, whether due to fraud or error.

In preparing the annual accounts, the directors are responsible for assessing the Bank's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Bank or to cease operations, or has no realistic alternative but to do so.

The audit committee is responsible for overseeing the process of preparation and presentation of the annual accounts.

Auditor's responsibilities for the audit of the annual accounts

Our objectives are to obtain reasonable assurance about whether the annual accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with legislation governing the audit practice in Spain will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual accounts.

As part of an audit in accordance with legislation governing the audit practice in Spain, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the annual accounts, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Bank's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the annual accounts or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Bank to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the annual accounts, including the disclosures, and whether the annual accounts represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the entity's audit committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the entity's audit committee with a statement that we have complied with relevant ethical requirements, including those relating to independence, and we communicate with the aforementioned those matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the entity's audit committee, we determine those matters that were of most significance in the audit of the annual accounts of the current period and are therefore the key audit matters.

We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Report on other legal and regulatory requirements

European single electronic format

We have examined the digital file of the European single electronic format (ESEF) of Banco Santander, S.A. for the 2021 financial year that comprises an XHTML file of the annual accounts for the financial year, which will form part of the annual financial report.

The directors of Banco Santander, S.A. are responsible for presenting the annual financial report for 2021 financial year in accordance with the formatting requirements established in the Delegated Regulation (EU) 2019/815 of 17 December 2018 of the European Commission (hereinafter the ESEF Regulation). In this regard, the Annual Corporate Governance Report and the Annual Report on Directors' Remuneration have been incorporated by reference in the management report.

Our responsibility is to examine the digital file prepared by the Bank's directors, in accordance with legislation governing the audit practice in Spain. This legislation requires that we plan and execute our audit procedures in order to verify whether the content of the annual accounts included in the aforementioned file completely agrees with that of the annual accounts that we have audited, and whether the format of these accounts has been affected, in all material respects, in accordance with the requirements established in the ESEF Regulation.

In our opinion, the digital file examined completely agrees with the audited annual accounts, and these are presented, in all material respects, in accordance with the requirements established in the ESEF Regulation.

Report to the audit committee

The opinion expressed in this report is consistent with the content of our additional report to the audit committee of the Bank dated February 25, 2022.

Appointment period

The General Ordinary Shareholders' Meeting held on March 26, 2021 appointed us as auditors for a period of one year, as from the year ended December 31, 2021.

Previously, we were appointed by resolution of the General Ordinary Shareholders' Meeting for a period of three years and we have audited the accounts continuously since the year ended December 31, 2016.

Banco Santander, S.A.

Services provided

Services provided to the audited entity and its subsidiaries for services other than the audit of the accounts are disclosed in note 43 to the annual accounts.

PricewaterhouseCoopers Auditores, S.L. (S0242)

Julián González Gómez (20179)

February 25, 2022

Santander

Banco Santander, S.A.

Financial statements for the year ended 31 December 2021

Translation of annual accounts originally issued in Spanish and prepared in accordance with the regulatory financial reporting framework applicable to Banco Santander in Spain (see notes 1 and 49). In the event of a discrepancy, the Spanish-language version prevails.

Santander

Translation of annual accounts originally issued in Spanish and prepared in accordance with the regulatory financial reporting framework applicable to Banco Santander in Spain (see notes 1 and 49). In the event of a discrepancy, the Spanish-language version prevails.

Banco Santander, S.A.

BALANCE SHEETS AS OF 31 DECEMBER 2021 AND 2020

EUR Million

ASSETS	Note	2021	2020*
CASH, CASH BALANCES AT CENTRAL BANKS AND OTHER DEPOSITS ON DEMAND	**6**	**91,736**	**67,561**
FINANCIAL ASSETS HELD FOR TRADING		**86,085**	**81,437**
Derivatives	9 & 11	42,023	53,362
Equity instruments	8	14,619	9,758
Debt instruments	7	14,320	18,243
Loans and advances		15,123	74
Central banks	6	1,118	—
Credit institutions	6	6,980	3
Customers	10	7,025	71
Memorandum items: lent or delivered as guarantees with disposal or pledge rights	*31*	*22,440*	*8,540*
NON-TRADING FINANCIAL ASSETS MANDATORILY AT FAIR VALUE THROUGH PROFIT OR LOSS		**2,355**	**2,225**
Equity instruments	8	908	305
Debt instruments	7	734	671
Loans and advances		713	1,249
Central banks	6	—	—
Credit institutions	6	—	—
Customers	10	713	1,249
Memorandum items: lent or delivered as guarantees with disposal or pledge rights	*31*	*154*	*329*
FINANCIAL ASSETS DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS		**13,403**	**33,899**
Debt instruments	7	—	—
Loans and advances		13,403	33,899
Central banks	6	—	482
Credit institutions	6	3,445	9,888
Customers	10	9,958	23,529
Memorandum items: lent or delivered as guarantees with disposal or pledge rights	*31*	—	*3,642*
FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME		**15,035**	**22,623**
Equity instruments	8 & 25	1,705	1,942
Debt instruments	7 & 25	9,394	15,146
Loans and advances		3,936	5,535
Central banks	6	—	—
Credit institutions	6	—	—
Customers	10	3,936	5,535
Memorandum items: lent or delivered as guarantees with disposal or pledge rights	*31*	*2,348*	*2,293*

ASSETS	Note	2021	2020*
FINANCIAL ASSETS AT AMORTIZED COST		**339,053**	**311,020**
Debt instruments	7	17,208	11,413
Loans and advances		321,845	299,607
Central banks	6	26	21
Credit institutions	6	35,084	34,159
Customers	10	286,735	265,427
Memorandum items: lent or delivered as guarantees with disposal or pledge rights	*31*	*1,513*	*2,607*
HEDGING DERIVATIVES	**32**	**1,648**	**3,137**
CHANGES IN THE FAIR VALUE OF HEDGED ITEMS IN PORTFOLIO HEDGES OF INTEREST RATE RISK	**32**	**120**	**206**
INVESTMENTS		**88,549**	**84,890**
Group entities	13	85,272	81,560
Joint venture entities		257	248
Associated entities	13	3,020	3,082
TANGIBLE ASSETS	**15**	**6,515**	**6,680**
Property, plant and equipment		6,244	6,462
For own-use		*5,392*	*5,715*
Leased out under an operating lease		*852*	*747*
Investment property		*271*	*218*
Of which, Leased out under an operating lease		*271*	*218*
Memorandum items: acquired in financial leasing		*2,695*	*2,879*
INTANGIBLE ASSETS	**16**	**896**	**948**
Goodwill		396	458
Other intangible assets		500	490
TAX ASSETS	**24**	**9,622**	**9,282**
Current tax assets		1,003	721
Deferred tax assets		8,619	8,561
OTHER ASSETS		**1,940**	**4,174**
Insurance contracts linked to pensions	14, 17 & 23	381	423
Inventories	17	—	—
Other	17	1,559	3,751
NON-CURRENT ASSETS HELD FOR SALE	**12**	**993**	**1,287**
TOTAL ASSETS		**657,950**	**629,369**

* Presented for comparison purposes only (note 1.d).

The accompanying notes 1 to 49 and Appendices are an integral part of the balance sheet as of 31 December 2021.

Translation of annual accounts originally issued in Spanish and prepared in accordance with the regulatory financial reporting framework applicable to Banco Santander in Spain (see notes 1 and 49). In the event of a discrepancy, the Spanish-language version prevails.

BALANCE SHEETS AS OF 31 DECEMBER 2021 AND 2020

EUR Million

LIABILITIES	Note	2021	2020*
FINANCIAL LIABILITIES HELD FOR TRADING		**56,969**	**61,014**
Derivatives	9 & 11	40,672	50,676
Short positions	9	9,244	10,338
Deposits		7,053	—
Central banks	18	44	—
Credit institutions	18	5,718	—
Customers	19	1,291	—
Marketable debt securities	20	—	—
Other financial liabilities	22	—	—
FINANCIAL LIABILITIES DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS		**12,743**	**16,890**
Deposits		12,743	16,890
Central banks	18	607	1,469
Credit institutions	18	1,067	4,496
Customers	19	11,069	10,925
Marketable debt securities	20	—	—
Other financial liabilities	22	—	—
Memorandum items: subordinated liabilities		—	—
FINANCIAL LIABILITIES AT AMORTIZED COST		**510,272**	**474,619**
Deposits		396,154	376,837
Central banks	18	64,649	60,372
Credit institutions	18	35,262	40,725
Customers	19	296,243	275,740
Marketable debt securities	20	104,094	87,902
Other financial liabilities	22	10,024	9,880
Memorandum items: subordinated liabilities	*20 & 21*	*20,399*	*17,124*
HEDGING DERIVATIVES	**32**	**2,076**	**1,780**
CHANGES IN THE FAIR VALUE OF HEDGED ITEMS IN PORTFOLIO HEDGES OF INTEREST RATE RISK		**—**	**—**
PROVISIONS	**23**	**4,349**	**5,007**
Pensions and other post-retirement obligations		1,677	1,849
Other long term employee benefits		1,053	1,581
Taxes and other legal contingencies		516	496
Contingent liabilities and commitments		190	157
Other provisions		913	924
TAX LIABILITIES	**24**	**1,697**	**1,555**
Current tax liabilities		176	45
Deferred tax liabilities		1,521	1,510
OTHER LIABILITIES	**17**	**3,271**	**3,567**
LIABILITIES ASSOCIATED WITH NON-CURRENT ASSETS HELD FOR SALE		**—**	**—**
TOTAL LIABILITIES		**591,377**	**564,432**

* Presented for comparison purposes only (note 1.d).

The accompanying notes 1 to 49 and Appendices are an integral part of the balance sheet as of 31 December 2021.

Translation of annual accounts originally issued in Spanish and prepared in accordance with the regulatory financial reporting framework applicable to Banco Santander in Spain (see notes 1 and 49). In the event of a discrepancy, the Spanish-language version prevails.

BALANCE SHEETS AS OF 31 DECEMBER 2021 AND 2020

EUR Million

EQUITY	Note	2021	2020*
SHAREHOLDERS' EQUITY	**26**	**68,375**	**66,498**
CAPITAL		**8,670**	**8,670**
Called up paid capital	27	8,670	8,670
Unpaid capital which has been called up		—	—
Memorandum items: uncalled up capital		—	—
SHARE PREMIUM	**28**	**47,979**	**52,013**
EQUITY INSTRUMENTS ISSUED OTHER THAN CAPITAL	**30**	**658**	**627**
Equity component of compound financial instruments		—	—
Other equity instruments issued		658	627
OTHER EQUITY INSTRUMENTS	**30**	**147**	**157**
ACCUMULATED RETAINED EARNINGS	**29**	**9,683**	**9,683**
REVALUATION RESERVES		**—**	**—**
OTHER RESERVES	**29**	**(1,017)**	**(1,095)**
(-) OWN SHARES	**30**	**(841)**	**—**
RESULTS FOR THE PERIOD	**4**	**3,932**	**(3,557)**
(-) INTERIM DIVIDENDS	**4**	**(836)**	**—**
OTHER COMPREHENSIVE INCOME OR LOSS		**(1,802)**	**(1,561)**
ITEMS THAT WILL NOT BE RECLASSIFIED TO PROFIT OR LOSS	**25**	**(1,858)**	**(1,882)**
Actuarial gains or - losses in defined benefit pension plans		(1,329)	(1,351)
Non-current assets and disposal groups that have been classified as held for sale		—	—
Changes in the fair value of equity instruments measured at fair value with changes in other comprehensive income		(468)	(537)
Ineffectiveness of fair value hedges of equity instruments measured at fair value with changes in other comprehensive income		—	—
Changes in the fair value of equity instruments measured at fair value with changes in other comprehensive income [hedged item]		271	154
Changes in the fair value of equity instruments measured at fair value with changes in other comprehensive income [hedging instrument]		(271)	(154)
Changes in the fair value of financial liabilities at fair value through profit or loss attributable to changes in credit risk		(61)	6
ITEMS THAT MAY BE RECLASSIFIED TO PROFIT OR LOSS	**25**	**56**	**321**
Hedge of net investments in foreign operations [effective part]		—	—
Currency conversion		—	—
Hedging derivatives. Cash flow hedge reserve [effective part]		(87)	(189)
Changes in the fair value of debt instruments measured at fair value with changes in other comprehensive income		143	510
Hedging instruments [non-designated items]		—	—
Non-current assets and disposal groups that have been classified as held for sale		—	—
TOTAL EQUITY		**66,573**	**64,937**
TOTAL LIABILITIES AND EQUITY		**657,950**	**629,369**
MEMORANDUM ITEMS			
Financial guarantees granted	31	10,489	10,135
Loan commitments granted	31	111,410	96,959
Other commitments granted	31	59,421	50,686

* Presented for comparison purposes only (note 1.d).

The accompanying notes 1 to 49 and Appendices are an integral part of the balance sheet as of 31 December 2021.

Translation of annual accounts originally issued in Spanish and prepared in accordance with the regulatory financial reporting framework applicable to Banco Santander in Spain (see notes 1 and 49). In the event of a discrepancy, the Spanish-language version prevails.

INCOME STATEMENTS FOR THE YEARS ENDED 31 DECEMBER 2021 AND 2020

EUR Million

		(Debit) Credit	
	Note	2021	2020*
Interest income	34	6,405	6,528
Financial assets at fair value through other comprehensive income		*236*	*256*
Financial assets at amortized cost		*4,847*	*5,078*
Other interest income		*1,322*	*1,194*
Interest expense	35	(2,785)	(3,160)
Expenses for capital stock repayable on demand		—	—
Interest income/(changes)		**3,620**	**3,368**
Dividend income	36	5,489	5,642
Commission income	37	3,119	2,811
Commission expense	38	(541)	(494)
Gains or losses on financial assets and liabilities not measured at fair value through profit or loss, net	39	318	578
Financial assets at amortized cost	*39*	*19*	*10*
Other financial assets and liabilities	*39*	*299*	*568*
Gains or losses on financial assets and liabilities held for trading, net	39	175	(29)
Reclassification of financial assets at fair value through other comprehensive income		—	—
Reclassification of financial assets at amortized cost		—	—
Other gains (losses)		*175*	*(29)*
Gains or losses on non-trading financial assets and liabilities mandatorily at fair value through profit or loss	39	(45)	(290)
Reclassification of financial assets at fair value through other comprehensive income		—	—
Reclassification of financial assets at amortized cost		—	—
Other gains (losses)		*(45)*	*(290)*
Gains or losses on financial assets and liabilities measured at fair value through profit or loss, net	39	38	4
Gains or losses from hedge accounting, net	39	(28)	10
Exchange differences, net	40	(205)	372
Other operating income	41	441	404
Other operating expenses	41	(894)	(785)
Total income		**11,487**	**11,591**
Administrative expenses		(4,673)	(4,602)
Staff costs	*42*	*(2,707)*	*(2,586)*
Other general administrative expenses	*43*	*(1,966)*	*(2,016)*
Depreciation and amortisation cost	15 & 16	(570)	(625)
Provisions or reversal of provisions, net	23	(758)	(1,133)
Impairment or reversal of impairment at financial assets not measured at fair value through profit or loss and net gains and losses from changes	7 &10	(2,287)	(2,559)
Financial assets at fair value through other comprehensive income		*(1)*	*(4)*
Financial assets at amortized cost		*(2,286)*	*(2,555)*
Impairment or reversal of impairment of investments in subsidiaries, joint ventures and associates, net	44	800	(5,921)
Impairment or reversal on non-financial assets, net		(85)	(63)
Tangible assets	*15*	*(85)*	*(62)*
Intangible assets	*16*	—	*(1)*
Others		—	—
Gain or losses on non-financial assets and investments, net	45	—	1,142

		(Debit) Credit	
	Note	2021	2020*
Negative goodwill recognised in results		—	—
Gains or losses on non-current assets held for sale not classified as discontinued operations	12 & 46	(50)	(77)
Operating profit/(loss) before tax		**3,864**	**(2,247)**
Tax expense or income from continuing operations	24	68	(1,310)
Profit/(loss) from continuing operations		**3,932**	**(3,557)**
Profit/(loss) after tax		—	—
Profit/(loss) for the year		**3,932**	**(3,557)**

* Presented for comparison purposes only (note 1.d).

The accompanying notes 1 to 49 and Appendices are an integral part of the income statement the year ended as of 31 December 2021.

Translation of annual accounts originally issued in Spanish and prepared in accordance with the regulatory financial reporting framework applicable to Banco Santander in Spain (see notes 1 and 49). In the event of a discrepancy, the Spanish-language version prevails.

STATEMENTS OF RECOGNISED INCOME AND EXPENSES FOR THE YEARS ENDED 31 DECEMBER 2021 AND 2020

EUR Million

	Note	2021	2020*
PROFIT/LOSS FOR THE YEAR		**3,932**	**(3,557)**
OTHER RECOGNISED INCOME AND EXPENSES	**25**	**(662)**	**(1,221)**
Items that will not be reclassified to profit or loss		**(397)**	**(858)**
Actuarial gains and losses on defined benefit pension plans		29	(77)
Other recognised income and expense of investments in subsidiaries, joint venture and associates		—	—
Changes in the fair value of equity instruments measured at fair value through other comprehensive income, net		(347)	(796)
Gains or losses resulting from the accounting for hedges of equity instruments measured at fair value through other comprehensive income, net		—	—
Changes in the fair value of equity instruments measured at fair value through other comprehensive income (hedged item)		*117*	*4*
Changes in the fair value of equity instruments measured at fair value through other comprehensive income (hedging instrument)		*(117)*	*(4)*
Changes in the fair value of financial liabilities at fair value through profit or loss attributable to changes in credit risk		(93)	4
Income tax relating to items that will not be reclassified	24	14	11
Items that may be reclassified to profit or loss		**(265)**	**(363)**
Hedges of net investments in foreign operations (Effective portion)		—	—
Revaluation gains (losses)		—	—
Amounts transferred to income statement		—	—
Other reclassifications		—	—
Exchanges differences		—	—
Revaluation gains (losses)		—	—
Amounts transferred to income statement		—	—
Other reclassifications		—	—
Cash flow hedges (Effective portion)		146	(206)
Revaluation gains or (losses)		*152*	*(239)*
Amounts transferred to income statement		*(6)*	*33*
Transferred to initial carrying amount of hedged items		—	—
Other reclassifications		—	—
Hedging instruments (items not designated)		—	—
Revaluation gains (losses)		—	—
Amounts transferred to income statement		—	—
Other reclassifications		—	—
Debt instruments at fair value with changes in other comprehensive income		(524)	(316)
Revaluation gains (losses)		*(243)*	*244*
Amounts transferred to income statement		*(281)*	*(560)*
Other reclassifications		—	—
Non-current assets held for sale		—	—
Revaluation gains (losses)		—	—
Amounts transferred to income statement		—	—
Other reclassifications		—	—
Income tax related to items that may be reclassified to profit or loss	24	113	159
Total recognised income and expenses for the year		**3,270**	**(4,778)**

* Presented for comparison purposes only (note 1.d).

The accompanying notes 1 to 49 and Appendices are an integral part of the statement of recognized income and expenses for the year ended as of 31 December 2021.

Translation of annual accounts originally issued in Spanish and prepared in accordance with the regulatory financial reporting framework applicable to Banco Santander in Spain (see notes 1 and 50). In the event of a discrepancy, the Spanish-language version prevails.

STATEMENTS OF CHANGES IN TOTAL EQUITY FOR THE YEARS ENDED 31 DECEMBER 2021 AND 2020

EUR Million

	Capital	Share premium	Equity instruments issued (not capital)	Other equity instruments	Accumulated retained earnings	Revaluation reserves	Other reserves	(-) Own Equity shares	Result for the period	(-) Interim dividends	Other comprehensive income	Total
Balance at 31 December 2020*	**8,670**	**52,013**	**627**	**157**	**9,683**	**—**	**(1,095)**	**—**	**(3,557)**	**—**	**(1,561)**	**64,937**
Adjustments due to errors	—	—	—	—	—	—	—	—	—	—	—	—
Adjustments due to changes in accounting policies	—	—	—	—	—	—	—	—	—	—	—	—
Opening balance at 1 January 2021*	**8,670**	**52,013**	**627**	**157**	**9,683**	**—**	**(1,095)**	**—**	**(3,557)**	**—**	**(1,561)**	**64,937**
Total recognised income and expense	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**3,932**	**—**	**(662)**	**3,270**
Other changes in equity	**—**	**(4,034)**	**31**	**(10)**	**—**	**—**	**78**	**(841)**	**3,557**	**(836)**	**421**	**(1,634)**
Issuance of ordinary shares	—	—	—	—	—	—	—	—	—	—	—	—
Issuance of preferred shares	—	—	—	—	—	—	—	—	—	—	—	—
Issuance of other financial instruments	—	—	—	—	—	—	—	—	—	—	—	—
Maturity of other financial instruments	—	—	—	—	—	—	—	—	—	—	—	—
Conversion of financial liabilities into equity	—	—	—	—	—	—	—	—	—	—	—	—
Capital reduction	—	—	—	—	—	—	—	—	—	—	—	—
Dividends	—	(477)	—	—	—	—	—	—	—	(836)	—	(1,313)
Purchase of equity instruments	—	—	—	—	—	—	—	(1,446)	—	—	—	1,446
Disposal of equity instruments	—	—	—	—	—	—	—	605	—	—	—	605
Transfer from equity to liabilities	—	—	—	—	—	—	—	—	—	—	—	—
Transfer from liabilities to equity	—	—	—	—	—	—	—	—	—	—	—	—
Transfers between equity items	—	(3,557)	—	—	—	—	(421)	—	3,557	—	421	—
Increases (decreases) due to business combinations	—	—	—	—	—	—	—	—	—	—	—	—
Share-based payment	—	—	—	(62)	—	—	—	—	—	—	—	(62)
Others increases or (-) decreases of the equity	—	—	31	52	—	—	499	—	—	—	—	582
Of which, discretionary allocation to social funds (only savings banks and credit cooperatives)	—	—	—	—	—	—	—	—	—	—	—	—
Balance at 31 December 2021	**8,670**	**47,979**	**658**	**147**	**9,683**	**—**	**(1,017)**	**(841)**	**3,932**	**(836)**	**(1,802)**	**66,573**

* Presented for comparison purposes only (note 1.d).

The accompanying notes 1 to 49 and Appendices are an integral part of the statement of changes in total equity for the year ended as of 31 December 2021.

Santander

Translation of annual accounts originally issued in Spanish and prepared in accordance with the regulatory financial reporting framework applicable to Banco Santander in Spain (see notes 1 and 49). In the event of a discrepancy, the Spanish-language version prevails.

STATEMENTS OF CHANGES IN TOTAL EQUITY FOR THE YEARS ENDED 31 DECEMBER 2021 AND 2020

EUR Million

	Capital	Share premium	Equity instruments issued (not capital)	Other equity instruments	Accumulated retained earnings	Revaluation reserves	Other reserves	(-) Own Equity shares	Result for the period	(-) Interim dividends	Other comprehensive income	Total
Balance at 31 December 2019*	**8,309**	**52,446**	**598**	**144**	**7,814**	**—**	**(617)**	**—**	**3,530**	**(1,662)**	**(340)**	**70,222**
Adjustments due to errors	—	—	—	—	—	—	—	—	—	—	—	—
Adjustments due to changes in accounting policies	—	—	—	—	—	—	—	—	—	—	—	—
Opening balance at 1 January 2020*	**8,309**	**52,446**	**598**	**144**	**7,814**	**—**	**(617)**	**—**	**3,530**	**(1,662)**	**(340)**	**70,222**
Total recognised income and expense	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**(3,557)**	**—**	**(1,221)**	**(4,778)**
Other changes in equity	**361**	**(433)**	**29**	**13**	**1,869**	**—**	**(478)**	**—**	**(3,530)**	**1,662**	**—**	**(507)**
Issuance of ordinary shares	361	(72)	—	—	—	—	70	—	—	—	—	359
Issuance of preferred shares	—	—	—	—	—	—	—	—	—	—	—	—
Issuance of other financial instruments	—	—	—	—	—	—	—	—	—	—	—	—
Maturity of other financial instruments	—	—	—	—	—	—	—	—	—	—	—	—
Conversion of financial liabilities into equity	—	—	—	—	—	—	—	—	—	—	—	—
Capital reduction	—	—	—	—	—	—	—	—	—	—	—	—
Dividends	—	(361)	—	—	—	—	—	—	—	—	—	(361)
Purchase of equity instruments	—	—	—	—	—	—	—	(615)	—	—	—	(615)
Disposal of equity instruments	—	—	—	—	—	—	—	615	—	—	—	615
Transfer from equity to liabilities	—	—	—	—	—	—	—	—	—	—	—	—
Transfer from liabilities to equity	—	—	—	—	—	—	—	—	—	—	—	—
Transfers between equity items	—	—	—	(1)	1,869	—	—	—	(3,530)	1,662	—	—
Increases (decreases) due to business combinations	—	—	—	—	—	—	—	—	—	—	—	—
Share-based payment	—	—	—	(53)	—	—	—	—	—	—	—	(53)
Other increases or (-) decreases of the equity	—	—	29	67	—	—	(548)	—	—	—	—	(452)
Of which, discretionary allocation to social funds (only savings banks and credit cooperatives)	—	—	—	—	—	—	—	—	—	—	—	—
Balance at 31 December 2020*	**8,670**	**52,013**	**627**	**157**	**9,683**	**—**	**(1,095)**	**—**	**(3,557)**	**—**	**(1,561)**	**64,937**

* Presented for comparison purposes only (note 1.d).

The accompanying notes 1 to 49 and Appendices are an integral part of the statements of changes in total equity for the year ended 31 December 2021.

Translation of annual accounts originally issued in Spanish and prepared in accordance with the regulatory financial reporting framework applicable to Banco Santander in Spain (see notes 1 and 49). In the event of a discrepancy, the Spanish-language version prevails.

STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED 31 DECEMBER 2021 AND 2020

EUR Million

	Note	2021	2020*
A. CASH FLOWS FROM OPERATING ACTIVITIES		**20,034**	**37,842**
Profit or loss for the year	**4**	**3,932**	**(3,557)**
Adjustments made to obtain the cash flows from operating activities		**2,052**	**12,938**
Depreciation and amortization cost	*15 & 16*	*570*	*625*
Other adjustments		*1,482*	*12,313*
Net increase/(decrease) in operating assets		**9,622**	**(7,513)**
Financial assets held-for-trading		*4,648*	*(5,146)*
Non-trading financial assets mandatorily at fair value through profit or loss		*130*	*(394)*
Financial assets designated at fair value through profit or loss		*(20,496)*	*(15,962)*
Financial assets at fair value through other comprehensive income		*(7,166)*	*(9,299)*
Financial assets at amortized cost		*36,675*	*26,903*
Other operating assets		*(4,169)*	*(3,615)*
Net increase/(decrease) in operating liabilities		**24,024**	**21,199**
Financial liabilities held-for-trading		*(4,045)*	*(3,341)*
Financial liabilities designated at fair value through profit or loss		*(4,147)*	*(7,374)*
Financial liabilities at amortized cost		*32,660*	*35,268*
Other operating liabilities		*(444)*	*(3,354)*
Income tax recovered/(paid)		**(352)**	**(251)**
B. CASH FLOWS FROM INVESTING ACTIVITIES		**4,083**	**(3,263)**
Payments		**2,266**	**8,001**
Tangible assets	*15*	*501*	*489*
Intangible assets	*16*	*110*	*73*
Investments	*13*	*1,655*	*7,439*
Subsidiaries and other business units		*—*	*—*
Non-current assets held for sale and associated liabilities		*—*	*—*
Other payments related to investing activities		*—*	*—*
Proceeds		**6,349**	**4,738**
Tangible assets	*15*	*119*	*118*
Intangible assets	*16*	*—*	*—*
Investments	*13 & 36*	*5,959*	*4,398*
Subsidiaries and other business units		*—*	*—*
Non-current assets held for sale and associated liabilities		*271*	*222*
Other proceeds related to investing activities		*—*	*—*
C. CASH FLOW FROM FINANCING ACTIVITIES		**(277)**	**1,087**
Payments		**5,322**	**3,250**
Dividends	*4*	*1,313*	*—*
Subordinated liabilities	*21*	*2,248*	*2,348*
Redemption of own equity instruments		*—*	*—*
Acquisition of own equity instruments		*1,446*	*615*
Other payments related to financing activities		*315*	*287*
Proceeds		**5,045**	**4,337**
Subordinated liabilities	*21*	*4,440*	*3,722*
Issuance of own equity instruments		*—*	*—*
Disposal of own equity instruments		*605*	*615*
Other proceeds related to financing activities		*—*	*—*
D. EFFECT OF FOREIGN EXCHANGE RATE CHANGES		**335**	**(576)**

	Note	2021	2020*
E. NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS		**24,175**	**35,090**
F. CASH AND CASH EQUIVALENTS AT BEGINNING OF THE YEAR		**67,561**	**32,471**
G. CASH AND CASH EQUIVALENTS AT END OF THE YEAR		**91,736**	**67,561**
MEMORANDUM ITEMS			
COMPONENTS OF CASH AND CASH EQUIVALENTS AT END OF THE YEAR			
Cash		*1,184*	*1,302*
Cash equivalents at central banks		*88,268*	*63,984*
Other financial assets		*2,284*	*2,275*
Less - Bank overdrafts refundable on demand		*—*	*—*
TOTAL OF CASH AND CASH EQUIVALENTS AT END OF THE YEAR		**91,736**	**67,561**

* Presented for comparison purposes only (note 1.d).

The accompanying notes 1 to 49 and Appendices are an integral part of the statement of cash flows for the year ended as of 31 December 2021.

Translation of annual accounts originally issued in Spanish and prepared in accordance with the regulatory financial reporting framework applicable to Banco Santander in Spain (see notes 1 and 49). In case of discrepancy, the Spanish version prevails.

Banco Santander, S.A.

Notes to the financial statements (annual accounts) for the year ended 31 December 2021.

1. Introduction, basis of presentation of the financial statements (annual accounts) and other information

a) Introduction

Banco Santander, S.A. ('the Bank' or 'Banco Santander') is a private-law entity subject to the rules and regulations applicable to banks operating in Spain, where it was constituted and currently maintains its legal domicile, which is Paseo de Pereda, numbers 9 to 12 (39004, Santander, Spain).

The principal headquarters of Banco Santander are located in Ciudad Grupo Santander, Avenida Cantabria s/n (28660, Boadilla del Monte, Madrid, Spain).

The corporate purpose of Banco Santander, S.A., mainly entails carrying out all kinds of activities, operations and services inherent to the banking business in general and permitted by current legislation, and the acquisition, holding, enjoyment and disposal of all kinds of securities.

In addition to the operations carried on directly by it, Banco Santander is the head of a group of subsidiaries that engage in various business activities and which compose, together with it, Grupo Santander ('Grupo Santander' or 'the Group'). Therefore, Banco Santander is obliged to prepare, in addition to its own separate financial statements, the Group's consolidated financial statements, which also include the interests in joint ventures and investments in associates.

Banco Santander annual accounts for the financial year 2020 were approved in the Banco Santander general shareholders' meeting held on 26 March 2021. The Group's 2021 consolidated financial statements, the financial statements of Banco Santander and of substantially all the Group companies have not been approved yet by their shareholders at the respective annual general meetings. However, Banco Santander board of directors considers that the aforementioned financial statements will be approved without any significant changes.

Appendix IX includes the list of agents that assist Banco Santander on the performance of its business activities in Spain.

b) Basis of presentation of the financial statements (annual accounts)

Banco Santander financial statements for the year ended 2021 have been formulated by Banco Santander directors (at the Board of Directors meeting on February 24, 2022) in accordance with Bank of Spain Circular 4/2017 and subsequent amendments, as well as the commercial regulations applicable to the Bank. Accounting principles, policies and measurement criteria are applied by the bank as set forth in note 2, in order to faithfully represent Banco Santander´s equity and financial position as of 31 December 2021 and 2020, results of its operations, recognized revenue and expenditure, changes in total equity and cash flows pertaining to financial year 2021 and 2020. These annual accounts have been prepared using the accounting records maintained by Banco Santander.

The notes to the financial statements contain additional information to that presented on the balance sheet, income statement, statement of recognized income and expense, statement of changes in total equity and statement of cash flows. The notes provide, in a clear, relevant, reliable and comparable manner, narrative descriptions and breakdowns of these statements.

Adoption of new standards and related interpretations

The following is a summary of the main Bank of Spain Circulars issued that became applicable to Banco Santander in financial year 2021:

Bank of Spain Circular 1/2021, of January 28, which modifies Circular 1/2013, of May 24, on the Risk Information Center, and Circular 5/2012, of June 27 , to credit institutions and payment service providers, on transparency of banking services and responsibility in granting loans. (BOE of January 30, 2021).

The main objective of this circular is to adapt Bank of Spain Circulars 1/2013 of May 24 over the Risk Information Center and Circular 5/2012 over the transparency of banking services and responsibility in the granting of loans to the changes in the regulation of the Risk Information Center (CIR), as well as to update the official reference rates by Order ETD/699/2020 (by

which the order Order ECO/ 697/2004 and Order 23 EHA/2899/2011, on transparency and protection of banking services clients).

On July 27, the Rev. Credit OM was published in the Official State Bulletin (BOE) where, among other regulations, Order ECO/697/2004 of March 11 on the Central Risk Information (hereinafter,'OM de la CIR') was modified. Among the objectives of this order is to improve the information available to lenders in performing solvency analyses of potential borrowers, avoiding over-indebtedness positions that lead borrowers to fail to comply with their financial obligations. Having the appropriate information that allows a solid assessment of solvency to prevent situations of excessive indebtedness, takes on special relevance in the context of the economic and social impact caused by the covid-19 health crisis.

On the other hand, the exceptional situation created by covid-19 has made it necessary to deploy different financial measures to mitigate the economic impact of the pandemic. These measures have been articulated in four royal decree-laws that describe the conditions to finance individuals, companies and the self-employed in relation to the implementation of moratoriums and government guarantees, as well as private moratoriums promoted by associated entities. In order to comply with the regulations over information possessed by lenders, imposed by said royal decree laws, and to support the supervision and inspection efforts by the Bank of Spain, reporting entities were requested to send the CIR certain information regarding the characteristics of loans affected by the aforementioned measures.

Additionally, the second rule of the circular modifies certain aspects of Circular 5/2012, in regards to official interest rates by the modification of Order EHA/2899/2011. This change is intended, among other ends, to increase the amount of official interest rate alternatives available to entities, who then apply them in granting loans and modifying existing contracts. In order to accomplish this, a review is conducted of the different official reference rates available and modifications are made to naming conventions of existing rates. In this regard, the circular updates the list of official rates within the Transparency OM and establishes the scope and procedures for determining the new indices.

The application of the circular has not had a significant effect on the Bank's annual accounts.

Bank of Spain Circular 2/2021, of January 28, which modifies Bank of Spain Circular 8/2015, of December 18, to the entities and branches subscribed to the Deposit Guarantee Fund of Credit Institutions, over information to determine the basis for calculating contributions to the Deposit Guarantee Fund for Credit Institutions. (BOE of February 2, 2021).

The objective of this circular is to incorporate changes made to Royal Decree 2017/2008 into the Bank of Spain circular 8/2015, establishing how to collect new information which must be made available to the Bank of Spain, credit institutions, and FGD-subscribed branches. This is outlined within 'Information in determining the basis for calculating contributions to the Deposit Guarantee Fund' as well as the 'Received deposit registry', which appear in annexes 1 and 2, respectively, of the aforementioned Circular 8/2015.

The regulation modifies Circular 8/2015 as follows:

- The fourth rule has been modified to set the minimum frequency by which entities and FGD-subscribed branches must update the detailed deposits received registry (as regulated in annex 2). Specifically, updates must include information related to securities and cash balances held by investment companies, opened with the entity or FGD-subscribed branch and in the name of the investment services company on behalf of its clients.
- Schedule 1, 'Information to determine the basis for calculating contributions to the Deposit Guarantee Fund', has been replaced by another schedule of the same name, schedule 1, which consists of two parts, A and B. In part A's template, 'Information regarding the compartmentalization of deposit and securities guarantees', information is kept until the establishment of this circular are sent by the entities attached to the FGD and the necessary adjustments are made to collect the information on the deposits constituted by investment services companies in instrumental and temporary cash accounts opened in the name of the investment services company in the reporting entity on behalf of its clients, as established in articles 30 quater and 43.3 of the Royal Decree 217/2008. In addition, for admissible deposits, the detail is disaggregated between those by offices located in Spain ('Business in Spain') and those branches in other European Union countries ('Business in branches in other Member States of the European Union'). Lastly, part B has been added to annex 1 of Circular 8/2015, which includes a breakdown by country of residence of the branches containing eligible and guaranteed deposits.

The application of the circular has not had a significant effect on the Bank's annual accounts.

Bank of Spain Circular 3/2021 of May 13, which modifies Circular 5/2012, of June 27, regarding the definition of the reference interest rate based on the Euro short-term rate (EUR STR) to credit institutions and payment service providers, on transparency of banking services and responsibility in granting loans. (BOE of May 17, 2021).

The main objective of this circular is to adapt the definition of the index based on the Euro short-term rate (EUR STR). For the purposes of its consideration as an official rate, included in annex 8, section six, of Circular 5/2012, of June 27, to credit institutions and payment service providers, on transparency of banking services and responsibility in granting loans, following the publication of the European Central Bank's Guideline (EU) 2021/565, of 17 March 2021, which modifies Guideline (EU) 2019/1265, on the short-term interest rate of the euro (EUR STR) (ECB / 2021/10), which establishes the preparation and daily publication, as of April 15, 2021, of compound average rates based on EUR STR.

The application of the circular has not had a significant effect on the Bank's annual accounts.

Bank of Spain Circular 4/2021 of 25 November, to credit institutions and other supervised entities, on models of reserved statements in matters of market conduct, transparency and customer protection, and on the registration of claims. (BOE of 1 December 2021).

The purpose of this circular is to establish the content and frequency of the models of reserved statements in matters of market conduct, transparency and customer protection that must be sent to the Bank of Spain. Further, the circular declares minimum amounts of claims information that said entities must have at the disposal of the Bank of Spain.

The application of the circular has not had a significant effect on the Bank's annual accounts.

Bank of Spain Circular 5/2021 of 22 December, which modifies Circular 2/2016 of February 2 to credit institutions, on supervision and solvency, which completes the adaptation of the Spanish legal system to Directive 2013/36/EU and Regulation (EU) No. 575/2013. (BOE of 23 December 2021) (Correction of BOE errors of December 30, 2021).

This circular covers the principles of necessity, effectiveness, proportionality, legal certainty, transparency, and efficiency, as outlined in article 129 of Law 39/2015 of October 1, on the Common Administrative Procedure of Public Administrations.

In regards to the principles of necessity and effectiveness, this circular is a necessary tool for the development of the framework applicable to the new macroprudential tools that the Bank of Spain has at its disposal, in accordance with Royal Decree-Law 22 /2018 and Royal Decree 102/2019. This Decree-Law's ultimate objective is to identify, prevent and mitigate the development of systemic risk and ensure a sustainable contribution by the financial system to economic growth:

- Capital buffer requirements, as established in articles 43 to 49 of Law 10/2014.
- The establishment of limits to sector concentration, in accordance with article 69 ter of Law 10/2014.
- The setting of conditions over the granting of loans and other operations, by virtue of article 69 quater of Law 10/2014.

The application of the circular has not had a significant effect on the Bank's annual accounts.

Bank of Spain Circular 6/2021 of 22 December, which modifies Circular 4/2017 of 27 November, to credit institutions, on public and reserved financial information standards, and models of financial statements, and Circular 4/2019 of November 26, to financial credit establishments, on standards of public and reserved financial information, and models of financial statements. (BOE of 29 December 2021).

The main objective of this circular is to update Circular 4/2017 (27 of November), pertaining to credit institutions, specifically over public and reserved financial information standards, as well as financial statement models.

Firstly, among the modifications that this circular incorporates in Circular 4/2017 of November 27, there includes changes in the international financial reporting standards adopted in the European Union (IFRS-EU) with regard to International Accounting Standard No. 39 and International Financial Reporting Standards 4, 7, 9 and 16. The mentioned changes are the result of an International Accounting Standards Board (IASB) project that responds to the reform of benchmark interest rate indices known as IBOR (InterBank Offered Rates).

The additional detail required by the amendments to Circular 6/2021 relating to hedging relationships are included in note 32. Note 49 includes a description of Group and Bank management progress in the transition to reference rate alternatives, as well as detail over changes in risk management strategy.

The following is a breakdown of the carrying amount, at 31 December 2021, of financial assets, financial liabilities, derivatives and loan commitments that continue to reference the indices subject to IBOR Reform:

EUR million

Gross Carrying amount	Loans and advances	Debt securities acquired (Assets)	Deposits	Debt securities issued (Liabilities)	Derivatives (Assets)	Derivatives (Liabilities)	Loan Commitments
Referenced to EONIA	—	68	524	284	121	244	—
Referenced to LIBOR	17,608	1,649	56	2,419	9,101	13,335	948
of which USD	*15,740*	*491*	*56*	*2,419*	*5,719*	*8,383*	*764*
of which GBP	*1,656*	*1,158*	—	—	*3,370*	*4,922*	*162*
TOTAL	**17,608**	**1,717**	**580**	**2,703**	**9,222**	**13,579**	**948**

Secondly, the models and instructions used in preparing the confidential financial statements known as FINREP, among other aspects, have been modified by Commission Execution Regulation (EU) 2021/451 of December 17, 2020, which establishes technical standards for the implementation of Regulation (EU) No. 575/2013 of the European Parliament and of the Council in relation to the communication of information for supervisory purposes by entities, which also repeals the Execution Regulation (EU) No. 680/2014. By virtue of this implemented regulation, changes have been made to FINREP in relation to restructured, refinanced or refinancing operations (forborne exposures). This circular makes adjustments to the treatment of restructured, refinanced or refinancing operations included in annex 9, 'Analysis and coverage of credit risk', of Circular 4/2017 dated November 27, in order to keep it aligned with that of FINREP.

Thirdly, the European Banking Authority (EBA) guidelines on the granting and monitoring of loans (EBA/GL/2020/06) aim to, among other objectives, to improve practices, processes and procedures related to the granting of credit operations. The aforementioned guidelines have been leveraged by the Bank of Spain, the scope of which applying to both less significant credit institutions and for credit financial establishments. The European Central Bank has within it's domain significant credit institutions.

Fourthly, this circular modifies annex 9 of Circular 4/2017, dated November 27, updating the alternative solutions for collective estimations of credit risk loss coverage and discounts on the reference value of the assets awarded or received in the payment of debts. Said modification includes updates to data used in the operations declared by entities under the periphery of the Bank of Spain and, in the case of alternative solutions, it incorporates updated forecasts on future macroeconomic conditions.

Regarding the use of updated alternative solutions, it should be noted that, in accordance with the provisions of points 52 and 53 of annex 9 of Circular 4/2017, dated November 27, the decision over whether to develop internal methodologies for collective estimations of the provisions for credit losses or resort to alternative solutions is one the entity makes itself. Although these alternative solutions will not be established until June 30, 2022, Banco Santander uses internal methodologies to calculate value corrections for impairment (see notes 2.d.iii and 2.i).

Fifthly, Circular 4/2017, dated November 27, was modified to reflect the update in the statistical data requirements of the Economic and Monetary Union (EMU), in accordance with the modifications established by Regulation (EU) 2021 /379 of the European Central Bank, dated January 22, regarding balance sheet items of credit institutions and the monetary financial institutions sector (recast) (ECB/2021/2). The new information that has been requested consists, on the one hand, of additional data requirements to improve the analysis of monetary and credit evolution and, on the other, of modifications of some of the existing data requirements and definitions to facilitate better integration with other statistical data sets.

Finally, specific modifications are made to the reserved individual financial statements pertaining to Circular 4/2017, dated November 27, in order to introduce new data requirements to verify compliance with regulations or collect statistical information, as well as to make the adjustments and corrections identified as necessary since the last update of said circular.

The application of the circular has not had a significant effect on the Bank's annual accounts.

Bank of Spain Circular 5/2020, of November 25, to payment institutions and electronic money institutions, on public and reserved financial reporting rules and model financial statements, and amending Circular 6/2001 of 29 October on holders of currency exchange establishments and Circular 4/2017 of 27 November, to credit institutions, on public and reserved financial reporting rules, and model financial statements. (Official Gazette of 4 December 2020).

This circular establishes the accounting framework for payment and electronic money institutions. It also sets out the accounting documents that such entities and their affiliates have to draw up, including the model public and reserved financial statements. It also determines the rules for recognition, valuation, presentation, and information to be included in the report, as well as a breakdown of model financial statement information to be used in preparing the annual accounts. This circular acts as the accounting regulation for credit institutions, either by setting criteria similar to those communicated directly from credit institutions, or referring to the rules of Bank of Spain Circular 4/2017 of November 27 on credit rules on public and reserved financial information and models of financial statements.

The application of the circular has not had a significant effect on the Bank's annual accounts.

c) Use of critical estimates

The results and the determination of equity are sensitive to the accounting policies, measurement bases and estimates used by the directors of Banco Santander in preparing the financial statements.

The main accounting policies and measurement bases are set forth in note 2.

In the financial statements estimates were occasionally made by the senior management of Banco Santander in order to quantify certain of the assets, liabilities, income, expenses and obligations reported herein. These estimates, which were made on the basis of the highest quality information available, relate primarily to the following:

- The impairment losses on certain assets: it applies to financial assets at fair value through other comprehensive income, financial assets at amortised cost, non-current assets held for sale, investments, tangible assets and intangible assets (see notes 6, 7, 8, 10, 12, 13, 15, 16 and 49).
- The assumptions used in the actuarial calculation of the post-employment benefit liabilities and commitments and other obligations (see note 23).
- The useful life of the tangible and intangible assets (see notes 15 and 16).
- Assessment of the impairment of investments in group, joint venture and associated entities (see note 13).
- The measurement of goodwill (see note 16).
- The calculation of provisions and the consideration of contingent liabilities (see note 23).
- The fair value of certain unquoted assets and liabilities (see notes 6, 7, 8, 9, 10, 11, 18, 19 and 20).
- The recoverability of deferred tax assets and the income tax expense (see note 24).
- The fair value of the identifiable assets acquired and the liabilities assumed in business combinations (see note 3).

To update the estimates described above, the Bank's Management has taken into account the current situation as a result of covid-19, classified as a pandemic by the World Health Organization, which significantly is affecting the economic activity worldwide and, as a result, the Bank's operations and financial results, and which generates uncertainty in the Bank's estimates. Therefore, the Bank's Management has made an assessment of the current situation according to the best information available to date, disclosing in the notes the main estimates made and the potential impacts of covid-19 on them for the period ended 31 December 2021 (see notes 16, 24 and 49).

Although these estimates have been made on the basis of the best information available at the end of the year 2021, and considering information updated at the date of preparation of these annual accounts, it is possible that events that may take place in the future may make it necessary to modify them (upwards or downwards) in the coming years, which would be done, if appropriate, in a prospective manner, recognising the effects of the change in estimate in the corresponding income statement.

d) Comparative information

The information contained in the 2021 annual accounts for the 2020 financial year is presented, solely and exclusively, for comparison with the information relating to 2021.

e) Capital management

i. Regulatory and economic capital

Credit institutions must meet a number of minimum capital and liquidity requirements. These minimum requirements are governed by the European Capital Requirements Regulation, better known as CRR, and the Capital Requirements Directive, CRD. In June 2019, these regulations were significantly amended. The applicable regulations are now CRR II and CRD V.

As the Directives need to be transposed into the legal systems of the different Member States in order to be applicable, in the case of Spain, Royal Legislative Decree 7/2021 and Royal Decree 970/2021 were published for this purpose in 2021.

In June 2019, CRR II introduced the minimum TLAC (Total Loss Absorbing Capacity) requirement, which only applies to global systemically important banks (G-SIBs). This requirement introduces two metrics: i) a minimum requirement for own funds and eligible liabilities as a percentage of the Total Risk Exposure Amount (TREA) set at 16% during the transition period and 18% from 1 January 2022 after the end of the transition period; and ii) a metric to set a minimum requirement for own funds and eligible liabilities as a percentage of the Total Risk Exposure Amount of 6% during the transition period and 6.75% from 1 January 2022 after the end of the transition period.

This year saw the implementation of the EBA Guidelines on the Definition of New Default, which were prepared in accordance with CRR II, on 1 January 2021. The changes to CRR II that are applicable from June 2021 include the introduction of a minimum leverage ratio of 3%, the new standardised EAD calculation for counterparty risk, known as SA-CCR, the long-term liquidity ratio (NSFR), the new limits for large exposures and the requirement to report under the standardised approach for market risk.

The CRD V introduces important modifications such as the regulation of Pillar 2G ('guidance', orientation of requirements by Pillar 2).

On 27 October 2021, the European Commission published the draft review of European banking legislation: CRR III and CRD VI.

The banking package consists of the following elements: 1) Implementation of the final Basel III reforms, 2) Contribution to sustainability and green transition and 3) Stronger supervision: ensuring sound management of EU banks and better protection of financial stability.

In general, the Commission proposes to start applying the new rules from 1.1.2025, but the amendments to the regulation that concern resolution issues could come into force in the first months of 2022.

With regard to the resolution rules, institutions must have an adequate funding structure to ensure that, in the event of financial distress, the institution has sufficient liabilities to absorb losses in order to recover its position or be resolved, while ensuring the protection of depositors and financial stability.

The directive that governs the resolution framework mentioned above is the Bank Recovery and Resolution Directive (BRRD). Like the CRR and the CRD, the BRRD was amended in June 2019, so BRRD II refers to all of these amendments. The transposition of this directive into the Spanish legal system took place in 2021 through a Royal Decree.

BRRDII has introduced important changes to the Minimum Requirement for Own Funds and Eligible Liabilities (MREL). For example, the TLAC requirement is now considered a Pillar 1 resolution requirement for G-SIBs. For large banks (defined as banks with total assets of more than EUR 100 billion) or banks deemed systemically important by the resolution authority, BRRDII sets a minimum subordination requirement of 13.5% of risk-weighted assets or 5% of the leverage ratio, whichever is higher. For all other institutions, the subordination requirement is set by the resolution authority on a case-by-case basis.

Finally, Deposit Guarantee Schemes (DGS) are regulated by Directive 2014/49 or DSGD, which has not undergone any significant changes since its publication in 2014. It aims to harmonise the deposit guarantee schemes of the Member States, thus ensuring stability and balance in the different countries. It creates an appropriate framework for depositors to have better access to DGSs than was the case before the publication of this Directive through clear coverage, shorter repayment periods, better information and robust funding requirements. This Directive is transposed into Spanish law by Law 11/2015, Royal Decree 1012/2015 and Royal Decree 1041/2021.

In 2020, the national governments took measures to address the economic and social impact of the vine population, in particular legislative moratoria that were aimed at containing NPLs and helping the population to meet liquidity needs. Throughout 2020, the EBA adopted a series of guidelines, including the Guidelines on legislative and non-legislative moratoria applied in the context of the Cov19 crisis on 2 April 2020 (EBA/GL/2020/08). These guidelines clarified the requirements for public and private moratoria to avoid classification of exposures affected by moratoria as forborne exposures.

Although these guidelines were initially going to apply to moratoria granted before 30 June 2020, the EBA decided on 2 December 2020 to reactivate the application of these guidelines (EBA/GL/2020/02) for moratoria requested before 31 March 2021 and for a period not exceeding 9 months.

Another measure adopted in 2020 to provide flexibility in meeting the requirements was the approval and entry into force of the CRR "Quick Fix" amending CRR II (urgent and extraordinary amendments to bring about a more flexible regulatory framework in response to COVID-19). The Quick Fix introduces a number of new features,

including the extension of the transitional period granted before the pandemic for the entry into force of IFRS 9, due to the sudden and significant increase in expected credit loss provisions to be recognised. The implementation of certain provisions of CRR II has also been delayed, such as those relating to the leverage ratio buffer (postponed until 1 January 2023); the possibility of excluding exposures to central banks from the calculation of the leverage ratio, which should have been applied from June 2021 on, has been brought forward. Other provisions beneficial to institutions have also been brought forward. These include the support factors for SMEs and infrastructure, and the new treatment for software (applicable from the day following the publication date of the Delegated Regulation that implements it).

At 31 December 2021, the Bank met the minimum capital requirements established by current legislation (see note 49.d).

ii. Plan for the roll-out of advanced approaches and authorisation from the supervisory authorities

Banco Santander following the Group's policies, continues adopting, over the next few years, the advanced internal ratings-based (AIRB) approach under Basel II for substantially all its banks. The commitment assumed before the supervisor still implies the adoption of advanced models within the ten key markets where Santander Group operates.

This objective of covering IRB models in the Group and the Bank should be seen in the context of the current supervisory focus on the robustness and adequacy of existing models, as well as the simplification strategy recently agreed with the ECB.

Grupo Santander has obtained authorisation from the supervisory authorities to use the AIRB approach for the calculation of regulatory capital requirements for credit risk for Banco Santander and the main subsidiaries in Spain, the United Kingdom and Portugal, as well as for certain portfolios in Germany, Mexico, Brazil, Chile, the Nordic countries (Norway, Sweden and Finland), France and the United States.

As regards the other risks explicitly addressed under Basel Pillar I, the Group is authorised to use its internal model for market risk for its treasury trading activities in Spain, Chile and Mexico.

For the purpose of calculating regulatory capital for operational risk, the Group and the Bank use the standardised approach provided for the CRR. In 2017 the European Central Bank authorised the use of the Alternative Standardised Approach to calculate the capital requirements at consolidated level in Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México, in addition to the approval obtained in 2016 in Brazil.

f) Environmental impact

In view of the business activities carried on by the Group entities, and therefore the Bank, do not have any environmental liability, expenses, assets, provisions or contingencies that might be material with respect to its equity, financial position or results.

Grupo and Banco Santander consider the aspects related to climate change in the preparation of the ratings of its wholesale clients if they are relevant. These ratings influence the subsequent assignment of credit parameters for the calculation of the expected loss' estimate.

With the reasonable and supportable information available at the date of approval of these consolidated annual accounts, the potential additional impacts of expected losses on the time horizons of the Group's portfolios, taking into account as well the mitigation measures, are not considered material.

Grupo Santander, together with the rest of the financial industry, is working on developing the appropriate methodologies to improve the measurement of these losses, when the necessary regulatory developments are more advanced and information is available to carry out a more precise measurement.

See additional information in note 49.a.

g) Customer Care Service Annual Report

As required by the Article 17 of Ministry of Economy Order ECO/734/2004, of 11 March, on the services and departments of Customer Service and the Customer Ombudsmen of Financial Institutions, the annual report presented by the Head of the department to the board meeting held on March 2022 is summarised in the directors' report.

h) Deposit Guarantee Fund and Resolution Fund

i. Deposit Guarantee Fund

Banco Santander participates in the Deposit Guarantee Fund (DGF). The annual contribution to be made by the entities to this fund, established by Royal Decree - Law 16/2011 of October 14, by which the DGF is created in accordance with the wording given by the Tenth Final Disposition of Law 11/2015 of June 18 on Recovery and Resolution of credit institutions and investment services companies (in force since June 20, 2015), is determined by the Management Committee of the DGF and is established based on the guaranteed deposits of each entity and their risk profile. The annual contribution to be made by the entities to this fund is determined by the Management Committee of the FGD, and consists of the contribution based on the guaranteed deposits of each entity corrected for their risk profile, which includes the phase of the economic cycle and the impact of pro-cyclical contributions, according to section 3 of article 6 of the Royal Decree-Law 16/2011.

The purpose of the FGD is to guarantee deposits with credit institutions up to the limit established in the mentioned Royal Decree-Law. The expense incurred by the contributions accrued to this organism in the year 2021 has amounted to EUR 225 million (EUR 239 million in the year 2020), which are recorded under 'Other operating expenses' in the profit and loss account attached (see note 41).

ii. National Resolution Fund

Law 11/2015 regulates the creation of the National Resolution Fund, whose financial resources should reach, by 31 December 2024, at least 1% of the amount of secured deposits, through contributions from credit institutions and investment firms established in Spain. The details of the calculation of contributions to this Fund is regulated by Commission Delegated Regulation (EU) 2015/63 of 21 October 2014 and is calculated by the Orderly Banking Resolution Fund, on the basis of the information provided by each entity.

iii. Single Resolution Fund

On January 1, 2016, the Single Resolution Fund (SRF), which was implemented by Regulation (EU) No. 806/2014 of the European Parliament and of the Council, became operational. The rules governing the banking union provide that banks will pay contributions to the SRF over eight years.

The Single Resolution Board (SRB) is responsible for calculating the contributions to be made by credit institutions and investment firms to the SRF. These contributions are based, as of fiscal year 2016, on: (a) a flat-rate contribution (or base annual contribution), pro rata with respect to the total liabilities, excluding own funds, guaranteed deposits of all institutions authorized in the territory of the participating member states; and (b) a risk-adjusted contribution, which will be based on the criteria set out in Article 103(7) of Directive 2014/59/EU, taking into account the principle of proportionality, without creating distortions between structures of the banking sector of the member states. The amount of this contribution will accrue from the 2016 financial year, on an annual basis.

The expenditure incurred by the contribution made to the National Fund and the Single Resolution Fund amounted to EUR 307 million in 2021 (EUR 262 million in the year 2020), which are recognised under 'Other operating expenses' in the accompanying income statement (see note 41).

i) Merger by absorption

i. Merger by absorption between Banco Santander, S.A. (as absorbing company) and Popular Spain Holding de Inversiones, S.L.U., Santander Investment I, S.A.U. and Administración de Bancos Latinoamericanos Santander, S.L. (as absorbed companies).

On June 29, 2021, the members of the respective boards of directors of Banco Santander, S.A. (as absorbing company) and Popular Spain Holding de Inversiones, S.L.U., Santander Investment I, S.A.U. and Administration of Latin American Banks Santander, S.L. (as absorbed companies) drafted and signed the common project for the merger by absorption.

Under Articles 49 and 51 of Law 3/2009, of April 3, on Structural Modifications of Commercial Companies ("LME"), it was not necessary for this merger to be approved by the general shareholders' meetings (or, as the case may be, by the sole shareholder) of the absorbed companies, since Banco Santander, S.A. had a direct holding in the case of Popular Spain Holding de Inversiones, S.L.U. and Santander Investment I, S.A.U., and in the case of Administración de Bancos Latinoamericanos Santander, S.L., partly directly and partly indirectly through another absorbed company (Santander Investment I, S.A.U.), partly through another absorbed company (Santander Investment I, S.A.U.), and, in the case of Administración de Bancos Latinoamericanos Santander, S.L., partly directly and partly indirectly through another of the absorbed companies (Santander Investment I, S.A.U.); nor was approval by the shareholders' meeting of Banco Santander, S.A. necessary, since shareholders representing at least 1% of the share capital did not require it, in accordance with Article 51.1 of the LME. Consequently, the board of directors of Banco Santander, S.A. on June 29, 2021 approved both the common merger plan and the merger that is the object of the merger.

Once the mandatory authorization by the Minister of Economic Affairs and Digital Transformation was obtained (twelfth additional provision of Law 10/2014, of June 26, on the regulation, supervision and solvency of credit institutions), on 16 December 2021, the corresponding merger deed was executed and, having been registered in the Commercial Registry of Cantabria, the dissolution without liquidation of Popular Spain Holding de Inversiones, S.L.U. took place with effect from 20 December 2021, Santander Investment I, S.A.U. and Administración de Bancos Latinoamericanos Santander, S.L. and the transfer en bloc, on a universal basis, of all their respective assets and liabilities to Banco Santander, S.A., which acquired them by universal succession and without solution of continuity. It should be noted that the merger, for accounting purposes, was recorded by Banco Santander, S.A. in 2021.

Since the absorbed companies were fully owned by Banco Santander, S.A., in the case of Popular Spain Holding de Inversiones, S.L.U. and Santander Investment I, S.A.U. and directly and indirectly in the case of Administración de Bancos Latinoamericanos Santander, S.L., in accordance with article 49.1, in relation to article 26, of the LME, the Bank did not increase capital. Once the merger became effective on December 20, 2021, all the shares and participations of the absorbed companies were fully amortized, extinguished and cancelled.

The merger balance sheets were considered to be those included in the financial statements for the year ended December 31, 2020, prepared by the administrative bodies of each of the companies participating in the merger. The merger balance sheets of Banco Santander, S.A., Popular Spain Holding de Inversiones, S.L.U., Santander Investment I, S.A.U. and Administración de Bancos Latinoamericanos Santander, S.L. were duly verified by their respective auditors.

In accordance with the provisions of the applicable accounting regulations, for accounting purposes, 1 January 2021 was set as the date from which the transactions of the absorbed companies were to be considered as carried out by Banco Santander, S.A. for the merger.

Likewise, the transaction constitutes a merger of those regulated in article 76.1.c) of Law 27/2014, of November 27, on Corporate Income Tax ("LIS"). Pursuant to Article 89.1 of the LIS, the merger was subject to the tax regime established in Chapter VII of Title VII and in the second additional provision of the LIS, as well as in Article 45, paragraph I.B.10 of the Consolidated Text of the Law on Transfer Tax and Stamp Duty, approved by Royal Legislative Decree 1/1993, of September 24. The information required by Article 86.1 of the Law with respect to the merger is included in these notes to the consolidated financial statements (appendix VIII).

The following are the balance sheets of companies absorbed as of 31 December 2020:

POPULAR SPAIN HOLDING DE INVERSIONES, S.L.U.

Balance as of December 31, 2020

EUR thousands

ASSETS	2020	EQUITY AND LIABILITIES	2020
NON-CURRENT ASSETS	90,882	EQUITY	500,854
Deferred tax asset	90,882	SHAREHOLDERS EQUITY	500,854
		Capital	100
		Share premium	726,127
		Reserves	40
		Loss for the period	(225,413)
CURRENT ASSETS	410,154	CURRENT LIABILITIES	182
Clients, Group companies and Associates	60,095	Commercial creditors and other accounts payable	182
Other credits with public administrations	44		
Cash and other equivalent liquid assets	350,015		
TOTAL ASSETS	**501,036**	**TOTAL EQUITY AND LIABILITIES**	**501,036**

SANTANDER INVESTMENT I, S.A.U.

Balance as of December 31, 2020

EUR thousands

ASSETS	2020	EQUITY AND LIABILITIES	2020
NON-CURRENT ASSETS	1,857,418	EQUITY	217,897
Long term investments in Group companies and Associates	1,857,417	SHAREHOLDERS EQUITY	217,897
Other long term financial assets	1	Capital	601
		Reserves	228,318
		Loss form previous periods	(11,022)
		NON-CURRENT LIABILITIES	1,640,630
		Long term debts to Group companies and Associates	1,629,500
		Deferred tax liabilities	11,130
CURRENT ASSETS	2,682	CURRENT LIABILITIES	1,573
Long-term investments in Group companies and Associates. Loans to companies	4	Short term debts to Group companies and Associates	1,548
Cash and other equivalent liquid assets	2,678	Commercial creditors and other accounts payable	25
TOTAL ASSETS	**1,860,100**	**TOTAL EQUITY AND LIABILITIES**	**1,860,100**

ADMINISTRACIÓN DE BANCOS LATINOAMERICANOS SANTANDER, S.L.

Balance as of December 31, 2020

EUR thousands

ASSETS	2020	EQUITY AND LIABILITIES	2020
NON-CURRENT ASSETS	2,513,961	EQUITY	2,537,251
Long-term equity investments in Group companies and Associates	569,949	SHAREHOLDERS EQUITY	2,537,251
Long-term debt investments in Group companies and Associates	1,944,003	Capital	394,685
Other long-term financial assets	8	Reserves	2,176,029
Long-term debt investments in third parties	1	Negative results from previous exercises	(24,034)
		Loss of the period	(9,429)
		NON-CURRENT LIABILITIES	22,931
		Deferred tax liabilities	22,931
CURRENT ASSETS	46,671	CURRENT LIABILITIES	450
Commercial debts receivable and others accounts bills	2	Short term debts	19
Short-term debt investments in Group companies and Associates	843	Debts with Group companies and Associates in the short term	408
Cash and cash equivalents	45,826	Commercial debts and other accounts payable	23
TOTAL ASSETS	**2,560,632**	**TOTAL EQUITY AND LIABILITIES**	**2,560,632**

In accordance with the provisions of the applicable regulations, because of the accounting record of the merger by absorption carried out by the Bank in 2021, an increase of EUR 1,037 million in the Bank's voluntary reserves in that year was recorded as a result of the decrease on the participation of the absorbed companies (see note 29).

ii. Merger by absorption between Banco Santander, S.A. (absorbing company) and Santander Global Property, S.L.U., Inmobiliaria Viagracia, S.A.U. and BPE Financiaciones, S.A.U. (as absorbed companies)

On 30 June 2020, the directors of Banco Santander, S.A., the joint administrators of Santander Global Property, S.L.U. and the respective solidary administrators of Inmobiliaria Viagracia, S.A.U. and BPE Financiaciones, S.A.U. approved and signed the joint merger project between Banco Santander, S.A. (as an absorbing company) and Santander Global Property, S.L.U., Inmobiliaria Viagracia, S.A.U. and BPE Financiaciones, S.A.U. (as absorbed companies).

Under Articles 49.1 and 51 of Law 3/2009 of 3 April on Structural Modifications of Commercial Companies ('LME'), approval of this merger was not required by the sole partner of the companies acquired, as it was entirely owned by Banco Santander, nor by the shareholders meeting of Banco Santander, to not required by its shareholders in accordance with Article 51 of the LME.

Likewise, the said transaction constitutes a merger of those regulated in Article 76.1.c) of Law 27/2014, of 27 November, on Corporate Tax ('LIS'). The information required in Article 86.1 of the aforementioned Act with regard to merger is incorporated into this report (Annex VIII).

Once obtained the mandatory authorization of the Ministry of Economic Affairs and Digital Transformation (additional provision twelfth Law 10/2014, of 26 June, on the management, supervision and solvency of credit institutions) on December 23, 2020, the corresponding merger deed was granted and, registered in the Commercial Register of Cantabria, with effect from December 23, 2020, the extinction without liquidation of Santander Global Property, S.L.U., Inmobiliaria Viagracia, S.A.U. and BPE Financiaciones, S.A.U., respectively, and the bulk transfer of all of their respective assets to Banco Santander, S.A., which acquired them by succession universal and without continuity solution. It should be noted that the merger, for accounting purposes, was registered by Banco Santander, S.A. in the financial year 2020.

Since the companies acquired were wholly owned by Banco Santander, in accordance with Article 49.1 in conjunction with Article 26 of the LME, Banco Santander did not increase capital. The merger with effect from 23 December 2020 became effective, all the shares of the companies absorbed were fully amortized, extinguished and cancelled.

For the purposes of Spanish legislation, those included in the annual accounts for the financial year ended 31 December 2019, formulated by the board of directors of each of the companies participating in the merger, were considered as merger balance sheets. The merger balance sheets of Banco Santander, S.A. and BPE Financiaciones, S.A.U. have been duly verified by their respective auditors. The merger balance sheets of the remaining companies absorbed have not been subject to auditor verification, as they were not required to audit their accounts.

In accordance with the provisions of the applicable accounting rules, for accounting purposes, the merger was fixed on 1 January 2020 as the date from which the transactions of the companies absorbed were to be considered to be carried out by Banco Santander, S.A.

Furthermore, in accordance with Article 89.1 of the LIS, the merger was subject to the tax regime laid down in Title VII, Chapter VII and the second additional provision of the LIS, as well as Article 45, paragraph I.B.10 of the Consolidated Text of the Law on Tax on Property Transfers and Documented Legal Acts, approved by Royal Legislative Decree 1/1993 of 24 September.

The following are the balance sheets of companies absorbed as of 31 December 2019:

SANTANDER GLOBAL PROPERTY, S.L.U.

Balance at December 31, 2019

EUR thousands

ASSETS	2019	EQUITY AND LIABILITIES	2019
NON-CURRENT ASSETS	94	EQUITY	252,984
Deferred tax asset	94	SHAREHOLDERS EQUITY	252,984
		Capital	211,087
		Share premium	36,414
		Reserves	10,560
		Loss for previous periods	(5,071)
		Loss for the period	(6)
CURRENT ASSETS	252,893	CURRENT LIABILITIES	3
Other credits with Public Administrations	29	Short term debt	3
Investments in Group companies and Associates	2		
Cash and cash equivalent	252,862		
TOTAL ASSETS	**252,987**	**TOTAL EQUITY AND LIABILITIES**	**252,987**

INMOBILIARIA VIAGRACIA, S.A.U.

Balance at December 31, 2019

EUR thousands

ASSETS	2019	EQUITY AND LIABILITIES	2019
NON-CURRENT ASSETS	37,295	EQUITY	92,554
Real Estate Investments	7,666	SHAREHOLDERS EQUITY	90,876
Long term investments in Group companies and Associates	26,634	Capital	4,688
Long term financial investments	2,990	Share premium	10,370
Deferred tax asset	5	Reserves	86,604
		Loss for previous periods	(12,237)
		Loss for the period	1,451
		ADJUSTMENTS FOR CHANGES IN VALUE	1,678
		Financial instruments HTC&S	1,678
		NON-CURRENT LIABILITIES	802
		Long term debts to Group companies and Associates	83
		Deferred tax liabilities	719
CURRENT ASSETS	56,513	CURRENT LIABILITIES	452
Cash and cash equivalent	56,513	Short term debts with Group companies and Associates	428
		Commercial debts and other accounts payable	24
TOTAL ASSETS	**93,808**	**TOTAL EQUITY AND LIABILITIES**	**93,808**

BPE FINANCIACIONES, S.A.U.

Balance at December 31, 2019

EUR thousands

ASSETS	2019	EQUITY AND LIABILITIES	2019
NON-CURRENT ASSETS	—	EQUITY	880
		SHAREHOLDERS EQUITY	880
		Capital	100
		Reserves	840
		Loss for the period	(60)
CURRENT ASSETS	662,680	CURRENT LIABILITIES	661,800
Short term investments in Group companies and Associates	661,797	Short term debit	500,916
Cash and cash equivalent	883	Short term debts to Group companies and Associates	160,772
		Commercial debts and other accounts payable	11
		Accruals expenses	101
TOTAL ASSETS	**662,680**	**TOTAL EQUITY AND LIABILITIES**	**662,680**

Pursuant to the provisions of the applicable legislation, as a result of the accounting record of the above-mentioned merger by absorption by Banco Santander in the financial year 2020, Banco Santander's voluntary reserves have been reduced by EUR 1 million due to the decrease in the financial year participation of the absorbed companies (see note 29).

j) Events after the reporting period

No significant events occurred from 1 January 2022 to the date on which these financial statements were authorized for issue, other than those described in these annual accounts.

2. Accounting policies

The following accounting principles, policies and measurement criteria have been applied in the preparation of the financial statements:

a) Foreign currency transactions

The functional currency of Banco Santander is the euro. Therefore, all balances and transactions denominated in currencies other than the euro are deemed to be denominated in foreign currency.

The balances in the financial statements whose functional currency is not the euro are translated to euros as follows:

- Assets and liabilities, at the closing rates.
- Income and expenses, at the average exchange rates for the year.
- Equity items, at the historical exchange rates.

In general, balances denominated in foreign currencies, including those branches in countries outside the Monetary Union, have been converted to euros using the official average exchange rates of the Spanish spot currency market ((through the US dollar's quotation on local markets, for non-monetary currencies. listed on the Spanish market) at the end of each fiscal year.

The exchange differences arising on the translation of foreign currency balances to the functional currency are generally recognised at their net amount under 'Exchange differences, net' in the income statement, except for exchange differences arising on financial instruments at fair value through profit or loss, which are recognised in the income statement without distinguishing them from other changes in fair value, and for exchange differences arising on non-monetary items measured at fair value through equity, which are recognised under 'Other comprehensive income–Items that may be reclassified to profit or loss–Exchange differences' (except for exchange differences on equity instruments, where the option to irrevocably elect to be measured at fair value through changes in accumulated other comprehensive income, which are recognised in accumulated 'Other Comprehensive Income - Items not to be reclassified to profit or loss - Changes in fair value of equity instruments measured at fair value' through other comprehensive income (see note 25).

b) Investments in group entities, joint ventures and associates

Group entities are those over which the Bank has the capacity to exercise control; capacity which is generally but not exclusively manifested by the direct or indirect ownership of at least 50% of the voting rights of the investees or, even if this percentage is lower or zero, if, as in the case of agreements with their shareholders, the Bank is granted such control.

Control is understood to be the power to direct the financial and operating policies, by law, by statute or by agreement, of an entity in order to obtain benefits from its activities.

Joint ventures are deemed to be entities that are not subsidiaries but which are jointly controlled by two or more unrelated entities. This is evidenced by contractual arrangements whereby two or more parties have interests in entities so that decisions about the relevant activities require the unanimous consent of all the parties sharing control.

Associated entities are those over which Banco Santander is in a position to exercise significant influence, but not control or joint control. It is presumed that Banco Santander exercises significant influence if it holds 20% or more of the voting power of the investee.

The shareholdings in group, multi-group and associated entities are presented on the balance sheet at their acquisition cost, net of any deterioration that, where relevant, those shares may have suffered.

Where there is evidence of impairment of these shares, the amount of such impairment is equivalent to the difference between their recoverable amount and their book value. Impairment losses are recorded under the heading 'Impairment or reversal of impairment of investments in joint ventures or associates' in the profit and loss account.

Appendices I and II contain significant information on these companies. In addition, note 13 provides information on the most significant acquisitions and disposals in 2021 and 2020.

c) Definitions and classification of financial instruments

i. Definitions

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

An equity instrument is a contract that evidences a residual interest in the assets of the issuing entity after deducting all of its liabilities.

A financial derivative is a financial instrument whose value changes in response to the change in an observable market variable (such as an interest rate, foreign exchange rate, financial instrument price, market index or credit rating), whose initial investment is very small compared with other financial instruments with a similar response to changes in market factors, and which is generally settled at a future date.

Hybrid financial instruments are contracts that simultaneously include a non-derivative host contract together with a derivative, known as an embedded derivative, that is not separately transferable and has the effect that some of the cash flows of the hybrid contract vary in a way similar to a stand-alone derivative.

Compound financial instruments are contracts that simultaneously create for their issuer a financial liability and an own equity instrument (such as convertible bonds, which entitle their holders to convert them into equity instruments of the issuer).

The preference shares contingently convertible into ordinary shares eligible as Additional Tier 1 capital (CCPSs) -perpetual shares, which may be repurchased by the issuer in certain circumstances, the interest on which is discretionary, and would convert into variable number of newly issued ordinary shares if the capital ratio of the Bank or its consolidated group falls below a given percentage (trigger event), as those two terms are defined in the related issue prospectuses- are recognised for accounting purposes by the Bank as compound instruments. The liability component reflects the issuer's obligation to deliver a variable number of shares and the equity component reflects the issuer's discretion in relation to the payment of the related coupons. In order to effect the initial allocation, Banco Santander estimates the fair value of the liability as the amount that would have to be delivered if the trigger event were to occur immediately and, accordingly, the equity component, calculated as the residual amount, is zero. In view of the aforementioned discretionary nature of the payment of the coupons, they are deducted directly from equity.

Capital perpetual preference shares (CPPS), with the possibility of purchase by the issuer in certain circumstances, whose remuneration is discretionary, and which will be amortised permanently, totally or partially, in the event that the Bank or its consolidated group submits a capital ratio lesser than a certain percentage (trigger event), as defined in the corresponding prospectuses, are accounted for by Banco Santander as equity instruments.

The following transactions are not treated for accounting purposes as financial instruments:

- Investments in associates and joint ventures (see note 13).
- Rights and obligations under employee benefit plans (see note 23).
- Contracts and obligations relating to employee remuneration based on own equity instruments (see note 30).

ii. Classification of financial assets for measurement purposes

Financial assets are initially classified into the various categories used for management and measurement purposes, unless they have to be presented as 'Non-current assets held for sale' or they relate to 'Cash, cash balances at central banks and other deposits on demand', 'Changes in the fair value of hedged items in portfolio hedges of interest rate risk (asset side)', 'Hedging derivatives and Investments', which are reported separately.

Classification of financial instruments: the classification criteria for financial assets depends on the business model for their management and the characteristics of their contractual flows.

Banco Santander´s business models refer to the way in which it manages its financial assets to generate cash flows. In defining these models, the Bank takes into account the following factors:

- How key management staff are assessed and reported on the performance of the business model and the financial assets held in the business model.
- The risks that affect the performance of the business model (and the financial assets held in the business model) and, specifically, the way in which these risks are managed.
- How business managers are remunerated.
- The frequency and volume of sales in previous years, as well as expectations of future sales.

The analysis of the characteristics of the contractual flows of financial assets requires an assessment of the congruence of these flows with a basic loan agreement. Banco Santander determines if the contractual cash flows of its financial assets that are only principal and interest payments on the outstanding principal amount at the beginning of the transaction. This analysis takes into consideration four factors (performance, clauses, contractually linked products and currencies). Furthermore, among the most significant judgements used by Banco Santander in carrying out this analysis, the following ones are included:

- The return on the financial asset, in particular in cases of periodic interest rate adjustments where the term of the reference rate does not coincide with the frequency of the adjustment. In these cases, an assessment is made to determine whether or not the contractual cash flows differ significantly from the flows without this change in the time value of money, establishing a tolerance level of 2%.
- The contractual clauses that may modify the cash flows of the financial asset, for which the structure of the cash flows before and after the activation of such clauses is analysed.

- Financial assets whose cash flows have different priority for payment due to a contractual link to underlying assets (e.g. securitisations) require a look-through analysis by the Bank so as to review that both the financial asset and the underlying assets are only principal and interest payments and that the exposure to credit risk of the set of underlying assets belonging to the tranche analysed is less than or equal to the exposure to credit risk of the set of underlying assets of the instrument.

Depending on these factors, the asset can be measured at amortised cost, at fair value with changes in other comprehensive income, or at fair value with changes through profit and loss. Bank of Spain Circular 4/2017 also establishes an option to designate an instrument at fair value with changes in profit or loss, when doing so eliminates or significantly reduces a measurement or recognition inconsistency (sometimes referred to as 'accounting asymmetry') that would otherwise arise from measuring assets or liabilities or recognising gains and losses on different bases.

Banco Santander uses the following criteria for the classification of financial debt instruments:

- Amortised cost: financial instruments under a business model whose objective is to collect principal and interest flows, over which there is no significant unjustified sales and fair value is not a key element in the management of these assets and contractual conditions they give rise to cash flows on specific dates, which are only payments of principal and interest on the outstanding principal amount. In this sense, unjustified sales are considered to be those other than those related to an increase in the credit risk of the asset, unanticipated funding needs (stress case scenarios). Additionally, the characteristics of its contractual flows represent substantially a “basic financing agreement”.

- Fair value with changes in other comprehensive income: financial instruments held in a business model whose objective is to collect principal and interest cash flows and the sale of these assets, where fair value is a key factor in their management. Additionally, the contractual cash flow characteristics substantially represent a 'basic financing agreement'.

- Fair value with changes in profit or loss: financial instruments included in a business model whose objective is not obtained through the above mentioned models, where fair value is a key factor in managing of these assets, and financial instruments whose contractual cash flow characteristics do not substantially represent a 'basic financing agreement'. In this section it can be enclosed the portfolios classified under 'Financial assets held for trading', 'Non-trading financial assets mandatorily at fair value through profit or loss' and 'Financial assets at fair value through profit or loss'. In this regard, most of the financial assets presented in the category of 'Financial assets designated at value reasonable with change in results' are instruments financial services that, not being part of the portfolio of negotiation, are contracted jointly with other financial instruments that are recorded in the category of 'held for trading', and that by both are recorded at fair value with changes in results, so your record in any other category would produce accounting asymmetries.

Equity instruments will be classified at fair value under Bank of Spain Circular 4/2017 and subsequent amendments with changes in profit or loss, unless the Bank, decides, for non-trading assets, to classify them at fair value with changes in other comprehensive income (irrevocably) at initial recognition.

iii. Classification of financial assets for presentation purposes

Financial assets are classified by nature into the following items in the consolidated balance sheet:

- Cash, cash balances at Central Banks and other deposits on demand: cash balances and balances receivable on demand relating to deposits with central banks and credit institutions.

- Loans and advances: includes the debit balances of all credit and loans granted by the Bank, other than those represented by securities, as well as finance lease receivables and other debit balances of a financial nature in favour of the Bank, such as cheques drawn on credit institutions, balances receivable from clearing houses and settlement agencies for transactions on the stock exchange and organised markets, bonds given in cash, capital calls, fees and commissions receivable for financial guarantees and debit balances arising from transactions not originating in banking transactions and services, such as the collection of rentals and similar items. They are classified, on the basis of the institutional sector to which the debtor belongs, into:

  - Central banks: credit of any nature, including deposits and money market transactions received from the Bank of Spain or other central banks.
  - Credit institutions: credit of any nature, including deposits and money market transactions, in the name of credit institutions.
  - Customers: includes the remaining credit, including money market transactions through central counterparties.

- Debt instruments: bonds and other securities that represent a debt for their issuer, that generate an interest return, and that are in the form of certificates or book entries.
- Equity instruments: financial instruments issued by other entities, such as shares, which have the nature of equity instruments for the issuer, other than investments in subsidiaries, joint ventures or associates. Investment fund units are included in this item.
- Derivatives: includes the fair value in favour of the Bank of derivatives which do not form part of hedge accounting, including embedded derivatives separated from hybrid financial instruments.
- Changes in the fair value of hedged items in portfolio hedges of interest rate risk: this item is the balancing entry for the amounts credited to the income statement in respect of the measurement of the portfolios of financial instruments which are effectively hedged against interest rate risk through fair value hedging derivatives.
- Hedging derivatives: Includes the fair value in favour of the Bank of derivatives, including embedded derivatives separated from hybrid financial instruments, designated as hedging instruments in hedge accounting.

iv. Classification of financial liabilities for measurement purposes

Financial liabilities are initially classified into the various categories used for management and measurement purposes, unless they have to be presented as 'Liabilities associated with non-current assets held for sale' or they relate to 'Hedging derivatives' or changes in the fair value of hedged items in portfolio hedges of interest rate risk (liability side), which are reported separately.

In most cases, changes in the fair value of financial liabilities designated at fair value through profit or loss, caused by the entity's credit risk, are recognized in other comprehensive income.

Financial liabilities are included for measurement purposes in one of the following categories:

- Financial liabilities held for trading (at fair value through profit or loss): this category includes financial liabilities incurred for the purpose of generating a profit in the near term from fluctuations in their prices, financial derivatives not designated as hedging instruments, and financial liabilities arising from the outright sale of financial assets acquired under reverse repurchase agreements ("reverse repos") or borrowed (short positions).
- Financial liabilities designated at fair value through profit or loss: financial liabilities are included in this category when they provide more relevant information, either because this eliminates or significantly reduces recognition or measurement inconsistencies (accounting mismatches) that would otherwise arise from measuring assets or liabilities or recognising the gains or losses on them on different bases, or because a group of financial liabilities or financial assets and liabilities is managed and its performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy, and information about the group is provided on that basis to the Bank's key management personnel. Liabilities may only be included in this category on the date when they are incurred or originated.

  Liabilities may only be included in this portfolio at the date of issue or origination.
- Financial liabilities at amortised cost: financial liabilities, irrespective of their instrumentation and maturity, not included in any of the above-mentioned categories which arise from the ordinary borrowing activities carried on by financial institutions.

v. Classification of financial liabilities for presentation purposes

Financial liabilities are classified by nature into the following items in the consolidated balance sheet:

- Deposits: includes all repayable balances received in cash by the Bank, other than those instrumented as marketable securities and those having the substance of subordinated liabilities (amount of the loans received, which for credit priority purposes are after common creditors), except for the debt instruments. This item also includes cash bonds and cash consignments received the amount of which may be invested without restriction. Deposits are classified on the basis of the creditor's institutional sector into:

- Central banks: deposits of any nature, including credit received and money market transactions received from the Bank of Spain or other central banks.
- Credit institutions: deposits of any nature, including credit received and money market transactions in the name of credit institutions.
- Customer: includes the remaining deposits, including money market transactions through central counterparties.

On 6 June 2019, the European Central Bank announced a new program of targeted longer-term refinancing operations (TLTRO III); additionally, the conditions of the initial program were successively modified in the months of March and April 2020, reducing the interest rate by 25 bps to -0.5% from June 2020 to June 2021 and providing that, for banks meeting a certain volume of eligible loans, the interest rate could be -1% for that period. These conditions were extended on December 10, 2020 for the period from June 2021 to June 2022, including the option to cancel or reduce the amount of financing before maturity in windows coinciding with the interest rate review and adjustment periods.

The accounting standards indicate that for the recording of amortized cost the entity 'shall use a shorter period when the fees, basis points paid or received, transaction costs, premiums or discounts relate to it, this being the case when the variable to which the fees, basis points paid or received, transaction costs, and discounts or premiums relate is adjusted to market rates prior to the expected maturity of the financial instrument. In this case, the appropriate amortization period is the period until the next adjustment date'.

In this case, the applicable interest rate of -1% from June 2020 to June 2021 and from June 2021 to June 2022 corresponds to a specific period after which the funding is adjusted to market rates (specifically, the average rate applied in the Eurosystem's main refinancing operations) and must therefore be accrued until the next adjustment date. The early repayment windows of this funding program are substantive terms, given that at that time of adjustment of the funding cost to market, the entity may opt for renewal or cancellation and obtain new funding at more favorable terms.

Banco Santander has opted to accrue interest in accordance with the specific periods of adjustment to market rates, so that the interest corresponding to that period (-1%) will be recorded in the income statement from June 2020 to June 2022, assuming compliance with the threshold of eligible loans that gives rise to the extra rate.

Compliance with the qualifying loan thresholds is assessed at each reporting date and is based on the financial budgets approved by the Bank's directors, as well as on the evolution of macroeconomic variables (GDP, unemployment rate, inflation, etc.). If, subsequent to the initial recording of the financial liability, there is a change in the expectations of meeting this threshold of eligible loans, the Bank would adjust the carrying amount of the financial liability to the amount resulting from discounting the new estimated flows at the original Effective Interest Rate (EIR), recognizing this difference in profit or loss, without modifying the original EIR.

At the end of both periods, the Bank has met the financing objective established in the program, although the data relating to the second reference period (October 2020 to December 2021), will not be sent until next May, after validation by the external auditor, as established in the program conditions.

- Marketable debt securities: includes the amount of bonds and other debt represented by marketable securities, other than those having the substance of subordinated liabilities (amount of the loans received, which for credit priority purposes are after common creditors, and includes the amount of the financial instruments issued by the Bank which, having the legal nature of capital, do not meet the requirements to qualify as equity, such as certain preferred shares issued). This item includes the component that has the consideration of financial liability of the securities issued that are compound financial instruments.
- Derivatives: includes the fair value, with a negative balance for Banco Santander, separated from the host contract, which do not form part of hedge accounting.
- Short positions: includes the amount of financial liabilities arising from the outright sale of financial assets acquired under reverse repurchase agreements or borrowed.
- Other financial liabilities: includes the amount of payment obligations having the nature of financial liabilities not included in other items (includes, among others, the balance of lease liabilities that started to be recorded in 2019 as a result of the application of Bank of Spain Circular 2/2018 and liabilities under financial guarantee contracts, unless they have been classified as non-performing.
- Changes in the fair value of hedged items in portfolio hedges of interest rate risk: this item is the balancing entry for the amounts charged to the income statement in respect of the measurement of the portfolios of financial instruments which are effectively hedged against interest rate risk through fair value hedging derivatives.
- Hedging derivatives: includes the fair value of the Bank liability in respect of derivatives, including embedded derivatives separated from hybrid financial instruments, designated as hedging instruments in hedge accounting.

d) Measurement of financial assets and liabilities and recognition of fair value changes

In general, financial assets and liabilities are initially recognised at fair value which, in the absence of evidence to the contrary, is deemed to be the transaction price.

In this regard, Bank of Spain Circular 4/2017 states that regular way purchases or sales of financial assets shall be recognised and derecognised on the trade date or on the settlement date. Banco Santander has opted to make such recognition on the trading date or settlement date, depending on the convention of each of the markets in which the transactions are carried out. For example, in relation to the purchase or sale of debt securities or equity instruments traded in the Spanish market, securities market regulations stipulate their effective transfer at the time of settlement and, therefore, the same time has been established for the accounting record to be made.

The fair value of instruments not measured at fair value through profit and loss is adjusted by transaction costs. Subsequently, and on the occasion of each accounting close, they are valued in accordance with the following criteria:

i. Measurement of financial assets

Financial assets are measured at fair value are valued mainly at their fair value without deducting any transaction cost for their sale.

The fair value of a financial instrument on a given date is taken to be the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. The most objective and common reference for the fair value of a financial instrument is the price that would be paid for it on an active, transparent and deep market (quoted price or market price). At 31 December 2021, there were no significant investments in quoted financial instruments that had ceased to be recognised at their quoted price because their market could not be deemed to be active.

If there is no market price for a given financial instrument, its fair value is estimated on the basis of the price established in recent transactions involving similar instruments and, in the absence thereof, of valuation techniques commonly used by the international financial community, taking into account the specific features of the instrument to be measured and, particularly, the various types of risk associated with it.

All derivatives are recognised in the balance sheet at fair value from the trade date. If the fair value is positive, they are recognised as an asset and if the fair value is negative, they are recognised as a liability. The fair value on the trade date is deemed, in the absence of evidence to the contrary, to be the transaction price. The changes in the fair value of derivatives from the trade date are recognised in 'Gains/losses on financial assets and liabilities held for trading (net)' in the income statement. Specifically, the fair value of financial derivatives traded in organised markets included in the portfolios of financial assets or liabilities held for trading is deemed to be their daily quoted price and if, for exceptional reasons, the quoted price cannot be determined on a given date, these financial derivatives are measured using methods similar to those used to measure derivatives.

The fair value of derivatives is taken to be the sum of the future cash flows arising from the instrument, discounted to present value at the date of measurement (present value or theoretical close) using valuation techniques commonly used by the financial markets: net present value, option pricing models and other methods.

The amount of debt securities and loans and advances under a business model whose objective is to collect the principal and interest flows are valued at their amortised cost, as long as they comply with the 'SPPI' (Solely Payments of Principal and Interest) test, using the effective interest rate method in their determination. Amortised cost refers to the acquisition cost of a corrected financial asset or liability (more or less, as the case may be) for repayments of principal and the part systematically charged to the income statement of the difference between the initial cost and the corresponding reimbursement value at expiration. In the case of financial assets, the amortised cost includes, in addition, the corrections to their value due to the impairment. In the loans and advances covered in fair value hedging transactions, the changes that occur in their fair value related to the risk or the risks covered in these hedging transactions are recorded.

The effective interest rate is the discount rate that exactly matches the carrying amount of a financial instrument to all its estimated cash flows of all kinds over its remaining life. For fixed rate financial instruments, the effective interest rate coincides with the contractual interest rate established on the acquisition date plus, where applicable, the fees and transaction costs that, because of their nature, form part of their financial return. In the case of floating rate financial instruments, the effective interest rate coincides with the rate of return prevailing in all connections until the next benchmark interest reset date.

Equity instruments and contracts related with these instruments are measured at fair value. However, in certain circumstances the Bank estimates cost value as a suitable estimate of the fair value. This can happen if the recent event available information is not enough to measure the fair value or if there is a broad range of possible measures and the cost value represents the best estimates of fair value within this range.

The amounts at which the financial assets are recognised represent, in all material respects, the Bank maximum exposure to credit risk at each reporting date. Also, Banco Santander has received collateral and other credit enhancements to mitigate its exposure to credit risk, which consist mainly of mortgage guarantees, cash collateral, equity instruments and personal security, assets leased out under finance lease and full-service lease agreements, assets acquired under repurchase agreements, securities loans and credit derivatives.

ii. Measurement of financial liabilities

In general, financial liabilities are measured at amortised cost, as defined above, except for those included under 'Financial liabilities held for trading' and 'Financial liabilities designated at fair value through profit or loss' and financial liabilities designated as hedged items (or hedging instruments) in fair value hedges, which are measured at fair value. The changes in credit risk arising from financial liabilities designated at fair value through profit or loss are recognised in accumulated other comprehensive income, unless they generate or increase an accounting mismatch, in which case changes in the fair value of the financial liability in all respects are recognised in the income statement.

iii. Valuation techniques

The following table shows a summary of the fair values, at the end of 2021 and 2020 of financial assets and liabilities classified on the basis of the various measurement methods used by the Bank to determine their fair value:

EUR million

	2021			2020		
	Published price quotations in active Markets (Level 1)	Internal Models (Level 2 and 3)	Total	Published price quotations in active Markets (Level 1)	Internal Models (Level 2 and 3)	Total
Financial assets held for trading	28,995	57,090	86,085	27,514	53,923	81,437
Non-trading financial assets mandatorily at fair value through profit or loss	454	1,901	2,355	48	2,177	2,225
Financial assets designated at fair value through profit or loss	—	13,403	13,403	—	33,899	33,899
Financial assets at fair value through other comprehensive income	9,857	5,178	15,035	14,315	8,308	22,623
Hedging derivatives (assets)	—	1,648	1,648	—	3,137	3,137
Financial liabilities held for trading	9,404	47,565	56,969	10,562	50,452	61,014
Financial liabilities designated at fair value through profit or loss	—	12,743	12,743	—	16,890	16,890
Hedging derivatives (liabilities)	—	2,076	2,076	—	1,780	1,780

The financial instruments at fair value determined on the basis of published price quotations in active markets (level 1) include government debt securities, private-sector debt securities, derivatives traded in organised markets, securitised assets, shares, short positions and fixed-income securities issued.

In cases where price quotations cannot be observed, management makes its best estimate of the price that the market would set, using its own internal models. In most cases, these internal models use data based on observable market parameters as significant inputs (level 2) and, in cases, they use significant inputs not observable in market data (level 3). In order to make these estimates, various techniques are employed, including the extrapolation of observable market data. The best evidence of the fair value of a financial instrument on initial recognition is the transaction price, unless the fair value of the instrument can be obtained from other market transactions performed with the same or similar instruments or can be measured by using a valuation technique in which the variables used include only observable market data, mainly interest rates.

Grupo Santander has developed a formal process for the systematic valuation and management of financial instruments, which has been implemented worldwide across all the Group´s units. The governance scheme for this process which applies to the Bank, distributes responsibilities between two independent divisions: Treasury (development, marketing and daily management of financial products and market data) and Risk (on a periodic basis, validation of pricing models and market data, computation of risk metrics, new transaction approval policies, management of market risk and implementation of fair value adjustment policies).

The approval of new products follows a sequence of steps (request, development, validation, integration in corporate systems and quality assurance) before the product is brought into production. This process ensures that pricing systems have been properly reviewed and are stable before they are used.

The following subsections set forth the most important products and families of derivatives, and the related valuation techniques and inputs, by asset class:

Fixed income and inflation

The fixed income asset class includes basic instruments such as interest rate forwards, interest rate swaps and cross currency swaps, which are valued using the net present value of the estimated future cash flows discounted taking into account basis swap and cross currency spreads determined on the basis of the payment frequency and currency of each leg of the derivative. Vanilla options, including caps, floors and swaptions, are priced using the Black-Scholes model, which is one of the benchmark industry models. More exotic derivatives are priced using more complex models which are generally accepted as standard across institutions.

These pricing models are fed with observable market data such as deposit interest rates, futures rates, cross currency swap and constant maturity swap rates, and basis spreads, on the basis of which different yield curves, depending on the payment frequency, and discounting curves are calculated for each currency. In the case of options, implied volatilities are also used as model inputs. These volatilities are observable in the market for cap and floor options and swaptions, and interpolation and extrapolation of volatilities from the quoted ranges are carried out using generally accepted industry models. The pricing of more exotic derivatives may require the use of non-observable data or parameters, such as correlation (among interest rates and cross-asset), mean reversion rates and prepayment rates, which are usually defined from historical data or through calibration.

Inflation-related assets include zero-coupon or year-on-year inflation-linked bonds and swaps, valued with the present value method using forward estimation and discounting. Derivatives on inflation indices are priced using standard or more complex bespoke models, as appropriate. Valuation inputs of these models consider inflation-linked swap spreads observable in the market and estimations of inflation seasonality, on the basis of which a forward inflation curve is calculated. Also, implied volatilities taken from zero-coupon and year-on-year inflation options are also inputs for the pricing of more complex derivatives.

Equity and foreign exchange

The most important products in these asset classes are forward and futures contracts; they also include vanilla, listed and OTC (Over-The-Counter) derivatives on single underlying assets and baskets of assets. Vanilla options are priced using the standard Black-Scholes model and more exotic derivatives involving forward returns, average performance, or digital, barrier or callable features are priced using generally accepted industry models or bespoke models, as appropriate. For derivatives on illiquid stocks, hedging takes into account the liquidity constraints in models.

The inputs of equity models consider yield curves, spot prices, dividends, asset funding costs (repo margin spreads), implied volatilities, correlation among equity stocks and indices, and cross-asset correlation. Implied volatilities are obtained from market quotes of European and American-style vanilla call and put options. Various interpolation and extrapolation techniques are used to obtain continuous volatility for illiquid stocks. Dividends are usually estimated for the mid and long term. Correlations are implied, when possible, from market quotes of correlation-dependent products. In all other cases, proxies are used for correlations between benchmark underlyings or correlations are obtained from historical data.

The inputs of foreign exchange models include the yield curve for each currency, the spot foreign exchange rate, the implied volatilities and the correlation among assets of this class. Volatilities are obtained from European call and put options which are quoted in markets as of-the-money, risk reversal or butterfly options. Illiquid currency pairs are usually handled by using the data of the liquid pairs from which the illiquid currency can be derived. For more exotic products, unobservable model parameters may be estimated by fitting to reference prices provided by other non-quoted market sources.

Credit

The most common instrument in this asset class is the credit default swap (CDS), which is used to hedge credit exposure to third parties. In addition, models for first-to-default (FTD), n-to-default (NTD) and single-tranche collateralised debt obligation (CDO) products are also available. These products are valued with standard industry models, which estimate the probability of default of a single issuer (for CDS) or the joint probability of default of more than one issuer for FTD, NTD and CDO.

Valuation inputs are the yield curve, the CDS spread curve and the recovery rate. For indices and important individual issuers, the CDS spread curve is obtained in the market. For less liquid issuers, this spread curve is estimated using proxies or other credit-dependent instruments. Recovery rates are usually set to standard values. For listed single-tranche CDO, the correlation of joint default of several issuers is implied from the market. For FTD, NTD and bespoke CDO, the correlation is estimated from proxies or historical data when no other option is available.

Valuation adjustment for counterparty risk or default risk

The Credit valuation adjustment (CVA) is a valuation adjustment to over the counter (OTC) derivatives as a result of the risk associated with the credit exposure assumed to each counterparty.

The CVA is calculated taking into account potential exposure to each counterparty in each future period. The CVA for a specific counterparty is equal to the sum of the CVA for all the periods. The following inputs are used to calculate the CVA:

- Expected exposure: including for each transaction the mark-to-market (MtM) value plus an add-on for the potential future exposure for each period. Mitigating factors such as collateral and netting agreements are taken into account, as well as a temporary impairment factor for derivatives with interim payments.
- Severity: percentage of final loss assumed in a counterparty credit event/default.
- Probability of default: for cases where there is no market information (the CDS quoted spread curve, etc.), proxies based on companies holding exchange-listed CDS, in the same industry and with the same external rating as the counterparty, are used.
- Discount factor curve.

The Debit Valuation Adjustment (DVA) is a valuation adjustment similar to the CVA but, in this case, it arises as a result of the Bank's own risk assumed by its counterparties in OTC derivatives.

The CVA at 31 December 2021 amounted to EUR 237 million (resulting in a decrease of 41.9% compared to 31 December 2020) and DVA amounted to EUR 162 million (resulting in a decrease of 30.4% compared to 31 December 2020). These impacts are mainly due to the continuous improvement in credit markets, the creation of particular credit curves for certain counterparties and the introduction of methodological improvements in the calculation of exposures.

The CVA at 31 December 2020 amounted to EUR 408 million (resulting in an increase of 49.8% compared to 31 December 2019) and DVA amounted to EUR 233 million (resulting in an increase of 36.0% compared to 31 December 2019). These impacts were due to the fact that credit spread levels were at levels above 25% compared to 2019 due to the covid-19 pandemic.

The CVA at 31 December 2021 amounted to EUR 178 million (resulting in a reduction of 29.36% compared to 31 December 2020) and DVA amounted to EUR 63 million (resulting in a reduction of 8.69% compared to 31 December 2020). The variations are due to the fact that credit spreads for the most liquid maturities have been decreased in percentages over 40%.

At the end of December 2020, CVA adjustment of EUR 252 million (an increase of 25.50% compared to 31 December 2019) and DVA adjustment of EUR 69 million (an increase of 25,45% compared to 31 December 2019) were recorded. Variations are due to the reduction of credit spreads by percentages exceeding 25% in more liquid terms.

In addition, the Group amounts the funding fair value adjustment (FFVA) is calculated by applying future market funding spreads to the expected future funding exposure of any uncollateralised component of the OTC derivative portfolio. This includes the uncollateralised component of collateralised derivatives in addition to derivatives that are fully uncollateralised. The expected future funding exposure is calculated by a simulation methodology, where available. The FFVA impact is not material for the consolidated financial statements as of 31 December 2021 and 2020.

Grupo Santander has not carried out significant reclassifications of financial instruments between levels other than those disclosed in level 3 movement table during 2021 continuing the trend observed in 2020. The main variations over the last few years in the Level 3 volume have been due to purchases/sales of these instruments. There have been no significant variations in the market observability conditions, nor relevant changes in the criteria used for the classification of instruments within the fair value hierarchy.

In 2021, the amount reclassified to Level 3 by Banco Santander is EUR 626 million (EUR 523 million in 2020). They are mainly due to reclassifications to level 3 of loan positions for which there has been less access to price contributors and actual market transactions with which to demonstrate their observability, and to a lesser extent to certain debt instruments which, based on the Bank's criteria, do not qualify as observable instruments.

Valuation adjustments due to model risk

The valuation models described above do not involve a significant level of subjectivity, since they can be adjusted and recalibrated, where appropriate, through internal calculation of the fair value and subsequent comparison with the related actively traded price. However, valuation adjustments may be necessary when market quoted prices are not available for comparison purposes.

The sources of risk are associated with uncertain model parameters, illiquid underlying issuers, and poor quality market data or missing risk factors (sometimes the best available option is to use limited models with controllable risk). In these situations, the Group and the Bank calculate and apply valuation adjustments in accordance with common industry practice. The main sources of model risk are described below:

- In the fixed income markets, the sources of model risk include bond index correlations, basis spread modelling, the risk of calibrating model parameters and the treatment of near-zero or negative interest rates. Other sources of risk arise from the estimation of market data, such as volatilities or yield curves, whether used for estimation or cash flow discounting purposes.
- In the stock markets, the sources of model risk include forward skew modelling, the impact of stochastic interest rates, correlation and multi-curve modelling. Other sources of risk arise from managing hedges of digital callable and barrier option payments. Also worthy of consideration as sources of risk are the estimation of market data such as dividends and correlation for quanto and composite basket options.
- For specific financial instruments relating to home mortgage loans secured by financial institutions in the UK (which are regulated and partially financed by the Government) and property asset derivatives, the main input is the Halifax House Price Index (HPI). In these cases, risk assumptions include estimations of the future growth and the volatility of the HPI, the mortality rate and the implied credit spreads.
- Inflation markets are exposed to model risk resulting from uncertainty around modelling the correlation structure among various Consumer Price Index (CPI) rates. Another source of risk may arise from the bid-offer spread of inflation-linked swaps.
- The currency markets are exposed to model risk resulting from forward skew modelling and the impact of stochastic interest rate and correlation modelling for multi-asset instruments. Risk may also arise from market data, due to the existence of specific illiquid foreign exchange pairs.
- The most important source of model risk for credit derivatives relates to the estimation of the correlation between the probabilities of default of different underlying issuers. For illiquid underlying issuers, the CDS spread may not be well defined.

Set forth below are Grupo Santander´s financial instruments at fair value whose measurement was based on internal models (levels 2 and 3) at 31 December 2021 and 2020:

EUR million

	Fair values calculated using internal models at 2021*			
	Level 2	Level 3	Valuation techniques	Main assumptions
ASSETS	**121,640**	**7,667**		
Financial assets held for trading	**76,738**	**537**		
Central banks**	3,608	—	Present value method	Yield curves, FX market prices
Credit institutions**	10,397	—	Present value method	Yield curves, FX market prices
Customers**	6,829	—	Present value method	Yield curves, FX market prices
Debt and equity instruments	2,312	24	Present value method	Yield curves, FX market prices
Derivatives	53,592	513		
Swaps	*43,700*	*224*	Present value method, Gaussian Copula	Yield curves, FX market prices, HPI, Basis, Liquidity
Exchange rate options	*539*	*12*	Black-Scholes Model	Yield curves, Volatility surfaces, FX market prices, Liquidity
Interest rate options	*2,112*	*182*	Black's Model, multifactorial advanced models interest rate	Yield curves, Volatility surfaces, FX market prices, Liquidity
Interest rate futures	*409*	—	Present value method	Yield curves, FX market prices
Index and securities options	*439*	*41*	Black's Model, multifactorial advanced models interest rate	Yield curves, Volatility surfaces, FX & EQ market prices, Dividends, Liquidity
Other	*6,393*	*54*	Present value method, Advanced stochastic volatility models and other	Yield curves, Volatility surfaces, FX and EQ market prices, Dividends, Correlation, HPI, Credit, Others
Hedging derivatives	**4,761**	**—**		
Swaps	*4,204*	—	Present value method	Yield curves, FX market prices, Basis
Interest rate options	*9*	—	Black's Model	Yield curves, FX market prices, Volatility surfaces
Other	*548*	—	Present value method, Advanced stochastic volatility models and other	Yield curves, Volatility surfaces, FX market prices, Credit, Liquidity, Others
Non-trading financial assets mandatorily at fair value through profit or loss	**1,273**	**1,865**		
Equity instruments	415	1,231	Present value method	Market price, Interest rates curves, Dividends and Others
Debt instruments	589	366	Present value method	Yield curves
Loans and receivables	269	268	Present value method, swap asset model & CDS	Yield curves and Credit curves
Financial assets designated at fair value through profit or loss	**13,426**	**418**		
Credit institutions	3,152	—	Present value method	Yield curves, FX market prices
Customers***	10,270	18	Present value method	Yield curves, FX market prices, HPI
Debt instruments	4	400	Present value method	Yield curves, FX market prices
Financial assets at fair value through other comprehensive income	**25,442**	**4,847**		
Equity instruments	74	821	Present value method	Market price, Yield curves, Dividends and Others
Debt instruments	21,585	146	Present value method	Yield curves, FX market prices
Loans and receivables	3,783	3,880	Present value method	Yield curves, FX market prices and Credit curves

EUR million

	Fair values calculated using internal models at 2021*			
	Level 2	Level 3	Valuation techniques	Main assumptions
LIABILITIES	**103,807**	**629**		
Financial liabilities held for trading	**68,930**	**160**		
Central banks**	1,038	—	Present value method	Market price, Yield curves, Dividends and Others
Credit institutions**	6,488	—	Present value method	Yield curves, FX market prices
Customers	6,141	—	Present value method	Yield curves, FX market prices and Credit curves
Derivatives	53,234	160		
Swaps	*42,438*	*44*	Present value method, Gaussian Copula	Yield curves, FX market prices, Basis, Liquidity, HPI
Exchange rate options	*658*	*7*	Black-Scholes Model	Yield curves, Volatility surfaces, FX market prices, Liquidity
Index and securities options	*446*	*67*	Black-Scholes Model	Yield curves, FX market prices
Interest rate options	*2,720*	*26*	Black's Model, multifactorial advanced models interest rate	Yield curves, Volatility surfaces, FX market prices, Liquidity
Futures on interest rate and variable income	*184*	—	Present value method	Yield curves, Volatility surfaces, FX & EQ market prices, Dividends, Correlation, Liquidity, HPI
Other	*6,788*	*16*	Present value method, Advanced stochastic volatility models	Yield curves, Volatility surfaces, FX & EQ market prices, Dividends, Correlation, Liquidity, HPI, Credit, Others
Short positions	2,029	—	Present value method	Yield curves ,FX & EQ market prices, Equity
Hedging derivatives	**5,463**	**—**		
Swaps	*4,149*	—	Present value method	Yield curves ,FX & EQ market prices, Basis
Other	*1,314*	—	Present value method, Advanced stochastic volatility models and other	Yield curves , Volatility surfaces, FX market prices, Credit, Liquidity, Other
Financial liabilities designated at fair value through profit or loss	**28,644**	**469**	Present value method	Yield curves, FX market prices
Liabilities under insurance contracts	**770**	**—**	Present Value Method with actuarial techniques	Mortality tables and interest rate curves

* Level 2 internal models use data based on observable market parameters, while level 3 internal models use significant non-observable inputs in market data.
** Includes mainly short-term loans and reverse repurchase agreements with corporate customers (mainly brokerage and investment companies).
*** Includes, mainly, structured loans to corporate clients.

EUR million

	Fair values calculated using internal models at 2020*		
	Level 2	Level 3	Valuation techniques
ASSETS	**146,468**	**8,543**	
Financial assets held for trading	**67,826**	**740**	
Credit institutions	3	—	Present Value method
Customers**	296	—	Present Value method
Debt and equity instruments	1,453	10	Present Value method
Derivatives	66,074	730	
Swaps	*54,488*	*272*	Present Value method, Gaussian Copula
Exchange rate options	*696*	*22*	Black-Scholes Model
Interest rate options	*3,129*	*241*	Black's Model, advanced multifactor interest rate models
Interest rate futures	*1,069*	—	Present Value method
Index and securities options	*554*	*94*	Black's Model, advanced multifactor interest rate models
Other	*6,138*	*101*	Present Value method, Advanced stochastic volatility models and other
Hedging derivatives	**8,325**	**—**	
Swaps	*6,998*	—	Present Value method
Interest rate options	*25*	—	Black's Model
Other	*1,302*	—	Present Value method, Advanced stochastic volatility models and other
Non-trading financial assets mandatorily at fair value through profit or loss	**1,796**	**934**	
Equity instruments	*984*	*505*	Present Value method
Debt securities issued	*555*	*134*	Present Value method
Loans and receivables	*257*	*295*	Present Value method, swap asset model & CDS
Financial assets designated at fair value through profit or loss	**45,559**	**649**	
Central banks	9,481	—	Present Value method
Credit institutions	11,973	163	Present Value method
Customers	24,102	19	Present Value method
Debt instruments	3	467	Present Value method
Financial assets at fair value through other comprehensive income	**22,962**	**6,220**	
Equity instruments	75	1,223	Present Value method
Debt instruments	18,410	206	Present Value method
Loans and receivables	4,477	4,791	Present Value method

EUR million

	Fair values calculated using internal models at 2020*		
	Level 2	Level 3	Valuation techniques
LIABILITIES	**124,098**	**905**	
Financial liabilities held for trading	**71,009**	**295**	
Derivatives	63,920	295	
Swaps	*51,584*	*81*	Present Value method, Gaussian Copula
Interest rate options	*4,226*	*49*	Black's Model, advanced multifactor interest rate models
Exchange rate options	*724*	*1*	Black-Scholes Model
Index and securities options	*456*	*97*	Black-Scholes Model
Interest rate and equity futures	*1,054*	*2*	Present Value method
Other	*5,876*	*65*	Present Value method, Advanced stochastic volatility models and other
Short positions	7,089	—	Present Value method
Hedging derivatives	**6,869**	**—**	
Swaps	*5,821*	—	Present Value method
Interest rate options	*13*	—	Black's Model
Other	*1,035*	—	Present Value method, Advanced stochastic volatility models and other
Financial liabilities designated at fair value through profit or loss	**45,310**	**610**	Present Value method
Liabilities under insurance contracts	**910**	**—**	Present Value method with actuarial techniques

* Level 2 internal models use data based on observable market parameters, while level 3 internal models use significant non-observable inputs in market data.
** Includes mainly short-term loans and reverse repurchase agreements with corporate customers (mainly brokerage and investment companies).

The same information from the previous table, but referred to Banco Santander, S.A., is presented below:

EUR million

	Fair values calculated using internal models at 2021*			
	Level 2	Level 3	Valuation techniques	Main assumptions
ASSETS	**74,210**	**5,010**		
Financial assets held for trading	**56,612**	**478**		
Central banks **	1,118	—	Present value method	Yield curves, FX market prices
Credit institutions**	6,980	—	Present value method	Yield curves, FX market prices
Customers**	7,025	—	Present value method	Yield curves, FX market prices
Debt and equity instruments	120	—	Present value method	Yield curves, FX market prices
Derivatives	41,369	478		
Swaps	*33,316*	*281*	Present value method, Gaussian Copula	Yield curves, FX market prices, HPI, Basis, Liquidity
Exchange rate options	*5,554*	*9*	Black-Scholes Model	Yield curves, Volatility surfaces, FX market prices, Liquidity
Interest rate options	*2,186*	*183*	Black's Model, multifactorial advanced models interest rate	Yield curves, Volatility surfaces, FX market prices, Liquidity
Interest rate futures	*10*	—	Present value method	Yield curves, FX market prices
Index and securities options	*210*	*5*	Black's Model, multifactorial advanced models interest rate	Yield curves, Volatility surfaces, FX & EQ market prices, Dividends, Liquidity
Other	*93*	—	Present value method, Advanced stochastic volatility models and other	Yield curves, Volatility surfaces, FX and EQ market prices, Dividends, Correlation, HPI, Credit, Others
Hedging derivatives	**1,648**	**—**		
Swaps	*1,447*	—	Present value method	Yield curves, FX market prices, Basis
Exchange rate options	*195*	—	Black-Scholes Model	Yield curves, Volatility surfaces, FX market prices, Liquidity
Interest rate options	*6*	—	Black's Model	Yield curves, FX market prices, Volatility surfaces
Non-trading financial assets mandatorily at fair value through profit or loss	**1,360**	**541**		
Equity instruments	87	369	Present value method	Market price, Interest rates curves, Dividends and Others
Debt instruments	585	148	Present value method	Yield curves
Loans and receivables	688	24	Present value method, swap asset model & CDS	Yield curves and Credit curves
Financial assets designated at fair value through profit or loss	**13,403**	**—**		
Credit institutions	3,445	—	Present value method	Yield curves, FX market prices
Customers***	9,958	—	Present value method	Yield curves, FX market prices, HPI
Financial assets at fair value through other comprehensive income	**1,187**	**3,991**		
Equity instruments	—	753	Present value method	Market price, Yield curves, Dividends and Others
Debt instruments	489	—	Present value method	Yield curves, FX market prices
Loans and receivables	698	3,238	Present value method	Yield curves, FX market prices and Credit curves

EUR million

	Fair values calculated using internal models at 2021*			
	Level 2	Level 3	Valuation techniques	Main assumptions
LIABILITIES	**62,058**	**326**		
Financial liabilities held for trading	**47,382**	**183**		
Central banks**	44	—	Present value method	Market price, Yield curves, Dividends and Others
Credit institutions**	5,718	—	Present value method	Yield curves, FX market prices
Customers	1,291	—	Present value method	Yield curves, FX market prices and Credit curves
Derivatives	40,329	183		
Swaps	*31,529*	*114*	Present value method, Gaussian Copula	Yield curves, FX market prices, Basis, Liquidity, HPI
Exchange rate options	*5,368*	*7*	Black-Scholes Model	Yield curves, Volatility surfaces, FX market prices, Liquidity
Index and securities options	*2,686*	*33*	Black-Scholes Model	Yield curves, FX market prices
Interest rate options	*10*	*18*	Black's Model, multifactorial advanced models interest rate	Yield curves, Volatility surfaces, FX market prices, Liquidity
Futures on interest rate and variable income	*494*	—	Present value method	Yield curves, Volatility surfaces, FX & EQ market prices, Dividends, Correlation, Liquidity, HPI
Other	*242*	*11*	Present value method, Advanced stochastic volatility models	Yield curves, Volatility surfaces, FX & EQ market prices, Dividends, Correlation, Liquidity, HPI, Credit, Others
Hedging derivatives	**2,076**	**—**		
Swaps	*1,244*	—	Present value method	Yield curves ,FX & EQ market prices, Basis
Exchange rate options	*608*	—	Black-Scholes Model	Yield curves, Volatility surfaces, FX market prices, Liquidity
Interest rate options	*1*	—	Black's Model	Yield curves , Volatility surfaces, FX market prices, Liquidity
Other	*223*	—	Present value method, Advanced stochastic volatility models and other	Yield curves , Volatility surfaces, FX market prices, Credit, Liquidity, Other
Financial liabilities designated at fair value through profit or loss	**12,600**	**143**		
Central banks	607	—	Present value method	Yield curves, FX market prices
Credit institutions	1,067	—	Present value method	Yield curves, FX market prices
Customers	*10,926*	*143*	Present value method	Yield curves, FX market prices
Liabilities under insurance contracts	**—**	**—**	Present Value Method with actuarial techniques	Mortality tables and interest rate curves

* Level 2 internal models use data based on observable market parameters, while level 3 internal models use significant non-observable inputs in market data.
** Includes mainly short-term loans and reverse repurchase agreements with corporate customers (mainly brokerage and investment companies).
*** Includes, mainly, structured loans to corporate clients.

EUR million

	Fair values calculated using internal models at 2020*			
	Level 2	Level 3	Valuation techniques	Main assumptions
ASSETS	**94,940**	**6,504**		
Financial assets held for trading	**53,331**	**592**		
Credit institutions	—	—	Present value method	Yield curves, FX market prices
Customers **	74	—	Present value method	Yield curves, FX market prices
Debt and equity instruments	781	—	Present value method	Yield curves, FX market prices
Derivatives	52,476	592		
Swaps	*44,123*	*326*	Present value method, Gaussian Copula	Yield curves, FX market prices, HPI, Basis, Liquidity
Exchange rate options	*5,692*	*19*	Black-Scholes Model	Yield curves, Volatility surfaces, FX market prices, Liquidity
Interest rate options	*1,708*	*241*	Black's Model, multifactorial advanced models interest rate	Yield curves, Volatility surfaces, FX market prices, Liquidity
Interest rate futures	*56*	—	Present value method	Yield curves, FX market prices
Index and securities options	*820*	*6*	Black's Model, multifactorial advanced models interest rate and others	Yield curves, Volatility surfaces, FX & EQ market prices, Dividends, Liquidity
Other	*77*	—	Present value method, Advanced stochastic volatility models and other	Yield curves, Volatility surfaces, FX and EQ market prices, Dividends, Correlation, HPI, Credit, Others
Hedging derivatives	**3,137**	**—**		
Swaps	*2,429*	—	Present value method	Yield curves, FX market prices, Basis
Exchange rate options	*688*	—	Black-Scholes Model	Yield curves, Volatility surfaces, FX market prices, Liquidity
Interest rate options	*20*	—	Black´s Model	Yield curves, FX market prices, Volatility surfaces
Other	—	—	Present value method, Advanced stochastic volatility models and other	Yield curves, Volatility surfaces, FX marketprices, Credit, Liquidity, Others
Non-trading financial assets mandatorily at fair value through profit or loss	**1,835**	**342**		
Equity instruments	82	185	Present value method	Market price, Interest rates curves, Dividends and Others
Debt instruments	530	131	Present value method	Yield curves
Loans and receivables	1,223	26	Present value method, swap asset model & CDS	Yield curves and Credit curves
Financial assets designated at fair value through profit or loss	**33,736**	**163**		
Central banks	482	—	Present value method	Yield curves, FX market prices
Credit institutions	9,725	163	Present value method	Yield curves, FX market prices
Customers	23,529	—	Present value method	Yield curves, FX market prices, HPI
Debt instruments	—	—	Present value method	Yield curves, FX market prices
Financial assets at fair value through other comprehensive income	**2,901**	**5,407**		
Equity instruments	—	1,002	Present value method	Market price, Yield curves, Dividends and Others
Debt instruments	1,771	—	Present value method	Yield curves, FX market prices
Loans and receivables	1,130	4,405	Present value method	Yield curves, FX market prices and Credit curves

EUR million

	Fair values calculated using internal models at 2020*			
	Level 2	Level 3	Valuation techniques	Main assumptions
LIABILITIES	**68,640**	**482**		
Financial liabilities held for trading	**50,258**	**194**		
Derivatives	50,258	194		
Swaps	*40,047*	*127*	Present value method, Gaussian Copula	Yield curves, FX market prices, Basis, Liquidity, HPI
Exchange rate options	*5,224*	*1*	Black-Scholes Model	Yield curves, Volatility surfaces, FX market prices, Liquidity
Interest rate options	*3,825*	*50*	Black's Model, multifactorial advanced models interest rate	Yield curves, Volatility surfaces, FX market prices, Liquidity
Index and securities options	*45*	*14*	Black-Scholes Model	Yield curves, FX market prices, Volatility surfaces, Liquidity
Interest rate and equity futures	*424*	*—*	Present value method	Yield curves, Volatility surfaces, FX & EQ market prices, Dividends, Correlation, Liquidity, HPI
Other	*693*	*2*	Present value method, Advanced stochastic volatility models	Yield curves, Volatility surfaces, FX & EQ market prices, Dividends, Correlation, Liquidity, HPI, Credit, Others
Short positions	—	—	Present value method	Yield curves ,FX & EQ market prices, Equity
Hedging derivatives	**1,780**	**—**		
Swaps	*1,051*	*—*	Present value method	Yield curves ,FX & EQ market prices, Basis
Exchange rate options	*386*	*—*	Black-Scholes Model	Yield curves, Volatility surfaces, FX market prices, Liquidity
Interest rate options	*81*	*—*	Black's Model	Yield curves , Volatility surfaces, FX market prices, Liquidity
Other	*262*	*—*	Present value method, Advanced stochastic volatility models and other	Yield curves , Volatility surfaces, FX market prices, Credit, Liquidity, Other
Financial liabilities designated at fair value through profit or loss	**16,602**	**288**		
Central banks	*1,470*	*—*	Present value method	Yield curves, FX market prices
Credit institutions	*4,496*	*—*	Present value method	Yield curves, FX market prices
Customers	*10,636*	*288*	Present value method	Yield curves, FX market prices
Liabilities under insurance contracts	**—**	**—**	Present Value Method with actuarial techniques	Mortality tables and interest rate curves

* Level 2 internal models use data based on observable market parameters, while level 3 internal models use significant non-observable inputs in market data.
** Includes mainly short-term loans and reverse repurchase agreements with corporate customers (mainly brokerage and investment companies).

Financial Instruments (level 3)

Set forth below are the Group and the Bank´s main financial instruments measured using unobservable market data as significant inputs of the internal models (level 3):

- HTC&S (Hold to collect and sale) syndicated loans classified in the fair value category with changes in other comprehensive income, where the cost of liquidity is not directly observable in the market, as well as the prepayment option in favour of the borrower.
- Illiquid equity in non-trading portfolios, classified at fair value through profit or loss and at fair value through equity.
- Instruments in Santander UK's portfolio (loans, debt instruments and derivatives) linked to the House Price Index (HPI). Even if the valuation techniques used for these instruments may be the same as those used to value similar products (present value in the case of loans and debt instruments, and the Black-Scholes model for derivatives), the main factors used in the valuation of these instruments are the HPI spot rate, the growth and volatility thereof, and the mortality rates, which are not always observable in the market and, accordingly, these instruments are considered illiquid.
- Callable interest rate derivatives (Bermudan-style options) where the main unobservable input is mean reversion of interest rates.
- Trading derivatives on interest rates, taking as an underlying asset titling and with the amortization rate (CPR, Conditional prepayment rate) as unobservable main entry.
- Derivatives from trading on inflation in Spain, where volatility is not observable in the market.
- Equity volatility derivatives, specifically indices and equities, where volatility is not observable in the long term.
- Derivatives on long-term interest rate and FX in some units (mainly South America)where for certain underlyings it is not possible to demonstrate observability to these terms.
- Debt instruments referenced to certain illiquid interest rates, for which there is no reasonable market observability.

The measurements obtained using the internal models might have been different if other methods or assumptions had been used with respect to interest rate risk, to credit risk, market risk and foreign currency risk spreads, or to their related correlations and volatilities. Nevertheless, the Bank's directors consider that the fair value of the financial assets and liabilities recognised in the balance sheet and the gains and losses arising from these financial instruments are reasonable.

The net amount recorded in the 2021 financial year results of the Bank derived from valuation models whose significant inputs are non-observable market data (level 3) amounts to EUR 19 million profit for the Bank (EUR 186 million profit in 2020).

The table below shows the effect, at 31 December 2021 and 2020 on the fair value of the main financial instruments classified as level 3 of a reasonable change in the assumptions used in the valuation. This effect was determined by applying the probable valuation ranges of the main unobservable inputs detailed in the following table:

Santander

2021

Portfolio/Instrument (Level 3)	Valuation technique	Main unobservable inputs	Range	Weighted average	Impacts (EUR million)	
					Unfavourable scenario	Favourable scenario
Financial assets held for trading						
Derivatives						
Cap&Floor	Volatility option model	Volatility	10% - 90%	36.30%	(0.50)	0.43
CCS	Discounted Cash Flows	Interest rate	(0.7)% - 0.7%	0.73%	(0.11)	0.11
CCS	Forward estimation	Interest rate	4bps - (4)bps	(0.09)%	(0.03)	0.03
Convertibility curve - inputs: NDFs Offshore	Forward estimation	Price	0% - 2%	0.61%	(0.65)	0.28
EQ Options	EQ option pricing model	Volatility	0% - 90%	61.20%	(0.24)	0.52
EQ Options	Local volatility	Volatility	10% - 90%	40.00%	(6.82)	6.82
FRAs	Asset Swap model	Interest rate	0% - 4%	1.78%	(0.91)	0.73
FX Options	FX option pricing model	Volatility	0% - 50%	32.14%	(0.28)	0.50
Inflation Derivatives	Asset Swap model	Inflation Swap Rate	(50)% - 50%	50.00%	(0.56)	0.28
Inflation Derivatives	Volatility option model	Volatility	0% - 40%	13.29%	(0.47)	0.24
IR Futures	Asset Swap model	Interest rate	0% - 15%	5.91%	(1.09)	0.71
IR Options	IR option pricing model	Volatility	0% - 60%	36.28%	(0.20)	0.31
IRS	Asset Swap model	Interest rate	(6)% - 12.80%	10.36%	(0.07)	0.13
IRS	Discounted Cash Flows	Credit spread	103.10bps - 375.6bps	71.91%	(7.21)	4.16
IRS	Discounted Cash Flows	Inflation Swap Rate	(0.8)% - 6.5%	1.81%	(0.04)	0.01
IRS	Discounted Cash Flows	Swap Rate	7.7% - 8.2%	(2.87)%	(0.23)	0.10
IRS	Forward estimation	Interest rate	TIIE91 (8.98)bps - TIIE91 +11.12bps	n.a.	(0.27)	0.17
IRS	Forward estimation	Prepayment rate	6% - 12%	n.a.	—	—
IRS	Others	Others	0.05%	n.a.	(1.49)	—
IRS	Prepayment modelling	Prepayment rate	2.5% - 6.2%	0.44%	(0.09)	0.05
Property derivatives	Option pricing model	Growth rate	0% - 5%	2.50%	(2.62)	2.62
Swaptions	IR option pricing model	Volatility	0% - 40%	26.67%	(0.13)	0.27
Debt securities						
Corporate debt	Price based	Market price	85% - 115%	15.00%	—	—
Financial assets designated at fair value through profit or loss						
Loans and advances to customers						
Loans	Discounted Cash Flows	Credit spreads	0.1% - 1.4%	0.66%	(0.26)	0.26
Mortgage portfolio	Black Scholes model	Growth rate	0%- 5%	2.50%	(1.90)	1.90
Debt securities						
Corporate debt	Discounted Cash Flows	Credit spread	0% - 20%	9.88%	(1.23)	1.20
Government debt	Discounted Cash Flows	Discount curve	0% - 10%	8.33%	(4.14)	20.69
Other debt securities	Others	Inflation Swap Rate	0% - 10%	4.74%	(5.47)	4.92

2021

Portfolio/Instrument (Level 3)	Valuation technique	Main unobservable inputs	Range	Weighted average	Impacts (EUR million)	
					Unfavourable scenario	Favourable scenario
Non-trading financial assets mandatorily at fair value through profit or loss						
Debt securities						
Corporate debt	Discounted Cash Flows	Margin of a reference portfolio	(1)bp - 1bp	1.00%	(0.56)	0.60
Property securities	Probability weighting	Growth rate	0% - 5%	2.50%	(1.19)	1.19
Equity instruments						
Equities	Price Based	Price	90% - 110%	10.00%	(123.10)	123.10
Financial assets at fair value through other comprehensive income						
Loans and advances to customers						
Loans	Discounted Cash Flows	Credit spread	n.a.	n.a.	(19.84)	—
Loans	Discounted Cash Flows	Interest rate curve	(0.1)% - 0.1%	0.12%	(0.07)	0.07
Loans	Discounted Cash Flows	Margin of a reference portfolio	(1)bp - 1bp	1.00%	(13.12)	13.04
Loans	Forward estimation	Credit spread	77bps - 242bps	n.a.	—	—
Debt securities						
Government debt	Discounted Cash Flows	Interest rate	0.6% - 0.8%	0.09%	(0.01)	0.01
Equity instruments						
Equities	Price Based	Price	90% - 110%	10.00%	(82.13)	82.13
Financial liabilities held for trading						
Derivatives						
Cap&Floor	Volatility option model	Volatility	10% - 90%	36.30%	(0.50)	0.43
Financial liabilities designated at fair value through profit or loss						
Loans and advances to customers						
Repos/Reverse repos	Asset Swap Repo Model	Long-term repo spread	n.a	n.a.	(0.36)	—

Santander

2020

Portfolio/ Instrument (Level 3)	Valuation technique	Main unobservable inputs	Range	Weighted average	Impacts (EUR million)	
					Unfavourable scenario	Favourable scenario
Financial assets held for trading						
Derivatives						
Cap&Floor	Volatility option model	Volatility	10% - 90%	31.55%	(0.07)	0.05
CCS	Discounted Cash Flows	Interest rate	(0.30)% - 0.66%	0.66%	—	0.20
Convertibility curve - NDFs Offshore	Forward estimation	Price	0% - 2%	0.61%	(0.72)	0.31
EQ Options	EQ option pricing model	Volatility	7.86% - 93.67%	48.37%	(1.46)	1.81
FRAs	Asset Swap model	Interest rate	0% - 5%	2.22%	(0.78)	0.63
FX Forward	Discounted Cash Flows	Swap Rate	(0.02)% - (0.30)%	0.11%	—	—
FX Options	FX option pricing model	Volatility	0% - 50%	32.14%	(0.39)	0.70
Inflation Derivatives	Asset Swap model	Inflation Swap Rate	(100)% - 50%	83.33%	(0.63)	0.31
Inflation Derivatives	Volatility option model	Volatility	0% - 50%	16.67%	(0.47)	0.23
IR Futures	Asset Swap model	Interest rate	0% - 15%	0.94%	(0.94)	0.06
IR Options	IR option pricing model	Volatility	0% - 100%	19.05%	(0.27)	0.06
IRS	Asset Swap model	Interest rate	(6)% - 12.50%	10%	(0.08)	0.13
IRS	Discounted Cash Flows	Swap Rate	5.90% - 6.31%	2.26%	(0.01)	0.02
IRS	Discounted Cash Flows	Credit spread	78.97 bps - 202.37 bps	9.82 bps	(2.81)	1.29
IRS	Prepayment modelling	Prepayment rate	2.47% - 6.22%	0.06%	(0.12)	0.05
Property derivatives	Option pricing model	HPI Forward growth rate and HPI Spot rate	0% - 5%	2.50%	(17.82)	17.82
Swaptions	IR option pricing model	Volatility	0% - 50%	33.33%	(0.16)	0.31
Financial assets designated at fair value through profit or loss						
Loans and advances to customers						
Repos / Reverse repos	Asset Swap Repo Model	Long-term repo spread	n/a	n/a	(0.18)	0.23
Mortgage portfolio	Black Scholes model	HPI Forward growth rate	0% - 5%	2.50%	(2.23)	2.23
Other loans	Present value method	Credit spreads	0.07% - 1.55%	0.74%	(0.35)	0.35
Debt securities						
Government debt	Discounted Cash Flows	Interest rate	0% - 10%	8.33%	(0.78)	3.91
Other debt securities	Price based	Market Price	90% - 110%	10%	(0.15)	0.15
Property securities	Probability weighting	HPI Forward growth rate and HPI Spot rate	0% - 5%	2.50%	(7.24)	7.24
Non-trading financial assets mandatorily at fair value through profit or loss						
Equity instruments						
Equities	Price Based	Price	90% - 110%	10.00%	(50.47)	50.47

2020

Portfolio/ Instrument (Level 3)	Valuation technique	Main unobservable inputs	Range	Weighted average	Impacts (EUR million)	
					Unfavourable scenario	Favourable scenario
Financial assets at fair value through other comprehensive income						
Loans and advances to customers						
Loans	Discounted Cash Flows	Credit spread	n/a	n/a	(6.72)	—
Loans	Discounted Cash Flows	Interest rate curve	(0.15)% - 0.15%	0.15%	(0.09)	0.09
Other loans	Present value method	Credit spreads	0.15% - 0.53%	0.19%	(0.04)	0.04
Debt securities						
Government debt	Discounted Cash Flows	Interest rate	1.1% - 1.3%	0.10%	—	—
Equity instruments						
Equities	Price Based	Price	90% - 110%	10%	(122.14)	122.14
Financial liabilities held for trading						
Derivatives						
Cap&Floor	Volatility option model	Volatility	10% - 90%	34.61%	(0.02)	0.01
EQ Options	Option pricing model	HPI Forward growth rate and HPI Spot rate	0% - 5%	2.50%	(6.35)	6.35

Lastly, the changes in the financial instruments classified as Level 3, at Grupo Santander, in 2021 and 2020:

EUR million	01/01/2021	Changes						31/12/2021
	Fair value calculated using internal models (Level 3)	Purchases/ Issuances	Sales/ Settlements	Changes in fair value recognised in profit or loss	Changes in fair value recognised in equity	Level reclassifications	Other	Fair value calculated using internal models (level 3)
Financial assets held for trading	**740**	**136**	**(124)**	**(181)**	**—**	**(15)**	**(19)**	**537**
Debt instruments	7	20	(2)	(2)	—	—	(1)	22
Equity instruments	3	—	(1)	—	—	—	—	2
Trading derivatives	730	116	(121)	(179)	—	(15)	(18)	513
Swaps	*272*	*5*	*(33)*	*(35)*	—	*33*	*(18)*	*224*
Exchange rate options	*22*	*14*	*(27)*	*3*	—	—	—	*12*
Interest rate options	*241*	*7*	*(39)*	*(27)*	—	—	—	*182*
Index and securities options	*94*	*18*	*(12)*	*(51)*	—	*(8)*	—	*41*
Other	*101*	*72*	*(10)*	*(69)*	—	*(40)*	—	*54*
Financial assets at fair value through profit or loss	**649**	**59**	**(120)**	**(11)**	**—**	**(163)**	**4**	**418**
Credit entities	163	—	—	—	—	(163)	—	—
Loans and advances to customers	19	—	(2)	—	—	—	1	18
Debt instruments	467	59	(118)	(11)	—	—	3	400
Non-trading financial assets mandatorily at fair value through profit or loss	**934**	**534**	**(251)**	**127**	**—**	**485**	**36**	**1,865**
Customers	295	122	(149)	—	—	(3)	3	268
Debt instruments	134	206	(28)	28	—	17	9	366
Equity instruments	505	206	(74)	99	—	471	24	1,231
Financial assets at fair value through other comprehensive income	**6,220**	**5,681**	**(6,588)**	**—**	**(228)**	**(241)**	**3**	**4,847**
Loans and advances	4,791	5,597	(6,298)	—	(37)	(173)	—	3,880
Debt instruments	206	75	(25)	—	(43)	(68)	1	146
Equity instruments	1,223	9	(265)	—	(148)	—	2	821
TOTAL ASSETS	**8,543**	**6,410**	**(7,083)**	**(65)**	**(228)**	**66**	**24**	**7,667**
Financial liabilities held for trading	**295**	**85**	**(42)**	**(138)**	**—**	**(21)**	**(19)**	**160**
Trading derivatives	295	85	(42)	(138)	—	(21)	(19)	160
Swaps	*81*	*4*	*(10)*	*(36)*	—	*3*	*2*	*44*
Exchange rate options	*1*	*2*	—	*4*	—	—	—	*7*
Interest rate options	*49*	*26*	*(19)*	*(8)*	—	—	*(22)*	*26*
Index and securities options	*97*	*23*	*(5)*	*(27)*	—	*(22)*	*1*	*67*
Securities and interest rate futures	*2*	—	*(2)*	—	—	—	—	—
Others	*65*	*30*	*(6)*	*(71)*	—	*(2)*	—	*16*
Financial liabilities designated at fair value through profit or loss	**610**	**143**	**—**	**—**	**—**	**(289)**	**5**	**469**
TOTAL LIABILITIES	**905**	**228**	**(42)**	**(138)**	**—**	**(310)**	**(14)**	**629**

EUR million	01/01/2020	Changes						31/12/2020
	Fair value calculated using internal models (level 3)	Purchases /Issuances	Sales/ Settlements	Changes in fair value recognized in profit or loss	Changes in fair value recognized in equity	Level reclassifications	Other	Fair value calculated using internal models (level 3)
Financial assets held for trading	**598**	**52**	**(98)**	**330**	**—**	**(45)**	**(97)**	**740**
Debt instruments	65	7	(27)	1	—	—	(39)	7
Equity instruments	—	3	—	—	—	—	—	3
Trading derivatives	533	42	(71)	329	—	(45)	(58)	730
Swaps	*182*	*—*	*(8)*	*116*	*—*	*(8)*	*(10)*	*272*
Exchange rate options	*8*	*—*	*—*	*15*	*—*	*—*	*(1)*	*22*
Interest rate options	*177*	*15*	*(12)*	*61*	*—*	*—*	*—*	*241*
Index and securities options	*95*	*25*	*(43)*	*85*	*—*	*(38)*	*(30)*	*94*
Other	*71*	*2*	*(8)*	*52*	*—*	*1*	*(17)*	*101*
Financial assets at fair value through profit or loss	**664**	**280**	**(45)**	**17**	**—**	**(91)**	**(176)**	**649**
Credit entities	50	164	—	(1)	—	(50)	—	163
Loans and advances to customers	32	—	(15)	3	—	—	(1)	19
Debt instruments	582	116	(30)	15	—	(41)	(175)	467
Non-trading financial assets mandatorily at fair value through profit or loss	**1,601**	**120**	**(292)**	**(36)**	**—**	**(119)**	**(340)**	**934**
Loans and advances to customers	376	104	(136)	12	—	(30)	(31)	295
Debt instruments	675	—	(144)	(63)	—	2	(336)	134
Equity instruments	550	16	(12)	15	—	(91)	27	505
Financial assets at fair value through other comprehensive income	**3,788**	**8,795**	**(7,616)**	**—**	**(390)**	**571**	**1,072**	**6,220**
TOTAL ASSETS	**6,651**	**9,247**	**(8,051)**	**311**	**(390)**	**316**	**459**	**8,543**
Financial liabilities held for trading	**290**	**40**	**(14)**	**130**	**—**	**(96)**	**(55)**	**295**
Trading derivatives	290	40	(14)	130	—	(96)	(55)	295
Swaps	*115*	*8*	*—*	*(7)*	*—*	*(26)*	*(9)*	*81*
Exchange rate options	*1*	*—*	*—*	*2*	*—*	*—*	*(2)*	*1*
Interest rate options	*34*	*11*	*(2)*	*6*	*—*	*—*	*—*	*49*
Index and securities options	*88*	*21*	*(8)*	*95*	*—*	*(70)*	*(29)*	*97*
Securities and interest rate futures	*2*	*—*	*—*	*—*	*—*	*—*	*—*	*2*
Others	*50*	*—*	*(4)*	*34*	*—*	*—*	*(15)*	*65*
Financial liabilities designated at fair value through profit or loss	**784**	**4**	**(3)**	**(12)**	**—**	**(32)**	**(131)**	**610**
TOTAL LIABILITIES	**1,074**	**44**	**(17)**	**118**	**—**	**(128)**	**(186)**	**905**

The same information on the movement of financial instruments classified in Level 3, but referred to Banco Santander, S.A., in 2021 and 2020, is presented below:

EUR million	01/01/2021	Changes						31/12/2021
	Fair value calculated using internal models (Level 3)	Purchases/ Issuances	Sales/ Settlements	Changes in fair value recognised in profit or loss	Changes in fair value recognised in equity	Level reclassifications	Other	Fair value calculated using internal models (level 3)
Financial assets held for trading	**592**	**27**	**(86)**	**(65)**	**—**	**30**	**(20)**	**478**
Debt instruments and equity instrument	—	2	—	—	—	—	(2)	—
Trading derivatives	592	25	(86)	(65)	—	30	(18)	478
Swaps	*326*	*6*	*(21)*	*(45)*	*—*	*33*	*(18)*	*281*
Exchange rate options	*19*	*13*	*(27)*	*4*	*—*	*—*	*—*	*9*
Interest rate options	*241*	*6*	*(38)*	*(26)*	*—*	*—*	*—*	*183*
Index and securities options	*6*	*—*	*—*	*2*	*—*	*(3)*	*—*	*5*
Other	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*
Hedging derivatives (Assets)	—	—	—	—	—	—	—	—
Swaps	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*
Financial assets at fair value through profit or loss	**163**	**—**	**—**	**—**	**—**	**(163)**	**—**	**—**
Credit entities	163	—	—	—	—	(163)	—	—
Loans and advances to customers	—	—	—	—	—	—	—	—
Debt instruments	—	—	—	—	—	—	—	—
Non-trading financial assets mandatorily at fair value through profit or loss	**342**	**208**	**(17)**	**2**	**—**	**5**	**1**	**541**
Customers	26	4	(4)	(2)	—	—	—	24
Debt instruments	131	18	(6)	—	—	5	—	148
Equity instruments	185	186	(7)	4	—	—	1	369
Financial assets at fair value through other comprehensive income	**5,407**	**5,046**	**(5,959)**	**—**	**(263)**	**(240)**	**—**	**3,991**
Loans and advances	4,405	4,972	(5,951)	—	(14)	(174)	—	3,238
Debt instruments	—	74	(8)	—	—	(66)	—	—
Equity instruments	1,002	—	—	—	(249)	—	—	753
TOTAL ASSETS	**6,504**	**5,281**	**(6,062)**	**(63)**	**(263)**	**(368)**	**(19)**	**5,010**
Financial liabilities held for trading	**195**	**55**	**(39)**	**(35)**	**—**	**29**	**(22)**	**183**
Trading derivatives	195	55	(39)	(35)	—	29	(22)	183
Swaps	*128*	*6*	*(8)*	*(45)*	*—*	*33*	*—*	*114*
Exchange rate options	*1*	*2*	*—*	*4*	*—*	*—*	*—*	*7*
Interest rate options	*50*	*26*	*(19)*	*(2)*	*—*	*—*	*(22)*	*33*
Index and securities options	*14*	*—*	*(9)*	*17*	*—*	*(4)*	*—*	*18*
Securities and interest rate futures	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*
Others	*2*	*21*	*(3)*	*(9)*	*—*	*—*	*—*	*11*
Hedging derivatives (Liabilities)	—	—	—	—	—	—	—	—
Swaps	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*
Financial liabilities designated at fair value through profit or loss	**289**	**143**	**—**	**—**	**—**	**(289)**	**—**	**143**
TOTAL LIABILITIES	**484**	**198**	**(39)**	**(35)**	**—**	**(260)**	**(22)**	**326**

EUR million	01/01/2020	Changes						31/12/2020
	Fair value calculated using internal models (level 3)	Purchases /Issuances	Sales/ Settlements	Changes in fair value recognized in profit or loss	Changes in fair value recognized in equity	Level reclassifications	Other	Fair value calculated using internal models (level 3)
Financial assets held for trading	**449**	**21**	**(33)**	**200**	**—**	**11**	**(56)**	**592**
Debt instruments and equity instrument	36	7	(11)	—	—	—	(32)	—
Trading derivatives	413	14	(22)	200	—	11	(24)	592
Swaps	*209*	*—*	*(10)*	*123*	*—*	*8*	*(4)*	*326*
Exchange rate options	*5*	*—*	*—*	*15*	*—*	*—*	*(1)*	*19*
Interest rate options	*197*	*14*	*(12)*	*61*	*—*	*—*	*(19)*	*241*
Index and securities options	*2*	*—*	*—*	*1*	*—*	*3*	*—*	*6*
Other	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*
Hedging derivatives (Assets)	**4**	**—**	**—**	**—**	**—**	**—**	**(4)**	**—**
Swaps	*4*	*—*	*—*	*—*	*—*	*—*	*(4)*	*—*
Financial assets at fair value through profit or loss	**50**	**164**	**—**	**(1)**	**—**	**(50)**	**—**	**163**
Credit entities	50	164	—	(1)	—	(50)	—	163
Loans and advances to customers	—	—	—	—	—	—	—	—
Debt instruments	—	—	—	—	—	—	—	—
Non-trading financial assets mandatorily at fair value through profit or loss	**620**	**18**	**(13)**	**1**	**—**	**—**	**(284)**	**342**
Loans and advances to customers	26	2	(2)	—	—	—	—	26
Debt instruments	457	—	(9)	(2)	—	—	(315)	131
Equity instruments	137	16	(2)	3	—	—	31	185
Financial assets at fair value through other comprehensive income	**2,924**	**8,356**	**(7,280)**	**—**	**(378)**	**558**	**1,227**	**5,407**
TOTAL ASSETS	**4,047**	**8,559**	**(7,326)**	**200**	**(378)**	**519.00**	**883**	**6,504**
Financial liabilities held for trading	**355**	**19**	**(12)**	**13**	**—**	**4**	**(185)**	**194**
Trading derivatives	355	19	(12)	13	—	4	(185)	194
Swaps	*127*	*8*	*(2)*	*(3)*	*—*	*2*	*(5)*	*127*
Exchange rate options	*1*	*—*	*—*	*2*	*—*	*—*	*(2)*	*1*
Interest rate options	*218*	*11*	*(6)*	*6*	*—*	*—*	*(179)*	*50*
Index and securities options	*3*	*—*	*(1)*	*9*	*—*	*2*	*1*	*14*
Securities and interest rate futures	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*
Others	*6*	*—*	*(3)*	*(1)*	*—*	*—*	*—*	*2*
Hedging derivatives (Liabilities)	**4**	**—**	**—**	**—**	**—**	**—**	**(4)**	**—**
Swaps	*4*	*—*	*—*	*—*	*—*	*—*	*(4)*	*—*
Financial liabilities designated at fair value through profit or loss	**287**	**2**	**(1)**	**1**	**—**	**—**	**(1)**	**288**
TOTAL LIABILITIES	**646**	**21**	**(13)**	**14**	**—**	**4**	**(190)**	**482**

iv. Recognition of fair value changes

As a general rule, changes in the carrying amount of financial assets and liabilities are recognised in the consolidated income statement. A distinction is made between the changes resulting from the accrual of interest and similar items, (which are recognised under Interest income or Interest expense, as appropriate), and those arising for other reasons, which are recognised at their net amount under 'Gains/losses on financial assets and liabilities'.

Adjustments due to changes in fair value arising from:

- 'Financial assets at fair value with changes in other comprehensive income' are recorded temporarily, in the case of debt instruments in 'Other comprehensive income - Elements that can be reclassified to profit or loss - Financial assets at fair value with changes in other comprehensive income', while in the case of equity instruments are recorded in 'other comprehensive income - Elements that will not be reclassified to line item - Changes in the fair value of equity instruments valued at fair value with changes in other comprehensive income'.

  Exchange differences on debt instruments measured at fair value with changes in other comprehensive income are recognised under 'Exchange Differences, net' of the income statement. Exchange differences on equity instruments, in which the irrevocable option of being measured at fair value with changes in other comprehensive income has been chosen, are recognised in 'Other comprehensive income - Items that will not be reclassified to profit or loss - Changes in the fair value of equity instruments measured at fair value with changes in other comprehensive income'.

- Items charged or credited to 'Items that may be reclassified to profit or loss – Financial assets at fair value through other comprehensive income' and 'Other comprehensive income – Items that may be reclassified to profit or loss – Exchange differences in equity' remain in the Bank´s equity until the asset giving rise to them is impaired or derecognised, at which time they are recognised in the income statement.

- Unrealised gains on Financial assets classified as Non-current assets held for sale because they form part of a disposal group or a discontinued operation are recognised in 'Other comprehensive income under Items that may be reclassified to profit or loss – Non-current assets held for sale'.

v. Hedging transactions

Banco Santander uses financial derivatives for the following purposes: i) to facilitate these instruments to customers who request them in the management of their market and credit risks; ii) to use these derivatives in the management of the risks of the Group entities' own positions and assets and liabilities (hedging derivatives); and iii) to obtain gains from changes in the prices of these derivatives (derivatives).

Financial derivatives that do not qualify for hedge accounting are treated for accounting purposes as trading derivatives.

A derivative qualifies for hedge accounting if all the following conditions are met:

1. The derivative hedges one of the following three types of exposure:

   a. Changes in the fair value of assets and liabilities due to fluctuations, among others, in the interest rate and/or exchange rate to which the position or balance to be hedged is subject (fair value hedge).

   b. Changes in the estimated cash flows arising from financial assets and liabilities, commitments and highly probable forecast transactions (cash flow hedge).

   c. The net investment in a foreign operation (hedge of a net investment in a foreign operation).

2. It is effective in offsetting exposure inherent in the hedged item or position throughout the expected term of the hedge, which means that:

   a. At the date of arrangement the hedge is expected, under normal conditions, to be highly effective (prospective effectiveness).

   b. There is sufficient evidence that the hedge was actually effective during the whole life of the hedged item or position (retrospective effectiveness). To this end, the Bank checks that the results of the hedge were within a range of 80% to 125% of the results of the hedged item.

3. There must be adequate documentation evidencing the specific designation of the financial derivative to hedge certain balances or transactions and how this hedge was expected to be achieved and measured, provided that this is consistent with the Bank's management of own risks.

The changes in value of financial instruments qualifying for hedge accounting are recognised as follows:

a. In fair value hedges, the gains or losses arising on both the hedging instruments and the hedged items attributable to the type of risk being hedged are recognised directly in the income statement.

   In fair value hedges of interest rate risk on a portfolio of financial instruments, the gains or losses that arise on measuring the hedging instruments are recognised directly in income statement, whereas the gains or losses due to changes in the fair value of the hedged amount (attributable to the hedged risk) are recognised in income statement with a balancing entry under Changes in the fair value of hedged items in portfolio hedges of interest rate risk on the asset or liability side of the balance sheet, as appropriate.

b. In cash flow hedges, the effective portion of the change in value of the hedging instrument is recognised temporarily in Other comprehensive income – under Items that may be reclassified to profit or loss – Hedging derivatives – Cash flow hedges (effective portion) until the forecast transactions occur, when it is recognised in the income statement, unless, if the forecast transactions result in the recognition of non-financial assets or liabilities, it is included in the cost of the non-financial asset or liability.

c. In hedges of a net investment in a foreign operation, the gains or losses attributable to the portion of the hedging instruments qualifying as an effective hedge are recognised temporarily in Other comprehensive income under Items that may be reclassified to profit or loss – Hedges of net investments in foreign operations until the gains or losses – on the hedged item are recognised in profit or loss.

d. The ineffective portion of the gains or losses on the hedging instruments of cash flow hedges and hedges of a net investment in a foreign operation is recognised directly under 'Gains/losses on financial assets and liabilities (net)' in the income statement, in Gains or losses from hedge accounting, net.

If a derivative designated as a hedge no longer meets the requirements described above due to expiration, ineffectiveness or for any other reason, the derivative is classified for accounting purposes as a trading derivative.

When fair value hedge accounting is discontinued, the adjustments previously recognised on the hedged item are amortised to profit or loss at the effective interest rate recalculated at the date of hedge discontinuation. The adjustments must be fully amortised at maturity.

When cash flow hedge accounting is discontinued, any cumulative gain or loss on the hedging instrument recognised in equity under other comprehensive income 'Items that may be reclassified to profit or loss' (from the period when the hedge was effective) remains in this equity item until the forecast transaction occurs, at which time it is recognised in profit or loss, unless the transaction is no longer expected to occur, in which case the cumulative gain or loss is recognised immediately in profit or loss.

vi. Derivatives embedded in hybrid financial instruments

Derivatives embedded in other financial instruments or in other host contracts are accounted for separately as derivatives if their risks and characteristics are not closely related to those of the host contracts, provided that the host contracts are not classified as financial assets/liabilities designated at fair value through profit or loss or as 'Financial assets/liabilities held for trading'.

e) Derecognition of financial assets and liabilities

The accounting treatment of transfers of financial assets depends on the extent to which the risks and rewards associated with the transferred assets are transferred to third parties:

1. If the Bank transfers substantially all the risks and rewards to third parties unconditional -sale of financial assets, sale of financial assets under an agreement to repurchase them at their fair value at the date of repurchase, sale of financial assets with a purchased call option or written put option that is deeply out of the money, securitisation of assets in which the transferor does not retain a subordinated debt or grant any credit enhancement to the new holders, and other similar cases-, the transferred financial asset is derecognised and any rights or obligations retained or created in the transfer are recognised simultaneously.

2. If the Bank retains substantially all the risks and rewards associated with the transferred financial asset -sale of financial assets under an agreement to repurchase them at a fixed price or at the sale price plus interest, a securities lending agreement in which the borrower undertakes to return the same or similar assets, and other similar cases-, the transferred financial asset is not derecognised and continues to be measured by the same criteria as those used before the transfer. However, the following items are recognised:

a. An associated financial liability, which is recognised for an amount equal to the consideration received and is subsequently measured at amortised cost, unless it meets the requirements for classification under 'Financial liabilities designated at fair value through profit or loss'.

b. The income from the transferred financial asset not derecognised and any expense incurred on the new financial liability, without offsetting.

3. If the Bank neither transfers nor retains substantially all the risks and rewards associated with the transferred financial asset -sale of financial assets with a purchased call option or written put option that is not deeply in or out of the money, securitisation of assets in which the transferor retains a subordinated debt or other type of credit enhancement for a portion of the transferred asset, and other similar cases- the following distinction is made:

   a. If the transferor does not retain control of the transferred financial asset, the asset is derecognised and any rights or obligations retained or created in the transfer are recognised.

   b. If the transferor retains control of the transferred financial asset, it continues to recognise it for an amount equal to its exposure to changes in value and recognises a financial liability associated with the transferred financial asset. The net carrying amount of the transferred asset and the associated liability is the amortised cost of the rights and obligations retained, if the transferred asset is measured at amortised cost, or the fair value of the rights and obligations retained, if the transferred asset is measured at fair value.Accordingly, financial assets are only derecognised when the rights to the cash flows they generate have expired or when substantially all the inherent risks and rewards have been transferred to third parties. Similarly, financial liabilities are only derecognised when the obligations they generate have been extinguished or when they are acquired with the intention either to cancel them or to resell them.

Regarding contractual modifications of financial assets, the Bank has differentiated them into two main categories in relation to the conditions under which a modification leads to a derecognition or disposal of the financial asset (and the recognition of a new financial asset) and those under which the accounting of the original financial instrument with the modified terms is maintained:

- Contractual modifications for commercial or market reasons, which are generally carried out at the request of the debtor to apply current market conditions to the debt. The new contract is considered a new transaction and, consequently, it is necessary to derecognize the original financial asset and recognize a new financial asset subject to the classification and measurement requirements established by Bank of Spain Circular 4/2017 and subsequent modifications. Also, the new financial asset will be recorded at fair value and, if applicable, the difference between the carrying amount of the asset derecognized and the fair value of the new asset will be recognized in profit or loss.

- Modifications due to refinancing or restructuring, in which the payment conditions are modified to allow a customer that is experiencing financial difficulties (current or foreseeable) to meet its payment obligations and that, if such modification had not been made, it would be reasonably certain that it would not be able to meet such payment obligations. In this case, the modification does not result in the derecognition of the financial asset, but rather the original financial asset is maintained and does not require a new assessment of its classification and measurement. When assessing credit impairment, the current credit risk (considering the modified cash flows) should be compared with the credit risk at initial recognition. Finally, the gross carrying amount of the financial asset (the present value of the renegotiated or modified contractual cash flows that are discounted at the original effective interest rate of the financial asset) should be recalculated, with a gain or loss recognized in profit or loss for the difference.

f) Offsetting of financial instruments

Financial asset and liability balances are offset, i.e. reported in the balance sheet at their net amount, only if Banco Santander currently has a legally enforceable right to off set the recognised amounts and intends to either settle on a net basis, or to realise the asset and settle the liability simultaneously.

On the table below is the detail of financial assets and liabilities that were offset on the balance sheet as of 31 December 2021 and 2020:

EUR million

	2021		
Assets	Gross amount of financial assets	Gross amount of financial assets offset on the balance sheet	Net amount of financial assets presented on the balance sheet
Derivatives	83,426	(39,755)	43,671
Repos	39,517	(11,298)	28,219
Total	**122,943**	**(51,053)**	**71,890**

EUR million

	2020		
Assets	Gross amount of financial assets	Gross amount of financial assets offset on the balance sheet	Net amount of financial assets presented on the balance sheet
Derivatives	114,555	(58,056)	56,499
Repos	39,935	(8,856)	31,079
Total	**154,490**	**(66,912)**	**87,578**

EUR million

	2021		
Liabilities	Gross amount of financial liabilities	Gross amount of financial liabilities offset on the balance sheet	Net amount of financial liabilities presented on the balance sheet
Derivatives	82,503	(39,755)	42,748
Repos	26,036	(11,298)	14,738
Total	**108,539**	**(51,053)**	**57,486**

EUR million

	2020		
Liabilities	Gross amount of financial liabilities	Gross amount of financial liabilities offset on the balance sheet	Net amount of financial liabilities presented on the balance sheet
Derivatives	110,512	(58,056)	52,456
Repos	19,447	(8,856)	10,591
Total	**129,959**	**(66,912)**	**63,047**

Furthermore, most of the derivatives and temporary acquisition of uncompensated assets on the balance sheet are subject to netting and collateral agreements.

At December 31, 2021 the balance sheet amounts EUR 69,151 million on derivatives and temporary acquisition of assets and EUR 54,875 million on derivatives and repos as liabilities that are subject to netting and collateral arrangements (EUR 85,714 million and EUR 61,252 million in 2020, respectively).

g) Impairment of financial assets

i. Definition

Banco Santander associates an impairment in the value to financial assets measured at amortised cost, debt instruments measured at fair value with changes in other comprehensive income, lease receivables and commitments and guarantees granted that are not measured at fair value.

The impairment for expected credit losses is recorded with a charge to the income statement for the period in which the impairment arises. In the event of occurrence, the recoveries of previously recognised impairment losses are recorded in the income statement for the period in which the impairment no longer exists or is reduced.

In the case of purchased or originated credit-impaired assets, the Bank only recognizes at the reporting date the changes in the expected credit losses during the life of the asset since the initial recognition as a credit loss. In the case of assets measured at fair value with changes in other comprehensive income, the changes in the fair value due to expected credit losses are charged in the income statement of the year where the change happened, reflecting the rest of the valuation in other comprehensive income.

As a rule, the expected credit loss is estimated as the difference between the contractual cash flows to be recovered and the expected cash flows discounted using the original effective interest rate. In the case of purchased or originated credit-impaired assets, this difference is discounted using the effective interest rate adjusted by credit rating.

Depending on the classification of financial instruments, which is mentioned in the following sections, the expected credit losses may be along 12 months or during the life of the financial instrument:

- 12-month expected credit losses: arising from the potential default events, as defined in the following sections that are estimated to be likely to occur within the 12 months following the reporting date. These losses will be associated with financial assets classified as 'normal risk' as defined in the following sections.

- Expected credit losses over the life of the financial instrument: arising from the potential default events that are estimated to be likely to occur throughout the life of the financial instruments. These losses are associated with financial assets classified as 'normal risk under watchlist' or 'doubtful risk'.

With the purpose of estimating the expected life of the financial instrument all the contractual terms have been taken into account (e.g. prepayments, duration, purchase options, etc.), being the contractual period (including extension options) the maximum period considered to measure the expected credit losses. In the case of financial instruments with an uncertain maturity period and a component of undrawn commitment (e.g.: credit cards), the expected life is estimated through quantitative analyses to determine the period during which the entity is exposed to credit risk, also considering the effectiveness of management procedures that mitigate such exposure (e.g. the ability to unilaterally cancel such financial instruments, etc.).

The following constitute effective guarantees:

a. Mortgage guarantees on housing as long as they are first duly constituted and registered in favour of the entity. The properties include:

    i. Buildings and building elements, distinguishing among:

        - Houses.
        - Offices, stores and multi-purpose premises.
        - Rest of buildings such as non-multi-purpose premises and hotels.

    ii. Urban and developable ordered land.

    iii. Rest of properties that classify as: buildings and building elements under construction, such as property development in progress and halted development, and the rest of land types, such as rustic lands.

b. Collateral guarantees on financial instruments in the form of cash deposits and debt securities issued by creditworthy issuers.

c. Other types of real guarantees, including properties received in guarantee and second and subsequent mortgages on properties, as long as the entity demonstrates its effectiveness. When assessing the effectiveness of the second and subsequent mortgages on properties the entity will implement particularly restrictive criteria. It will take into account, among others, whether the previous charges are in favour of the entity itself or not and the relationship between the risk guaranteed by them and the property value.

d. Personal guarantees, as well as the incorporation of new owners, covering the entire amount of the financial instruments and implying direct and joint liability to the entity of persons or other entities whose solvency is sufficiently proven to ensure the repayment of the loan on the agreed terms.

The different aspects that the Bank considers for the evaluation of effective guarantees are set out below in relation to the individual analysis.

ii. Financial instruments presentation

For the purposes of estimating the impairment amount, and in accordance with its internal policies, the Bank classifies its financial instruments (financial assets, commitments and guarantees) measured at amortised cost or fair value through other comprehensive income in one of the following categories:

- Normal Risk ('stage 1'): includes all instruments that do not meet the requirements to be classified in the rest of the categories.
- Normal risk under watchlist ('stage 2'): includes all instruments that, without meeting the criteria for classification as doubtful or default risk, have experienced significant increases in credit risk since initial recognition.

In order to determine whether a financial instrument has increased its credit risk since initial recognition and is to be classified in stage 2, the Group and the Bank consider the following criteria:

Quantitative criteria	Changes in the risk of a default occurring through the expected life of the financial instrument are analysed and quantified with respect to its credit level in its initial recognition. With the purpose of determining if such changes are considered as significant, with the consequent classification into stage 2, each Group, and therefore the Bank, unit has defined the quantitative thresholds to consider in each of its portfolios taking into account corporate guidelines ensuring a consistent interpretation in all units. Within the quantitative thresholds, two types are considered: A relative threshold is those that compare current credit quality with credit quality at the time of origination in percentage terms of change. In addition, an absolute threshold compares both references in total terms, calculating the difference between the two. These absolute/relative concepts are used homogeneously (with different values) in all geographies. The use of one type of threshold or another (or both) is determined in accordance with the process described in note 49, below, and is marked by the type of portfolio and characteristics such as the starting point of the average credit quality of the portfolio.
Qualitative criteria	In addition to the quantitative criteria indicated, various indicators are used that are aligned with those used by the Bank in the normal management of credit risk. Irregular positions of more than 30 days and renewals are common criteria applied by the Bank and common to all the Group's units. Also,, each unit can define other qualitative indicators, for each of its portfolios, according to the particularities and normal management practices in line with the policies currently in force (i.e. use of management alerts, etc.). The use of these qualitative criteria is complemented with the use of an expert judgement, under the corresponding governance.

In the case of forbearances, instruments classified as 'normal risk under watchlist' may be generally reclassified to 'normal risk' in the following circumstances: at least two years have elapsed from the date of reclassification to that category or from its forbearance date, the client has paid the accrued principal and interest balance, and the client has no other instruments with more than 30 days past due balances.

- Doubtful Risk ('stage 3'): includes financial instruments, overdue or not, in which, without meeting the circumstances to classify them in the category of default risk, there are reasonable doubts about their total repayment (principal and interests) by the client in the terms contractually agreed. Likewise, off-balance-sheet exposures whose payment is probable and their recovery doubtful are considered in stage 3. Within this category, two situations are differentiated:

  – Doubtful risk for non-performing loans: financial instruments, irrespective of the client and guarantee, with balances more than 90 days past due for principal, interest or expenses contractually agreed.

    This category also includes all loan balances for a client which overdue amount more than 90 days past due is greater than 20% of the loan receivable balance.

    These instruments may be reclassified to other categories if, as a result of the collection of part of the past due balances, the reasons for their classification in this category do not remain and the client does not have balances more than 90 days past due in other loans.

  – Doubtful risk for reasons other than non-performing loans: this category includes doubtful recovery financial instruments that are not more than 90 days past due.

Banco Santander considers that a financial instrument to be doubtful for reasons other than delinquency when one or more combined events have occurred with a negative impact on the estimated future cash flows of the financial instrument. To this end, the following indicators, among others, are considered:

a) Negative net equity or decrease because of losses of the client's net equity by at least 50% during the last financial year.

b) Continued losses or significant decrease in revenue or, in general, in the client's recurring cash flows.

c) Generalised delay in payments or insufficient cash flows to service debts.

d) Significantly inadequate economic or financial structure or inability to obtain additional financing by the client.

e) Existence of an internal or external credit rating showing that the client is in default.

f) Existence of overdue customer commitments with a significant amount to public institutions or employees.

These financial instruments may be reclassified to other categories if, as a result of an individualised study, reasonable doubts do not remain about the total repayment under the contractually agreed terms and the client does not have balances with more than 90 days past due.

In the case of forbearances, instruments classified as doubtful risk may be reclassified to the category of 'normal risk under watchlist' when the following circumstances are present: a minimum period of one year has elapsed from the forbearance date, the client has paid the accrued principal and interest amounts, and the client has no other loan balance with more than 90 days past due.

- Default Risk: includes all financial assets, or part of them, for which, after an individualised analysis, their recovery is considered remote due to a notorious and irrecoverable deterioration of their solvency.

  In any case, except in the case of operations with real guarantees that cover more than 10% of the amount of the operation, in general the Bank considers as remote recovery: the operations of holders that are in the liquidation phase of the insolvency creditors, doubtful operations due to delinquency that have been in this category for more than 4 years and doubtful operations due to delinquency whose part not covered by real guarantees has been maintained with 100% credit risk coverage. for more than two years.

  A financial asset amount is maintained in the balance sheet until they are considered as a "default risk", either all or a part of it, and the write-off is registered against the balance sheet.

  In the case of operations that have only been partially derecognised, for forgiveness reasons or because part of the total balance is considered unrecoverable, the remaining amount shall be fully classified in the category of 'doubtful risk', except where duly justified.

  The classification of a financial asset, or part of it, as a 'default risk' does not involve the disruption of negotiations and legal proceedings to recover the amount.

iii. Impairment valuation assessment

Banco Santander has policies, methods and procedures in place to hedge its credit risk, both due to the insolvency attributable to counterparties and its residence in a specific country.

These policies, methods and procedures are applied in the concession, study and documentation of financial assets, commitments and guarantees, as well as in the identification of their impairment and in the calculation of the amounts needed to cover their credit risk.

The asset impairment model in Bank of Spain Circular 4/2017 applies to financial assets measured at amortised cost, debt instruments at fair value with changes in other comprehensive income, lease receivables and commitments and guarantees granted that are not measured at fair value.

The impairment represents the best estimation of the financial assets expected credit losses at the balance sheet date, assessed both individually and collectively.

- Individually: for the purposes of estimating the provisions for credit risk arising from the insolvency of a financial instrument, the Bank individually assesses impairment by estimating the expected credit losses on those financial instruments that are considered to be significant and with sufficient information to make such an estimate.

  Therefore, this classification mostly includes wholesale banking customers —Corporations, specialised financing— as well as some of the largest companies —Chartered and real estate developers— from retail banking. The determination of the perimeter in which the individualised estimate is applied is detailed in a later section.

  The individually assessed impairment estimate is equal to the difference between the gross carrying amount of the financial instrument and the estimated value of the expected cash flows receivable discounted using the original effective interest rate of the transaction. The estimate of these cash flows takes into account all available information on the financial asset and the effective guarantees associated with that asset. This estimation process is detailed below.

- Collectively: the Bank also assesses impairment by estimating the expected credit losses collectively in cases where they are not assessed on an individual basis. This includes, for example, loans with individuals, sole proprietors or businesses in retail banking subject to a standardised risk management.

  For the purposes of the collective assessment of expected credit losses, the Bank has consistent and reliable internal models. For the development of these models, instruments with similar credit risk characteristics that are indicative of the debtors' capacity to pay are considered.

  The credit risk characteristics used to group the instruments are, among others: type of instrument, debtor's sector of activity, geographical area of activity, type of guarantee, aging of past due balances and any other factor relevant to estimating the future cash flows.

  Banco Santander performs retrospective and monitoring tests to evaluate the reasonableness of the collective estimate.

On the other hand, the methodology required to estimate the expected credit loss due to credit events is based on an unbiased and weighted consideration by the probability of occurrence of a series of scenarios, considering a range of three to five possible future scenarios, depending on the characteristics of each unit, which could have an impact on the collection of contractual cash flows, always taking into account the time value of money, as well as all available and relevant information on past events, current conditions and forecasts of the evolution of macroeconomic scenarios that are shown to be relevant for the estimation of this amount (for example: GDP (Gross Domestic Product), housing price, unemployment rate, etc.).

The estimation of expected losses requires expert judgment and the support of historical, current and future information. The probability of loss is measured considering past events, the present situation and future trends of macroeconomic scenarios.

Banco Santander uses forward-looking information in both internal risk management and prudential regulation processes, so that for the calculation of the impairment loss allowance, various scenarios are incorporated that take advantage of the experience with such information, thus ensuring consistency in obtaining the expected loss.

The challenge of the exercise has focused on the uncertainty of the economic outlook caused by the covid-19 crisis, coupled with a complex environment for value creation.

Banco Santander has internally ensured the criteria to be followed for guarantees received from government bodies, both through credit lines and other public guarantees, so that when they are adequately reflected in each of the contracts, they are recognised as mitigating factors of the potential expected losses, and therefore of the provisions to be recognised, based on the provisions of the applicable standard. Furthermore, where applicable, these guarantees are appropriately reflected in the mitigation of the significant increase in risk, considering their nature as personal guarantees.

For the estimation of the parameters used in the estimation of impairment provisions -EAD (exposure at default), PD (probability of default), LGD (loss given default)-, the Bank based their experience in developing internal models for the estimation of parameters both in the regulatory area and for management purposes, adapting the development of the impairment provision models under Bank of Spain Circular 4/2017.

- Exposure at default: is the amount of estimated risk incurred at the time of the counterparty's analysis.
- Probability of default: is the estimated probability that the counterparty will default on its principal and/or interest payment obligations.
- Loss given default: is the estimate of the severity of the loss incurred in the event of non-compliance. It depends mainly on the updating of the guarantees associated with the operation and the future cash flows that are expected to be recovered.

In any case, when estimating the flows expected to be recovered, portfolio sales are included. It should be noted that due to the Bank's recovery policy and the experience observed in relation to the prices of past sales of assets classified as stage 3 and/or default risk, there is no substantial divergence between the flows obtained from recoveries after performing recovery management of the assets with those obtained from the sale of portfolios of assets discounting structural expenses and other costs incurred.

The definition of default implemented by the Bank for the purpose of calculating the impairment provision models is based on the definition in Article 178 of Regulation 575/2013 of the European Union (CRR), which is fully aligned with the requirements of Bank of Spain Circular 4/2017,which considers that a 'default' exists in relation to a specific customer/contract when at least one of the following circumstances exists: the entity considers that there are reasonable doubts about the payment of all its credit obligations or that the customer/contract is in an irregular situation for more than 90 days with respect to any significant credit obligation.

Grupo Santander will partially and voluntarily align during 2022 the accounting definition of Stage 3, as well as for the calculation of impairment provision models, to the New Definition of Default, incorporating the criteria defined by the EBA in its implementation guide of the definition of default, capturing the economic deterioration of the operations (days in default - on a daily basis - and materiality thresholds - minimum amount in arrears). The alignment of criteria will be done taking into account the criteria of IFRS 9 as well as the accounting principles of unbiased presentation of financial information. The expected increase in the default rate is estimated at around 24 basis points, with no material impact on the provision figures for credit risk.

In addition, the Bank considers the risk generated in all cross-border transactions due to circumstances other than the usual commercial risk of insolvency (sovereign risk, transfer risk or risks arising from international financial activity, such as wars, natural catastrophes, balance of payments crisis, etc.).

Bank of Spain Circular 4/2017 includes a series of practical solutions that can be implemented by entities, with the aim of facilitating its implementation. However, in order to achieve a complete and high-level implementation of the standard, and following the best practices of the industry, the Bank does not apply these practical solutions in a generalised manner:

- Rebuttable presumption that the credit risk has increased significantly, when payments are more than 30 days past due: this threshold is used as an additional, but not primary, indicator of significant risk increase. Additionally, there may be cases in Grupo Santander where its use has been rebutted as a result of studies that show a low correlation of the significant risk increase with this past due threshold. The volume rebutted does not exceed 0.1% of the Group's total exposure.
- Assets with low credit risk at the reporting date: the Bank assesses the existence of significant risk increase in all its financial instruments.

This information is provided in more detail in note 49 b.

iv. Detail of individual estimate of impairment

For the individual estimate of the assessment for impairment of the financial asset, the Bank has a specific methodology to estimate the value of the cash flows expected to be collected:

- Recovery through the debtor's ordinary activities (going approach).
- Recovery through the execution and sale of the collateral guaranteeing the operations (gone approach).

Gone approach:

a. Evaluation of the effectiveness of guarantees

Banco Santander the effectiveness of all the guarantees associated considering the following:

- The time required to execute these guarantees.
- Banco Santander's ability to enforce or assert these guarantees in its favour.
- The existence of limitations imposed by each local unit´s regulation on the foreclosure of collateral.

Under no circumstances the Bank considers that a guarantee is effective if its effectiveness depends substantially on the solvency of the debtor, as could be the case:

- Promises of shares or other securities of the debtor himself when their valuation may be significantly affected by a debtor's default.
- Personal cross-collateralisation: when the guarantor of a transaction is, at the same time, guaranteed by the holder of that transaction.

On the basis of the foregoing, the following types of guarantees are considered to be effective:

- Mortgage guarantees on properties, which are first charge, duly constituted and registered. Real estate includes:
  - Buildings and finished building elements.
  - Urban and developable land in order.
  - Other real estate, including buildings under construction, developments in progress or at a standstill, and other land, such as rural properties.
- Pledges on financial instruments such as cash deposits, debt securities of reputable issuers or equity instruments.
- Other types of security interests, including movable property received as security and second and subsequent mortgages on real state , provided that they are proven to be effective under particularly restrictive criteria.
- Personal guarantees, including new holders, covering the entire amount and involving direct and joint liability to the entity, from persons or entities whose equity solvency ensures repayment of the transaction under the agreed terms.

b. Valuation of guarantees

Banco Santander assesses the guarantees on the basis of their nature in accordance with the following:

- Mortgage guarantees on properties associated with financial instruments, using a complete individual valuations carried out by independent valuation experts and under generally accepted valuation standards. If this is not possible, alternative valuations are used with duly documented and approved internal valuation models.
- Personal guarantees are valued individually on the basis of the guarantor´s updated information.
- The rest of the guarantees are valued based on current market values.

c. Adjustments to the value of guarantees and estimation of future cash flow inflows and outflows.

Banco Santander applies a series of adjustments to the value of the guarantees in order to improve the reference values:

- Adjustments based on the historical sales experience for certain types of assets.
- Individual expert adjustments based on additional management information.

Likewise, to adjust the value of the guarantees, the time value of money is taken into account based on the historical experience, estimating:

- Period of adjudication.
- Estimated time of sale of the asset.

In addition, the Bank takes into account all those cash inflows and outflows linked to that guarantee until it is sold:

- Possible future income commitments in favour of the borrower which will available after the asset is awarded.
- Estimated foreclosure costs.
- Asset maintenance costs, taxes and community costs.
- Estimated marketing or sales costs.

Finally, since it is considered that the guarantee will be sold in the future, the Bank applies an additional adjustment ('index forward') in order to adjust the value of the guarantees to future valuation expectations.

v. Impairment individual assessment scope

Banco Santander determines the perimeter over which it makes an estimate of the assessment for impairment on an individual basis based on a relevance threshold and the stage in which the operations are located. In general, the Bank applies the individualised calculation of expected losses to the significant exposures classified in stage 3, although Banco Santander, S.A. has also extended its analyses to some of the exposures classified in stage 2.

It should be noted that, in any case and irrespective of the stage in which their transactions are carried out, for customers who do not receive standardised treatment, a relational risk management model is applied, with individualised treatment and monitoring by the assigned risk analyst. In addition to wholesale customers (Santander Corporate & Investment Banking or SCIB) and large companies, this relational management model also includes other segments of smaller companies for which there is information and capacity for more personalised and expert analysis and monitoring. As indicated in the Bank's wholesale credit model, the individual treatment of the client facilitates the continuous updating of information. The risk assumed must be followed and monitored throughout its life cycle, enabling anticipation and action to be taken in the event of possible impairments. In this way, the customer's credit quality is analysed individually, taking into account specific aspects such as his competitive

position, financial performance, management, etc. In the wholesale risk management model, every customer with a credit risk position is assigned a rating, which has an associated probability of customer default. Thus, individual analysis of the debtor triggers a specific rating for each customer, which determines the appropriate parameters for calculating the expected loss, so that it is the rating itself that initially modulates the necessary coverage, adjusting the severity of the possible loss to the guarantees and other mitigating factors that the customer may have available. In addition, if as a result of this individualised monitoring of the customer, the analyst finally considers that his coverage is not sufficient, he has the necessary mechanisms to adjust it under his expert judgement, always under the appropriate governance.

h) Repurchase agreements and reverse repurchase agreements

Purchases (sales) of financial instruments under a non-optional resale (repurchase) agreement at a fixed price (repos) are recognised in the balance sheet as financing granted (received), based on the nature of the debtor (creditor), under 'Loans and advances with central banks', 'Loans and advances to credit institutions' or 'Loans and advances to customers' (Deposits from central banks, Deposits from credit institutions or Customer deposits).

Differences between the purchase and sale prices are recognised as interest over the contract term.

i) 'Non-current assets' and 'liabilities associated with non-current assets held for sale'

'Non-current assets held for sale' includes the carrying amount of individual items, disposal groups or items forming part of a business unit earmarked for disposal (discontinued operations), whose sale in their present condition is highly likely to be completed within one year from the reporting date. Therefore, the recovery of the carrying amount of these items -which can be of a financial nature or otherwise- will foreseeably be effected through the proceeds from their disposal.

Specifically, property or other non-current assets received by Banco Santander as total or partial settlement of their debtors' payment obligations to them are deemed to be 'Non-current assets held for sale', unless the Bank has decided to make continuing use of these assets. In this connection, for the purpose of its consideration in the initial recognition of these assets, the Bank obtains, at the foreclosure date, the fair value of the related asset through a request for appraisal by external appraisal agencies.

Banco Santander has in place a corporate policy that ensures the professional competence and the independence and objectivity of the external appraisal agencies, in accordance with the regulations, which require appraisal agencies to meet independence, neutrality and credibility requirements, so that the use of their estimates does not reduce the reliability of its valuations. This policy establishes that all the appraisal companies and agencies with which the Bank works in Spain should be registered in the Official Register of the Bank of Spain and that the appraisals performed by them should follow the methodology established in Ministry of Economy Order ECO/805/2003, of 27 March. The main appraisal companies and agencies with whichthe Bank worked in Spain in 2021 are as follows: Gloval Valuation, S.A.U., Tinsa Tasaciones Inmobiliarias, S.A.U., Gesvalt Sociedad de Tasacion, S.A. and Sociedad de tasacion, S.A.

'Liabilities associated with non-current assets held for sale' includes the balances payable arising from the assets held for sale or disposal groups and from discontinued operations.

'Non-current assets and disposal groups of items that have been classified as held for sale' are generally recognised at the date of their allocation to this category and are subsequently valued at the lower of their fair value less costs to sell or its book value. 'Non-current assets and disposal groups of items that are classified as held for sale' are not amortised as long as they remain in this category.

At 31 December 2021 the fair value less costs to sell of non-current assets held for sale exceeded their carrying amount by EUR 229 million (EUR 198 million in 2020); however, in accordance with the applicable legislation, this unrealised gain could not be recognised.

The valuation of the portfolio of non-current assets held for sale has been made in compliance with the requirements of Bank of Spain Circular 4/2017 in relation to the estimate of the fair value of tangible assets and the value-in-use of financial assets.

The value of the portfolio is determined as the sum of the values of the individual elements that compose the portfolio, without considering any total or batch grouping in order to correct the individual values.

Banco Santander, in compliance with Bank of Spain Circular 4/2017, and subsequent amendments, on public and private financial reporting standards and financial statement models, has developed a methodology that enables it to estimate the fair value and costs of sale of assets foreclosed or received in payment of debts. This methodology is based on the classification of the portfolio of foreclosed assets into different segments. Segmentation enables the intrinsic characteristics of Banco Santander's portfolio of foreclosed assets to be differentiated, so that assets with homogeneous characteristics are grouped by segment.

Thus, the portfolio is segmented into (i) finished assets of a residential and tertiary nature, (ii) developments in progress and (iii) land[1].

In determining the critical segments in the overall portfolio, assets are classified on the basis of the nature of the asset and its stage of development. This segmentation is made in order to seek the liquidation of the asset (which should be carried out in the shortest possible time).

When making decisions, the situation and/or characteristics of the asset are fundamentally taken into account, as well as the evaluation of all the determining factors that favour the recovery of the debt. For them, the following aspects are analyzed, among others:

- The time that has elapsed since the adjudication.
- The transferability and contingencies of the foreclosed asset.
- The economic viability from the real estate point of view with the necessary investment estimate.
- The expenses that may arise from the marketing process.
- The offers received, as well as the difficulties in finding buyers.

In the case of real estate assets foreclosed in Spain, which represent 91% of the Group's total non-current assets held for sale, the valuation of the portfolio is carried out by applying the following models:

- Market Value Model used in the valuation of finished properties of a residential nature (mainly homes and car parks) and properties of a tertiary nature (offices, commercial premises and multipurpose buildings). For the valuation of finished assets whose availability for sale is immediate, a market sale value provided by a third party external to Banco Santander is considered, calculated under the AVM methodology by the comparable properties method adjusted by our experience in selling similar assets, given the term, price, volume, trend in the value of these assets and the time elapsing until their sale and discounting the estimated costs of sale.

  The market value is determined on the basis of the definition established by the International Valuation Standards drawn up by the IVSC (International Valuation Standards Council), understood as the estimated amount for which an asset or a liability should be exchanged on the measurement date between a willing buyer and a willing seller, in an arm's length transaction, after appropriate marketing, and in which the parties have acted with sufficient information, prudently and without coercion.

  The current market value of the properties is estimated on the basis of automated valuations obtained by taking comparable properties as a reference; simulating the procedure carried out by an appraiser in a physical valuation according to Order ECO 805/2003: selection of properties and obtaining the unit value by applying homogenisation adjustments. The selection of the properties is carried out by location within the same real estate cluster and according to the characteristics of the properties, filtering by type[2], surface area range and age. The model enables a distinction to be made within the municipality under study as to which areas are similar and comparable and therefore have a similar value in the property market, discriminating between which properties are good comparators and which are not.

  Adjustments to homogenize the properties are made according to: (i) the age of the property according to the age of the property to be valued, (ii) the deviation of the built area from the common area with respect to the property to be valued and (iii) by age of the date of capture of the property according to the price evolution index of the real estate market.

  In addition, for individually significant assets, complete individual valuations are carried out, including a visit to the asset, market analysis (data relating to supply, demand, current sale or rental price ranges and supply-demand and revaluation expectations) and an estimate of expected income and costs.

  For this segmentation of assets, when they are completed, the real costs are known and the actual expenses for the marketing and sale of the asset must be taken into account. Therefore, Banco Santander uses the actual costs in its calculation engine or, failing that, those estimated on the basis of its observed experience.

- Market Value Model according to Evolution of Market Values used to update the valuation of developments in progress. The valuation model estimates the current market value of the properties based on complete individual valuations by third parties, calculated from the values of the feasibility studies and development costs of the promotion, as well as the selling costs, distinguishing by location, size and type of property. The inputs used in the valuation model for residential assets under construction are actual revenues and costs.

[1] The assets in a situation of 'stopped development' are included under 'land'

[2] Assets qualified as protected housing are taken into account. The maximum legal value of these assets is determined by the VPO module, obtained from the result of multiplying the State Basic Module (MBE) by a zone coefficient determined by each autonomous community. To carry out the valuation of a protected property, the useful surface area is used in accordance with current regulations.

For this purpose, in order to calculate the investment flows, Banco Santander considers, on the basis of the feasibility studies, the expenditure required for construction, the professional fees relating to the project and to project management, the premiums for mandatory building insurance, the developer's administrative expenses, licenses, taxes on new construction and fees, and urban development charges.

With respect to the calculation of income flows, Banco Santander takes into account the square metres built, the number of homes under construction and the estimated selling price over 1.5 years.

The market value will be the result of the difference between the income flows and the investment flows estimated at each moment.

- Land Valuation model. The methodology followed by the Bank regarding land valuation consists of updating the individual reference valuation of each of the land on an annual basis, through updated valuation valuations carried out by independent professionals and following the methodology established in the OM (Ministerial Order) ECO/805/2003, of 27 March, whose main verifications in the case of land valuation, regardless of the degree of urbanisation of the land, correspond to:

  – Visual verification of the assessed property.

  – Registry description.

  – Urban planning.

  – Visible easements.

  – Visible state of occupation, possession, use and exploitation.

  – Protection regime.

  – Apparent state of preservation.

  – Correspondence with cadastral property.

  – Existence of expropriation procedure, expropriation plan or project, administrative resolution or file that may lead to expropriation.

  – Expiry of the urbanization or building deadlines.

  – Existence of a procedure for failure to comply with obligations.

  – Verification of surfaces.

  For the purposes of valuation, the land will be classified in the following levels:

  – Level I: It will include all the lands that do not belong to level II.

  – Level II: It shall include land classified as undeveloped where building is not allowed for uses other than agriculture, forestry, livestock or linked to an economic exploitation permitted by the regulations in force. Also included are lands classified as developable that are not included in a development area of urban planning or that, in such an area, the conditions for its development have not been defined.

In those cases where Banco Santander does not have an updated reference value through an ECO valuation for the current year, we use as a reference value the latest available ECO valuation reduced or corrected by the average annual coverage ratio of the land on which we have obtained an updated reference value, through an ECO valuation.

Banco Santander applies a discount to the aforementioned reference values that takes into account both the discount on the reference value in the sales process and the estimated costs of marketing or selling the land:

Discount on reference value = % discount on sales + % marketing costs being:

- % discount on Sales: = 100 - (sales price / updated appraisal value).
- marketing costs: calculated on the basis of our historical experience in sales and in accordance with the marketing management fees negotiated with our suppliers of this type of service.

In this way Banco Santander obtains the corrected market value, an amount that we compare with the net cost of each piece of land to determine its correct valuation and conclude with our valuation process.

In addition, in relation to the previously mentioned valuations, less costs to sell, are contrasted with the sales experience of each type of asset in order to confirm that there is no significant difference between the sale price and the valuation.

Impairment losses on an asset or disposal group arising from a reduction in its carrying amount to its fair value (less costs to sell) are recognised under 'Gains or (losses) on non-current assets held for sale not classified as discontinued operations' in the income statement.

The gains on a non-current asset held for sale resulting from subsequent increases in fair value (less costs to sell) increase its carrying amount and are recognised in the consolidated income statement up to an amount equal to the impairment losses previously recognised.

j) Insurance contracts linked to pensions

The item 'Insurance contracts linked to pensions', included within the heading 'Other assets' (see note 2.n), will include the fair value of the insurance policies to cover pension commitments that must be recorded as a Separate asset for not meeting the requirements established in regulation 35 of Bank of Spain Circular 4/2017 and subsequent modifications, to be considered plan assets.

k) Tangible assets

Tangible assets includes the amount of buildings, land, furniture, vehicles, computer hardware and other fixtures owned by Banco Santander or acquired under finance leases. Tangible assets are classified by use as follows:

i. Property, plant and equipment for own use

Property, plant and equipment for own use – including tangible assets received by the Bank in full or partial satisfaction of financial assets representing receivables from third parties which are intended to be held for continuing use and tangible assets acquired under finance leases– are presented at acquisition cost, less the related accumulated depreciation and any estimated impairment losses (carrying amount higher than recoverable amount).

Depreciation is calculated, using the straight-line method, on the basis of the acquisition cost of the assets less their residual value. The land on which the buildings and other structures stand has an indefinite life and, therefore, is not depreciated.

The period tangible asset depreciation charge is recognised in the income statement and is calculated using the following depreciation rates (based on the average years of estimated useful life of the various assets):

	Average annual rate
Buildings for own use	2.0 %
Furniture	10.0 %
Fixtures	5.0 %
IT equipment	25.0 %
Vehicles	16.0 %
Other	5.0 %
Lease use rights	Less than the lease term or the useful life of the underlying asset

At the end of each reporting period, Banco Santander assesses whether there is any indication that the carrying amount of an asset exceeds its recoverable amount, in which case they write down the carrying amount of the asset to its recoverable amount and adjust future depreciation charges in proportion to its adjusted carrying amount and to its new remaining useful life, if the useful life needs to be re-estimated.

Similarly, if there is an indication of a recovery in the value of a tangible asset, Banco Santander recognises the reversal of the impairment loss recognised in prior periods and adjust the future depreciation charges accordingly. In no circumstances may the reversal of an impairment loss on an asset raise its carrying amount above that which it would have if no impairment losses had been recognised in prior years.

The estimated useful lives of the items of property, plant and equipment for own use are reviewed at least at the end of the reporting period with a view to detecting significant changes therein. If changes are detected, the useful lives of the assets are adjusted by correcting the depreciation charge to be recognised in the income statement in future years on the basis of the new useful lives.

Upkeep and maintenance expenses relating to property, plant and equipment for own use are recognised as an expense in the period in which they are incurred, since they do not increase the useful lives of the assets.

ii. Investment property

'Investment property' reflects the net values of the land, buildings and other structures held either to earn rentals or for obtaining profits by sales due to future increase in market prices.

The criteria used to recognise the acquisition cost of investment property, to calculate its depreciation and its estimated useful life and to recognise any impairment losses thereon are consistent with those described in relation to property, plant and equipment for own use.

In order to evaluate the possible impairment Banco Santander determines periodically the fair value of its investment property so that, at the end of the reporting period, the fair value reflects the market conditions of the investment property at that date. This fair value is determined annually, taking as benchmarks the valuations performed by independent experts. The methodology used to determine the fair value of investment property is selected based on the status of the asset in question; thus, for properties earmarked for lease, the valuations are performed using the sales comparison approach, whereas for leased properties the valuations are made primarily using the income capitalisation approach and, exceptionally, the sales comparison approach.

In the sales comparison approach, the property market segment for comparable properties is analysed, inter alia, and, based on specific information on actual transactions and firm offers, current prices are obtained for cash sales of those properties. The valuations performed using this approach are considered as level 2 valuations.

In the income capitalisation approach, the cash flows estimated to be obtained over the useful life of the property are discounted taking into account factors that may influence the amount and actual obtainment thereof, such as: (i) the payments that are normally received on comparable properties; (ii) current and probable future occupancy; (iii) the current or foreseeable default rate on payments. The valuations performed using this approach are considered as Level 3 valuations, since significant unobservable inputs are used, such as current and probable future occupancy and/or the current or foreseeable default rate on payments.

iii. Assets leased out under an operating lease

'Property, plant and equipment' - Leased out under an operating lease reflects the amount of the tangible assets, other than land and buildings, leased out by the Bank under an operating lease.

The criteria used to recognise the acquisition cost of assets leased out under operating leases, to calculate their depreciation and their respective estimated useful lives and to recognise the impairment losses thereon are consistent with those described in relation to property, plant and equipment for own use.

l) Accounting for leases

The main aspects contained in the regulation Bank of Spain Circular 2/2018 adopted by the Bank are included below:

When the Bank acts as lessee, it recognises a right-of-use asset representing its right to use the underlying leased asset with a corresponding lease liability on the date on which the leased asset is available for use by the Bank. Each lease payment is allocated between the liability and the finance charge. The finance charge is allocated to the income statement during the term of the lease in such a way as to produce a constant periodic interest rate on the remaining balance of the liability for each year. The right-of-use asset is depreciated over the useful life of the asset or the lease term, whichever is shorter, on a straight-line basis. If the Bank is reasonably certain to exercise a purchase option, the right-of-use asset is amortized over the useful life of the underlying asset.

Assets and liabilities arising from a lease are initially measured at present value. Lease liabilities include the net present value of the following lease payments:

- Fixed payments (including inflation-linked payments), less any lease incentive receivable.
- Variable lease payments that depend on an index or rate.
- The amounts expected to be paid by the lessee under residual value guarantees.
- The exercise price of a purchase option if the lessee is reasonably certain that it will exercise that option.
- Lease termination penalty payments, if the term of the lease reflects the lessee's exercise of that option.

Lease payments are discounted using the interest rate implicit in the lease. Given in certain situations this interest rate cannot be obtained, the discount rate used in this cases, is the lessee's incremental borrowing rate at the related date. For this purpose, the entity has calculated this incremental borrowing rate taking as reference the listed debt instruments issued by the Bank; in this regard, the Bank has estimated different interest rate curves depending on the currency and economic environment in which the contracts are located.

In order to construct the incremental borrowing rate, a methodology has been developed at the corporate level. This methodology is based on the need for each entity to consider its economic and financial situation, for which the following factors must be considered:

- Economic and political situation (country risk).
- Credit risk of the company.
- Monetary policy.
- Volume and seniority of the company's debt instrument issues.

The incremental borrowing rate is defined as the interest rate that a lessee would have to pay for borrowing, given a similar period to the duration of the lease and with similar security, the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment. The Group entities have a wide stock and variety of financing instruments issued in different currencies to that of the euro (pound, dollar, etc.) that provide sufficient information to be able to determine an "all in rate" (reference rate plus adjustment for credit spread at different terms and in different currencies). In circumstances, where the Bank, has its own financing this has been used as the starting point for determining the incremental borrowing rate.

Right-of-use assets are valued at cost which includes the following:

- The amount of the initial measurement of the lease liability.
- Any lease payment made at or before the commencement date less any lease incentive received.
- Any initial direct costs.
- Restoration costs.

Banco Santander recognises the payments associated with short-term leases and leases of low-value assets on a straight-line basis as an expense in the income statement. Short-term leases are leases with a lease term less than or equal to 12 months (a lease that contains a purchase option is not a short term lease).

m) Intangible assets

Intangible assets are identifiable non-monetary assets (separable from other assets) without physical substance which arise as a result of a legal transaction or which are developed internally by the Bank.

Only assets whose cost can be estimated reliably and from which the Bank considers it probable that future economic benefits will be generated are recognised.

Intangible assets are recognised initially at acquisition or production cost and are subsequently measured at cost less any accumulated amortisation and any accumulated impairment losses.

i. Goodwill

Any excess of the cost of the investments in the subsidiaries, joint ventures and associates accounted for using the equity method over the corresponding underlying carrying amounts acquired, adjusted at the date of first-time consolidation, is allocated as follows:

- If it is attributable to specific assets and liabilities of the companies acquired, by increasing the value of the assets (or reducing the value of the liabilities) whose fair values were higher (lower) than the carrying amounts at which they had been recognised in the acquired entities' balance sheets.
- If it is attributable to specific intangible assets, by recognising it explicitly in the balance sheet provided that the fair value of these assets within twelve months following the date of acquisition can be measured reliably.
- The remaining amount is recognised as goodwill, which is allocated to one or more cash-generating units (CGUs) (a cash-generating unit is the smallest identifiable group of assets that, as a result of continuing operation, generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets). The cash-generating units represent the Banco Santander's geographical and/or business segments.

Goodwill (only recognised when it has been acquired by consideration) represents, therefore, a payment made by the acquirer in anticipation of future economic benefits from assets of the acquired entity that are not capable of being individually identified and separately recognised.

Goodwill, in accordance with Bank of Spain Circular 4/2017, is to be amortized over a 10-year period unless otherwise stated. The debits to the income statements for the amortisation of these assets are recorded under the section 'Amortisation' in the income statement.

At the end of each annual reporting period or whenever there is any indication of impairment goodwill is reviewed for impairment (i.e. a reduction in its recoverable amount to below its carrying amount) and, if there is any impairment, the goodwill is written down with a charge to 'Impairment or reversal of impairment on non-financial assets, net - Intangible assets' in the income statement.

An impairment loss recognised for goodwill is not reversed in a subsequent period.

In the event of sale or departure of an activity that is part of a CGU, the part of the goodwill that can be assigned to said activity would be written-off, taking as a reference the relative value of the same over the total of the CGU at the time of sale or abandonment. If applicable, the distribution by currency of the remaining goodwill will be performed based on the relative values of the remaining activities.

ii. Other intangible assets

Other intangible assets includes the amount of identifiable intangible assets, such as purchased customer lists and computer software.

In accordance with Rule Twenty Eight of Bank of Spain Circular 4/2017, for the financial statements (individual and consolidated) not subject to the framework of International Financial Reporting Standards, intangible assets will be considered assets with a limited useful life.

An intangible assets useful life may not exceed the period during which the entity is entitled to use the asset. If the right of use is for a limited period that can be renewed, the useful life will include the renewal period only when there is evidence that the renewal will be carried out without significant cost.

When the useful life of assets cannot be estimated reliably, they will be amortized over a period of ten years. In the absence of evidence to the contrary, the useful life of goodwill, if applicable, shall also be ten years.

Intangible assets shall be amortized in accordance with the criteria established for the tangible assets (a maximum period of 10 years). Banco Santander reviews, at least at the end of each year, the amortisation period and the amortisation method of each of its intangible assets and, if it considers that they are not appropriate, the impact will be treated as a change in its accounting estimates.

The intangible asset amortisation charge is recognised under 'Depreciation and amortisation' in the income statement.

In both cases, Banco Santander recognises any impairment loss on the carrying amount of these assets with a charge to 'Impairment or reversal of impairment on non-financial assets, net - Intangible assets in the income statement.

The criteria used to recognise the impairment losses on these assets and, where applicable, the reversal of impairment losses recognised in prior years are similar to those used for tangible assets (see note 2.k).

Internally developed computer software

Internally developed computer software is recognised as an intangible asset if, among other requisites (basically the Bank's ability to use or sell it), it can be identified and its ability to generate future economic benefits can be demonstrated.

Expenditure on research activities is recognised as an expense in the year in which it is incurred and cannot be subsequently capitalised into the carrying amount of the intangible asset.

n) Other assets

'Other assets' in the balance sheet includes the amount of assets not recorded in other items, the breakdown being as follows:

- Inventories: this item includes the amount of assets, other than financial instruments, that are held for sale in the ordinary course of business, that are in the process of production, construction or development for such purpose, or that are to be consumed in the production process or in the provision of services. Inventories include land and other property held for sale in the property development business.

  Inventories are measured at the lower of cost and net realisable value, which is the estimated selling price of the inventories in the ordinary course of business, less the estimated costs of completion and the estimated costs required to make the sale.

  Any write-downs of inventories -such as those due to damage, obsolescence or reduction of selling price- to net realisable value and other impairment losses are recognised as expenses for the year in which the impairment or loss occurs. Subsequent reversals are recognised in the income statement for the year in which they occur.

  The carrying amount of inventories is derecognised and recognised as an expense in the period in which the revenue from their sale is recognised.

- Other: this item includes the balance of all prepayments and accrued income (excluding accrued interest, fees and commissions), the net amount of the difference between pension plan obligations and the value of the plan assets with a balance in the entity's favour, when this net amount is to be reported in the balance sheet, and the amount of any other assets not included in other items.

o) Other liabilities

'Other liabilities' includes the balance of all accrued expenses and deferred income, excluding accrued interest, and the amount of any other liabilities not included in other categories.

p) Provisions and contingent assets and liabilities

When preparing the financial statements of the Bank, Banco Santander's directors made a distinction between:

- Provisions: credit balances covering present obligations at the reporting date arising from past events which could give rise to a loss for the Banco Santander, which is considered to be likely to occur and certain as to its nature but uncertain as to its amount and/or timing.

- Contingent liabilities: possible obligations that arise from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more future events not wholly within the control of the Bank. They include the present obligations of the Bank when it is not probable that an outflow of resources embodying economic benefits will be required to settle them. Banco Santander does not recognise the contingent liability. The Bank will disclose a contingent liability, unless the possibility of an outflow of resources embodying economic benefits is remote.

- Contingent assets: possible assets that arise from past events and whose existence is conditional on, and will be confirmed only by, the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Bank. Contingent assets are not recognised in the balance sheet or in the income statement, but rather are disclosed in the notes, provided that it is probable that these assets will give rise to an increase in resources embodying economic benefits.

Banco Santander`s financial statements include all the material provisions with respect to which it is considered that it is more likely than not the obligation will have to be settled. In accordance with accounting standards, contingent liabilities must not be recognised in the consolidated financial statements, but must rather be disclosed in the Notes.

Provisions (which are quantified on the basis of the best information available on the consequences of the event giving rise to them and are reviewed and adjusted at the end of each year) are used to cater for the specific obligations for which they were originally recognised. Provisions are fully or partially reversed when such obligations cease to exist or are reduced.

Provisions are classified according to the obligations covered as follows (see note 23):

- Provision for pensions and similar obligations: includes the amount of all the provisions made to cover post-employment benefits, including obligations to pre-retirees and similar obligations.
- Provisions for contingent liabilities and commitments: include the amount of the provisions made to cover contingent liabilities -defined as those transactions in which the Bank guarantees the obligations of a third party, arising as a result of financial guarantees granted or contracts of another kind- and contingent commitments -defined as irrevocable commitments that may give rise to the recognition of financial assets.
- Provisions for taxes and other legal contingencies and Other provisions: include the amount of the provisions recognised to cover tax and legal contingencies and litigation and the other provisions recognised by Banco Santander. Other provisions includes, inter alia, any provisions for restructuring costs and environmental measures.

q) Court proceedings and/or claims in process

At the end of 2021 certain court proceedings and claims were in process against Banco Santander arising from the ordinary course of their operations (see note 23).

r) Own equity instruments

Own equity instruments are those meeting both of the following conditions:

- The instruments do not include any contractual obligation for the issuer (i) to deliver cash or another financial asset to a third party; or (ii) to exchange financial assets or financial liabilities with a third party under conditions that are potentially unfavourable to the issuer.
- The instruments will or may be settled in the issuer's own equity instruments and are: (i) a non-derivative that includes no contractual obligation for the issuer to deliver a variable number of its own equity instruments; or (ii) a derivative that will be settled by the issuer through the exchange of a fixed amount of cash or another financial asset for a fixed number of its own equity instruments.

Transactions involving own equity instruments, including their issuance and cancellation, are charged directly to equity.

Changes in the value of instruments classified as own equity instruments are not recognised in the financial statements. Consideration received or paid in exchange for such instruments, including the coupons on preference shares contingently convertible into ordinary shares and the coupons associated with CCPP, is directly added to or deducted from equity.

s) Equity-instrument-based employee remuneration

Own equity instruments delivered to employees in consideration for their services, if the instruments are delivered once the specific period of service has ended, are recognised as an expense for services (with the corresponding increase in equity) as the services are rendered by employees during the service period. At the grant date the services received (and the related increase in equity) are measured at the fair value of the equity instruments granted. If the equity instruments granted are vested immediately Banco Santander recognises in full, at the grant date, the expense for the services received.

When the requirements stipulated in the remuneration agreement include external market conditions (such as equity instruments reaching a certain quoted price), the amount ultimately to be recognised in equity will depend on the other conditions being met by the employees (normally length of service requirements), irrespective of whether the market conditions are satisfied. If the conditions of the agreement are met but the external market conditions are not satisfied, the amounts previously recognised in equity are not reversed, even if the employees do not exercise their right to receive the equity instruments.

t) Recognition of income and expenses

The most significant criteria used by Banco Santander to recognise its income and expenses are summarised as follows:

i. Interest income, interest expenses and similar items

Interest income, interest expenses and similar items are generally recognised on an accrual basis using the effective interest method. Dividends received from other companies are recognised as income when the Banco Santander right to receive them arises.

ii. Commissions, fees and similar items

Fee and commission income and expenses are recognised in the income statement using criteria that vary according to their nature. The main criteria are as follows:

- Fee and commission income and expenses relating to financial assets and financial liabilities measured at fair value through profit or loss are recognised when paid.
- Those arising from transactions or services that are performed over a period of time are recognised over the life of these transactions or services.

- Those relating to services provided in a single act are recognised when the single act is carried out.

iii. Non-finance income and expenses

They are recognised for accounting purposes when the good is delivered or the non-financial service is rendered. To determine the amount and timing of recognition, a five-step model is followed: identification of the contract with the customer, identification of the separate obligations of the contract, determination of the transaction price, distribution of the transaction price among the identified obligations and finally recording of income as the obligations are satisfied.

iv. Deferred collections and payments

These are recognised for accounting purposes at the amount resulting from discounting the expected cash flows at market rates.

v. Loan arrangement fees

Loan arrangement fees, mainly loan origination, application and information fees, are accrued and recognised in income over the term of the loan.

u) Financial guarantees

Financial guarantees are defined as contracts whereby an entity undertakes to make specific payments on behalf of a third party if the latter fails to do so, irrespective of the various legal forms they may have, such as guarantees, insurance policies or credit derivatives.

Banco Santander initially recognises the financial guarantees provided on the liability side of the balance sheet at fair value, which is generally the present value of the fees, commissions and interest receivable from these contracts over the term thereof, and simultaneously the Bank recognises the amount of the fees, commissions and similar interest received at the inception of the transactions and a credit on the asset side of the balance sheet for the present value of the fees, commissions and interest outstanding.

Financial guarantees, regardless of the guarantor, instrumentation or other circumstances, are reviewed periodically so as to determine the credit risk to which they are exposed and, if appropriate, to consider whether a provision is required. The credit risk is determined by application of criteria similar to those established for quantifying impairment losses on debt instruments carried at amortised cost (described in note 2.g above).

The provisions made for these transactions are recognised under 'Provisions - Provisions for commitments and guarantees given in the consolidated balance sheet' (see note 23). These provisions are recognised and reversed with a charge or credit, respectively, to 'Provisions or reversal of provisions', net, in the income statement.

If a specific provision is required for financial guarantees, the related unearned commissions recognised under 'Financial liabilities at amortised cost - Other financial liabilities in the balance sheet', are reclassified to the appropriate provision.

v) Post-employment benefits

Under the collective agreements currently in force and other arrangements, the Spanish banks included in the Group and certain other Spanish and foreign consolidated entities have undertaken to supplement the public social security system benefits accruing to certain employees, and to their beneficiary right holders, for retirement, permanent disability or death, and the post-employment welfare benefits.

Banco Santander's post-employment obligations to its employees are deemed to be defined contribution plans when the Bank makes pre-determined contributions (recognised under Personnel expenses in the income statement) to a separate entity and will have no legal or effective obligation to make further contributions if the separate entity cannot pay the employee benefits relating to the service rendered in the current and prior periods. Post-employment obligations that do not meet the aforementioned conditions are classified as defined benefit plans (see note 23).

Defined contribution plans

The contributions made in this connection in each year are recognised under 'Personnel expenses' in the income statement.

The amounts not yet contributed at each year-end are recognised, at their present value, under 'Provisions - Provision for pensions' and similar obligations on the liability side of the balance sheet.

Defined benefit plans

Banco Santander recognises under 'Provisions - Provision for pensions and similar obligations on the liability side of the balance sheet' (or under 'Other assets' on the asset side, as appropriate) the present value of its defined benefit post-employment obligations, net of the fair value of the plan assets.

Plan assets are defined as those that will be directly used to settle obligations and that meet the following conditions:

- They are not owned by Banco Santander, but by a legally separate third party that is not a party related to the Bank.
- They are only available to pay or fund post-employment benefits and they cannot be returned to the Bank unless the assets remaining in the plan are sufficient to meet all the benefit obligations of the plan and of the entity to current and former employees, or they are returned to reimburse employee benefits already paid by the Bank.

If Banco Santander can look to an insurer to pay part or all of the expenditure required to settle a defined benefit obligation, and it is practically certain that said insurer will reimburse some or all of the expenditure required to settle that obligation, but the insurance policy does not qualify as a plan asset, the Bank recognises its right to reimbursement -which, in all other respects, is treated as a plan asset- under 'Insurance contracts linked to pensions' on the asset side of the balance sheet.

Banco Santander will recognise the following items in the income statement:

- Current service cost, (the increase in the present value of the obligations resulting from employee service in the current period), is recognised under 'Staff costs'.
- The past service cost, which arises from changes to existing post-employment benefits or from the introduction of new benefits and includes the cost of reductions, is recognised under 'Provisions or reversal of provisions'.
- Any gain or loss arising from a liquidation of the plan is included in the Provisions or reversion of provisions.
- Net interest on the net defined benefit liability (asset), i.e. the change during the period in the net defined benefit liability (asset) that arises from the passage of time, is recognised under 'Interest expense' and similar charges ('Interest and similar income' if it constitutes income) in the income statement.

The remeasurement of the net defined benefit liability (asset) is recognised in 'Other comprehensive income' under Items not reclassified to profit or loss and includes:

- Actuarial gains and losses generated in the year, arising from the differences between the previous actuarial assumptions and what has actually occurred and from the effects of changes in actuarial assumptions.
- The return on plan assets, excluding amounts included in net interest on the net defined benefit liability (asset).
- Any change in the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liability (asset).

w) Other long-term employee benefits

Other long-term employee benefits, defined as obligations to pre-retirees -taken to be those who have ceased to render services at the entity but who, without being legally retired, continue to have economic rights vis-à-vis the entity until they acquire the legal status of retiree-, long-service bonuses, obligations for death of spouse or disability before retirement that depend on the employee's length of service at the entity and other similar items, are treated for accounting purposes, where applicable, as established above for defined benefit post-employment plans, except that actuarial gains and losses are recognised under 'Provisions or reversal of provisions', net, in the income statement (see note 23).

x) Termination benefits

Termination benefits are recognised when there is a detailed formal plan identifying the basic changes to be made, provided that implementation of the plan has begun, its main features have been publicly announced or objective facts concerning its implementation have been disclosed.

y) Income tax

The income tax expense is recognised in the income statement, except when they arise from a transaction whose results are recognised directly in equity.

The current income tax expense is calculated as the sum of the current tax resulting from application of the appropriate tax rate to the taxable profit for the year (net of any deductions allowable for tax purposes), and of the changes in deferred tax assets and liabilities recognised in the income statement.

'Deferred tax assets' and liabilities include temporary differences, which are identified as the amounts expected to be payable or recoverable on differences between the carrying amounts of assets and liabilities and their related tax bases, and tax loss and tax credit carryforwards. These amounts are measured at the tax rates that are expected to apply in the period when the asset is realised or the liability is settled.

'Tax assets' include the amount of all tax assets, which are broken down into current -amounts of tax to be recovered within the next twelve months- and deferred -amounts of tax to be recovered in future years, including those arising from tax loss or tax credit carryforwards.

'Tax liabilities' includes the amount of all tax liabilities (except provisions for taxes), which are broken down into current -the amount payable in respect of the income tax on the taxable profit for the year and other taxes in the next twelve months- and deferred -the amount of income tax payable in future years.

Deferred tax liabilities are recognised in respect of taxable temporary differences associated with investments in subsidiaries, associates or joint ventures, except when the Bank is able to control the timing of the reversal of the temporary difference and, in addition, it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets are only recognised for temporary differences to the extent that it is considered probable that the Bank will have sufficient future taxable profits against which the deferred tax assets can be utilised, and the deferred tax assets do not arise from the initial

recognition (except in a business combination) of other assets and liabilities in a transaction that affects neither taxable profit nor accounting profit. Other deferred tax assets (tax loss and tax credit carryforwards) are only recognised if it is considered probable that the Bank entities will have sufficient future taxable profits against which they can be utilised.

Differences generated by the different accounting and tax treatment of any of the income and expenses recorded directly in equity to be paid or recovered in the future are accounted for as temporary differences.

The deferred tax assets and liabilities are reassessed at the reporting date in order to ascertain whether any adjustments need to be made on the basis of the findings of the analyses performed (see note 24).

z) Residual maturity periods

In note 48 its presented the analysis of the maturities of the balances of certain items in the balance sheet.

aa) Statement of recognised income and expenses

This statement presents the income and expenses generated by the Bank as a result of its business activity in the year, and a distinction is made between the income and expenses recognised in the income statement for the year and the other income and expenses recognised directly in equity.

Accordingly, this statement presents:

a. Profit for the year.

b. The net amount of the income and expenses recognised in 'Other comprehensive income' under items that will not be reclassified to profit or loss.

c. The net amount of the income and expenses recognised in Other comprehensive income under items that may be reclassified subsequently to profit or loss.

d. The income tax incurred in respect of the items indicated in b and c above, except for the valuation adjustments arising from investments in associates or joint ventures accounted for using the equity method, which are presented net.

e. Total recognised income and expense, calculated as the sum of a) to d) above.

The statement presents the items separately by nature, grouping together items that, in accordance with the applicable accounting standards, will not be reclassified subsequently to profit and loss since the requirements established by the corresponding accounting standards are met.

ab) Statement of changes in total equity

This statement presents all the changes in equity, including those arising from changes in accounting policies and from the correction of errors. Accordingly, this statement presents a reconciliation of the carrying amount at the beginning and end of the year of all the equity items, and the changes are grouped together on the basis of their nature into the following items:

a. Adjustments due to changes in accounting policies and to errors: include the changes in consolidated equity arising as a result of the retrospective restatement of the balances in the financial statements, distinguishing between those resulting from changes in accounting policies and those relating to the correction of errors.

b. Income and expense recognised in the year: includes, in aggregate form, the total of the aforementioned items recognised in the statement of recognised 'Income and expense'.

c. Other changes in equity: includes the remaining items recognised in equity, including, inter alia, increases and decreases in capital, distribution of profit, transactions involving own equity instruments, equity-instrument-based payments, transfers between equity items and any other increases or decreases in equity.

ac) Statement of cash flows

The following terms are used in the statements of cash flows with the meanings specified:

- Cash flows: inflows and outflows of cash and cash equivalents, which are short-term, highly liquid investments that are subject to an insignificant risk of changes in value, irrespective of the portfolio in which they are classified.

  Banco Santander classifies as cash and cash equivalents the balances recognised under 'Cash, cash balances at central banks' and 'Other deposits on demand' in the balance sheet.

- Operating activities: the principal revenue-producing activities of credit institutions and other activities that are not investing or financing activities.

- Investing activities: the acquisition and disposal of long-term assets and other investments not included in cash and cash equivalents.

- Financing activities: activities that result in changes in the size and composition of the equity and liabilities that are not operating activities.

During 2021, Banco Santander received interest amounting to EUR 6,242 million and paid interest amount to EUR 3,424 million (EUR 6,510 and 3,447 million, respectively in 2020).

Also, the dividends received and paid by Banco Santander are detailed in notes 4 and 36.

3. Santander Group

a) Banco Santander, S.A. and international Group structure

The growth of Grupo Santander in the last decades has led Banco Santander to also act, in practice, as a holding entity of the shares of the various companies in its Group, and its results are becoming progressively less representative of the performance and earnings of the Group. Therefore, each year the bank determines the amount of the dividends to be distributed to its shareholders on the basis of the consolidated net profit, while maintaining the Group's objectives of capitalisation and taking into account that the transactions of the Bank and of the rest of the Group are managed on a consolidated basis (notwithstanding the allocation to each company of the related net worth effect).

At the international level, the various banks and other subsidiaries, joint ventures and associates of the Group are integrated in a corporate structure comprising various holding companies which are the ultimate shareholders of the banks and subsidiaries abroad.

The purpose of this structure, all of which is controlled Banco Santander, is to optimise the international organisation from the strategic, economic, financial and tax standpoints, since it makes it possible to define the most appropriate units to be entrusted with acquiring, selling or holding stakes in other international entities, the most appropriate financing method for these transactions and the most appropriate means of remitting the profits obtained by the group's various operating units to Spain.

The Appendices provide relevant data on the consolidated group companies and on the companies accounted for using the equity method.

b) Acquisitions and disposals

Following is a summary of the main acquisitions and disposals of ownership interests in the share capital of other entities and other significant corporate transactions performed in the last two years or pending to be completed:

i. Purchase by SHUSA for shares of Santander Consumer USA

In August 2021 Santander Holdings USA, Inc. ('SHUSA') and Santander Consumer USA Holdings Inc. ('SC') entered into a definitive agreement pursuant to which SHUSA acquired all outstanding shares of common stock of SC not already owned by SHUSA via an all-cash tender offer (the 'Tender Offer') for USD 41.50 per SC common share (the 'Offer Price'), followed by a second-step consisting of a merge (together with the Offer, the 'Transaction') in which a wholly owned subsidiary of SHUSA was merged with and into SC, with SC surviving as a wholly owned subsidiary of SHUSA, and all outstanding shares of common stock of SC not tendered in the Tender Offer were converted into the right to receive the Offer Price in cash. The Offer Price represented a 14% premium to the closing price of SC common stock of USD 36.43 as of 1 July 2021, the last day prior to the announcement of SHUSA's initial offer to acquire the remaining outstanding shares of SC's common stock.

On 31 January 2022, after completion of the customary closing conditions, the Transaction was performed and SHUSA increased its share up to the 100% of SC's common stock. The transaction has meant a disbursement of USD 2,510 million (around EUR 2,239 million) for the Group.

ii. Acquisition of Amherst Pierpont, a U.S. fixed-income broker dealer

On 15 July 2021, Santander Holdings USA, Inc. reached an agreement to acquire Amherst Pierpont Securities, a market-leading independent fixed-income and structured products broker dealer, through the acquisition of its parent holding company, Pierpont Capital Holdings LLC, for a total consideration of approximately USD 600 million (around EUR 530 million). Amherst Pierpont will become part of Santander Corporate & Investment Banking (Santander CIB) Global business line.

The transaction is expected to close upon receipt of relevant regulatory approvals.

iii. Tender offer for shares of Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México

On 26 March 2021, Banco Santander, S.A. announced its intention to make a tender offer for all shares of Banco Santander Mexico, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México ('Santander México') that were not owned by Grupo Santander, representing (after the acquisition of shares of Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México in fiscal year 2019) approximately 8.3% of the share capital of Santander México. The announcement was subsequently supplemented by other publications on 24 May, 8 June and 28 October 2021, in which amendments to some of the terms of the offer were announced.

The offer was finally launched on 3 November 2021 and was settled on 10 December. Banco Santander accepted all of the Santander Mexico Shares and Santander Mexico American Depositary Share (ADS) (securities listed on the New York Stock Exchange, each representing 5 shares of Santander Mexico) tendered and not withdrawn representing approximately 4.5% of the share capital of Santander México. After the transaction, Santander Group holds approximately 96.2% of Santander México share capital.

The shareholders who have tendered their shares in the offer have received MXN 26.5 (approximately EUR 1) per share of Santander México and USD 6.2486 in cash per each ADS (the USD equivalent of MXN 132.50 per ADS based on the USD/MXN exchange rate on the expiration date of 7 December 2021) which has meant a disbursement of approximately EUR 335 million.

This transaction has entailed a decrease of reserves of EUR 41 million and a decrease of EUR 294 million of minority interests, for the purposes of the Group.

iv. Agreement for the acquisition of a significant stake in Ebury

On 28 April 2020, the investment in Ebury, a payments and currencies platform for SMEs, announced on 4 November 2019, was completed. The transaction involved a total outlay of GBP 357 million (EUR 409 million) of which GBP 70 million (approximately EUR 80 million) was for new shares. At 2019 year-end the Group had already acquired 6.4% of the company for GBP 40 million (approximately EUR 45 million). Following the disbursement made in April 2020, the Group is entitled to receive 50.38% of the dividends distributed by the company. This interest is recognized under 'Investments in Joint Ventures and Associates - Associates' in the consolidated balance sheet.

v. Reorganization of the banking insurance business, asset management and pension plans in Spain

On 24 June 2019, Banco Santander, S.A., reached an agreement with the Allianz Group to terminate the agreement that Banco Popular Español, S.A.U. ('Banco Popular') held in Spain with the Allianz Group for the exclusive distribution of certain life insurance products, non-life insurance products, collective investment institutions (IIC), and pension plans through the Banco Popular network (the 'Agreement'). Under this Agreement, the Group held a 40% stake in the capital of Popular Spain Holding de Inversiones, S.L.U., classified as investments in joint ventures and associated entities for an overall amount of EUR 409 million on 31 December 2019.

The Agreement was executed on 15 January 2020 for the non-life business and on 31 January 2020 for the remaining businesses, once the regulatory authorisations were obtained in the first half of 2020. The execution of the Termination Agreement entailed the payment by Banco Santander of a total consideration of EUR 859 million (after deducting the dividends paid until the end of the operation) and the acquisition of the remaining 60% of the capital of Popular Spain Holding de Inversiones, S.L.U.

On 10 July, 51% of the life-risk insurance business held by Banco Santander and the 51% of the new General Insurance business from Banco Popular's network not transferred to Mapfre (in accordance with the agreement indicated below) was acquired by Aegon, valuing these businesses at a total of approximately EUR 557 million.

The total amount of the life-savings business, collective investment institutions and pension plans is EUR 711 million and has resulted in the recognition of EUR 271 million of goodwill.

In addition, under the agreement reached between Banco Santander and Mapfre on 21 January 2019, 50.01% of the car, commercial multi-risk, SME multi-risk and corporate liability insurance business in the whole network of Banco Santander in Spain was acquired by Mapfre on 25 June 2019 amounting to EUR 82 million.

c) Offshore entities

According to current Spanish regulation (Law 11/2021, of 9 July and Royal Decree 1080/1991, of 5 July), Santander has one subsidiary and three branches in the non-cooperative jurisdictions of Jersey, the Isle of Man and the Cayman Islands (offshore entities). Santander also has three other subsidiaries incorporated in non-cooperative jurisdictions that are tax resident in the UK and subject to British tax law.

i. Offshore subsidiaries

A subsidiary resident in the Isle of Man was liquidated in 2021 so, at the reporting date, Grupo Santander has only one subsidiary resident in Jersey: Abbey National International Limited. In 2021, this subsidiary's contribution to Santander's consolidated profit was insubstantial.

ii. Offshore branches

Grupo Santander also has three offshore branches. One is found in the Cayman Islands, one is on the Isle of Man and another is in Jersey. They report to, and consolidate balance sheets and income statements with, their foreign headquarters. They are taxed either with their headquarters (the Cayman Islands branch in Brazil) or in the territories they are located in (Jersey and Isle of Man, pertain to the UK).

The entities mentioned in Sections I and II had 147 employees as of December 2021.

iii. Subsidiaries in non-cooperative jurisdictions that are tax resident in the United Kingdom

Grupo Santander also has three subsidiaries (one in liquidation) that were incorporated in offshore jurisdictions but are not deemed offshore entities. They only operate from, and are tax resident in, the UK and, thus, are subject to British tax law.

iv. Other offshore holdings

From Brazil, Grupo Santander manages Santander Brazil Global Investment Fund SPC, a segregated portfolio company located in the Cayman Islands. It also has two small financial investments in entities located in the Cayman Islands. In 2021, Guaranteed Investment Products 1 PCC Limited, a protected cell company found in Guernsey managed from the UK, was liquidated.

Organization for Economic Cooperation and Development (OECD)

Grupo Santander is not in any of the non-cooperative jurisdictions the OECD released in November 2021. Furthermore, Jersey, the Isle of Man and the Cayman Islands satisfy OECD standards on transparency and exchange of information for tax purposes.

The European Union (EU)

As of October 2021, the EU's blacklist comprises 9 jurisdictions where Santander is not present. Additionally, the EU's grey list comprises 15 jurisdictions which have sufficiently committed to adapt legislation to international standards, subject to monitoring by the EU. Within these jurisdictions, Santander is only present in Uruguay and Hong Kong mainly through Banco Santander S.A. in Uruguay and a branch in Hong Kong.

The Group's presence in offshore territories at the end of 2021 is as follows:

Presence of the Group in non-cooperative jurisdictions	Spanish legislation		OECD		European Commission Blacklist	
	Sub.	Branch	Sub.	Branch	Sub.	Branch
Jersey	1	1				
Isle of Man		1				
Guernsey*						
Bermuda*						
Cayman Islands		1				
2021	**1**	**3**	**—**	**—**	**—**	**—**
2020	**2**	**3**	**—**	**—**	**—**	**—**

* Additionally, there are 2 entities constituted in Guernsey (1 in liquidation) and 1 in Bermuda, but resident for tax purposes in the United Kingdom.

Changes to Spain's tax law

On 10 July 2021, Law 11/2021 on measures to prevent and fight against tax fraud was published in the Official Estate Gazette. The law expands the meaning of tax havens, which it renames "non-cooperative jurisdictions". It also allows government to update the non-cooperative jurisdictions list. Nonetheless, until that list conforms to the new criteria, the former list set out in Royal Decree 1080/1991 of 5 July will remain in effect.

Grupo Santander has the right mechanisms (risk management, supervision, verification and review plans, and regular reporting) to prevent reputational, tax and legal risk in entities resident in non-cooperative jurisdictions. Grupo Santander also maintains its policy of reducing the number of these entities.

PwC (PricewaterhouseCoopers) member firms audited the financial statements of Grupo Santander's offshore entities in 2021 and 2020.

d) Consolidated balance sheet, income statement, statement of recognized income and expenses, statement of changes in total equity and cash-flow statement

The Group's consolidated balance sheets at December 31, 2021 and 2020 and the consolidated income statements, consolidated statements of recognized income and expense, consolidated statements of changes in total equity and consolidated statements of cash flows for the years then ended are as follows:

Santander

CONSOLIDATED BALANCE SHEETS AS OF 31 DECEMBER 2021 AND 2020

EUR million

ASSETS	2021	2020*
CASH, CASH BALANCES AT CENTRAL BANKS AND OTHER DEPOSITS ON DEMAND	**210,689**	**153,839**
FINANCIAL ASSETS HELD FOR TRADING	**116,953**	**114,945**
Derivatives	54,292	67,137
Equity instruments	15,077	9,615
Debt instruments	26,750	37,894
Loans and advances	20,834	299
Central banks	3,608	—
Credit institutions	10,397	3
Customers	6,829	296
NON-TRADING FINANCIAL ASSETS MANDATORILY AT FAIR VALUE THROUGH PROFIT OR LOSS	**5,536**	**4,486**
Equity instruments	4,042	3,234
Debt instruments	957	700
Loans and advances	537	552
Central banks	—	—
Credit institutions	—	—
Customers	537	552
FINANCIAL ASSETS DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS	**15,957**	**48,717**
Debt instruments	2,516	2,979
Loans and advances	13,441	45,738
Central banks	—	9,481
Credit institutions	3,152	12,136
Customers	10,289	24,121
FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME	**108,038**	**120,953**
Equity instruments	2,453	2,783
Debt instruments	97,922	108,903
Loans and advances	7,663	9,267
Central banks	—	—
Credit institutions	—	—
Customers	7,663	9,267
FINANCIAL ASSETS AT AMORTIZED COST	**1,037,898**	**958,378**
Debt instruments	35,708	26,078
Loans and advances	1,002,190	932,300
Central banks	15,657	12,499
Credit institutions	39,169	37,838
Customers	947,364	881,963
HEDGING DERIVATIVES	**4,761**	**8,325**
CHANGES IN THE FAIR VALUE OF HEDGED ITEMS IN PORTFOLIO HEDGES OF INTEREST RATE RISK	**410**	**1,980**
INVESTMENTS	**7,525**	**7,622**
Joint venture entities	1,692	1,492
Associated entities	5,833	6,130
ASSETS UNDER INSURANCE OR REINSURANCE CONTRACTS	**283**	**261**

ASSETS	2021	2020*
TANGIBLE ASSETS	**33,321**	**32,735**
Property, plant and equipment	32,342	31,772
For own-use	13,259	13,213
Leased out under an operating lease	19,083	18,559
Investment properties	979	963
Of which leased out under an operating lease	*839*	*793*
INTANGIBLE ASSETS	**16,584**	**15,908**
Goodwill	12,713	12,471
Other intangible assets	3,871	3,437
TAX ASSETS	**25,196**	**24,586**
Current tax assets	5,756	5,340
Deferred tax assets	19,440	19,246
OTHER ASSETS	**8,595**	**11,070**
Insurance contracts linked to pensions	149	174
Inventories	6	5
Other	8,440	10,891
NON-CURRENT ASSETS HELD FOR SALE	**4,089**	**4,445**
TOTAL ASSETS	**1,595,835**	**1,508,250**

* Presented for comparison purposes only.

Santander

CONSOLIDATED BALANCE SHEETS AS OF 31 DECEMBER 2021 AND 2020

EUR million

LIABILITIES	2021	2020*
FINANCIAL LIABILITIES HELD FOR TRADING	**79,469**	**81,167**
Derivatives	53,566	64,469
Short positions	12,236	16,698
Deposits	13,667	—
Central banks	1,038	—
Credit institutions	6,488	—
Customers	6,141	—
Marketable debt securities	—	—
Other financial liabilities	—	—
FINANCIAL LIABILITIES DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS	**32,733**	**48,038**
Deposits	27,279	43,598
Central banks	607	2,490
Credit institutions	1,064	6,765
Customers	25,608	34,343
Marketable debt securities	5,454	4,440
Other financial liabilities	—	—
Memorandum items: subordinated liabilities	—	—
FINANCIAL LIABILITIES AT AMORTIZED COST	**1,349,169**	**1,248,188**
Deposits	1,078,587	990,391
Central banks	139,757	112,804
Credit institutions	52,235	62,620
Customers	886,595	814,967
Marketable debt securities	240,709	230,829
Other financial liabilities	29,873	26,968
Memorandum items: subordinated liabilities	*26,196*	*21,880*
HEDGING DERIVATIVES	**5,463**	**6,869**
CHANGES IN THE FAIR VALUE OF HEDGED ITEMS IN PORTFOLIO HEDGES OF INTEREST RATE RISK	**248**	**286**
LIABILITIES UNDER INSURANCE OR REINSURANCE CONTRACTS	**770**	**910**
PROVISIONS	**9,583**	**10,852**
Pensions and other post-retirement obligations	3,185	3,976
Other long term employee benefits	1,242	1,751
Taxes and other legal contingencies	1,996	2,200
Contingent liabilities and commitments	733	700
Other provisions	2,427	2,225
TAX LIABILITIES	**8,649**	**8,282**
Current tax liabilities	2,187	2,349
Deferred tax liabilities	6,462	5,933
OTHER LIABILITIES	**12,698**	**12,336**
LIABILITIES ASSOCIATED WITH NON-CURRENT ASSETS HELD FOR SALE	**—**	**—**
TOTAL LIABILITIES	**1,498,782**	**1,416,928**

* Presented for comparison purposes only.

Santander

CONSOLIDATED BALANCE SHEETS AS OF 31 DECEMBER 2021 AND 2020

EUR million

EQUITY	2021	2020*
SHAREHOLDERS´ EQUITY	**119,649**	**114,620**
CAPITAL	**8,670**	**8,670**
Called up paid capital	8,670	8,670
Unpaid capital which has been called up	—	—
SHARE PREMIUM	**47,979**	**52,013**
EQUITY INSTRUMENTS ISSUED OTHER THAN CAPITAL	**658**	**627**
Equity component of the compound financial instrument	—	—
Other equity instruments issued	658	627
OTHER EQUITY	**152**	**163**
ACCUMULATED RETAINED EARNINGS	**60,273**	**65,583**
REVALUATION RESERVES	**—**	**—**
OTHER RESERVES	**(4,477)**	**(3,596)**
Reserves or accumulated losses in joint venture investments	1,572	1,504
Others	(6,049)	(5,100)
(-) OWN SHARES	**(894)**	**(69)**
PROFIT OR LOSS ATTRIBUTABLE TO SHAREHOLDERS OF THE PARENT	**8,124**	**(8,771)**
(-) INTERIM DIVIDENDS	**(836)**	**—**
OTHER COMPREHENSIVE INCOME OR LOSS	**(32,719)**	**(33,144)**
Items that will not be reclassified to profit or loss	(4,241)	(5,328)
Items that may be reclassified to profit or loss	(28,478)	(27,816)
NON-CONTROLLING INTEREST	**10,123**	**9,846**
Other comprehensive income or loss	(2,104)	(1,800)
Other items	12,227	11,646
TOTAL EQUITY	**97,053**	**91,322**
TOTAL LIABILITIES AND EQUITY	**1,595,835**	**1,508,250**
MEMORANDUM ITEMS: OFF BALANCE SHEET AMOUNTS		
Loan commitments granted	262,737	241,230
Financial guarantees granted	10,758	12,377
Other commitments granted	75,733	64,538

* Presented for comparison purposes only (note 1.d).

Santander

CONSOLIDATED INCOME STATEMENTS FOR THE YEARS ENDED 31 DECEMBER 2021 AND 2020

EUR million

	(Debit) Credit	
	2021	2020*
Interest income	**46,463**	**45,741**
Financial assets at fair value through other comprehensive income	*2,582*	*2,840*
Financial assets at amortized cost	*40,471*	*40,365*
Other interest income	*3,410*	*2,536*
Interest expense	(13,093)	(13,747)
Interest income/(charges)	**33,370**	**31,994**
Dividend income	513	391
Income from companies accounted for using the equity method	432	(96)
Commission income	13,812	13,024
Commission expense	(3,310)	(3,009)
Gain or losses on financial assets and liabilities not measured at fair value through profit or loss, net	628	1,107
Financial assets at amortized cost	*89*	*(31)*
Other financial assets and liabilities	*539*	*1,138*
Gain or losses on financial assets and liabilities held for trading, net	1,141	3,211
Reclassification of financial assets at fair value through other comprehensive income	—	—
Reclassification of financial assets at amortized cost	—	—
Other gains (losses)	*1,141*	*3,211*
Gains or losses on non-trading financial assets and liabilities mandatorily at fair value through profit or loss	132	82
Reclassification of financial assets at fair value through other comprehensive income	—	—
Reclassification of financial assets at amortized cost	—	—
Other gains (losses)	*132*	*82*
Gain or losses on financial assets and liabilities measured at fair value through profit or loss, net	270	(171)
Gain or losses from hedge accounting, net	(46)	51
Exchange differences, net	(562)	(2,093)
Other operating income	2,255	1,920
Other operating expenses	(2,442)	(2,342)
Income from assets under insurance and reinsurance contracts	1,516	1,452
Expenses from liabilities under insurance and reinsurance contracts	(1,305)	(1,242)
Total income	**46,404**	**44,279**
Administrative expenses	(18,659)	(18,320)
Staff costs	*(11,216)*	*(10,783)*
Other general administrative expenses	*(7,443)*	*(7,537)*
Depreciation and amortisation cost	(2,756)	(2,810)
Provisions or reversal of provisions, net	(2,814)	(2,378)
Impairment or reversal of impairment at financial assets not measured at fair value through profit or loss and net gains and losses from changes	(7,407)	(12,382)
Financial assets at fair value through other comprehensive income	*(19)*	*(19)*
Financial assets at amortized cost	*(7,388)*	*(12,363)*
Impairment or reversal of impairment of investments in subsidiaries, joint ventures and associates, net	—	—
Impairment or reversal of impairment on non-financial assets, net	(231)	(10,416)
Tangible assets	*(150)*	*(174)*
Intangible assets	*(71)*	*(10,242)*
Others	*(10)*	—
Gain or losses on non-financial assets and investments, net	53	114
Negative goodwill recognized in results	—	8

	(Debit) Credit	
	2021	2020*
Gains or losses on non-current assets held for sale not classified as discontinued operations	(43)	(171)
Operating profit/(loss) before tax	14,547	(2,076)
Tax expense or income from continuing operations	(4,894)	(5,632)
Profit/(loss) from continuing operations	**9,653**	**(7,708)**
Profit/(loss) after tax from discontinued operations	**—**	**—**
Profit/(loss) for the year	**9,653**	**(7,708)**
Profit/(loss) attributable to non-controlling interests	1,529	1,063
Profit/(loss) attributable to the parent	8,124	(8,771)
Earnings/(losses) per share		
Basic	0.438	(0.538)
Diluted	0.436	(0.538)

* Presented for comparison purposes only (note 1.d).

Santander

CONSOLIDATED STATEMENTS OF RECOGNIZED INCOME AND EXPENSE FOR THE YEARS ENDED 31 DECEMBER 2021 AND 2020

EUR million

	2021	2020*
CONSOLIDATED PROFIT/(LOSS) FOR THE YEAR	**9,653**	**(7,708)**
OTHER RECOGNISED INCOME AND EXPENSE	**(220)**	**(9,794)**
Items that will not be reclassified to profit or loss	**754**	**(1,018)**
Actuarial gains and losses on defined benefit pension plans	1,567	(25)
Non-current assets held for sale	—	—
Other recognised income and expense of investments in subsidiaries, joint ventures and associates	(1)	(4)
Changes in the fair value of equity instruments measured at fair value through other comprehensive income	(171)	(917)
Gains or losses resulting from the accounting for hedges of equity instruments measured at fair value through other comprehensive income, net	—	—
Changes in the fair value of equity instruments measured at fair value through other comprehensive income (hedged item)	*117*	*4*
Changes in the fair value of equity instruments measured at fair value through other comprehensive income (hedging instrument)	*(117)*	*(4)*
Changes in the fair value of financial liabilities at fair value through profit or loss attributable to changes in credit risk	(99)	31
Income tax relating to items that will not be reclassified	(542)	(103)
Items that may be reclassified to profit or loss	**(974)**	**(8,776)**
Hedges of net investments in foreign operations (effective portion)	(1,159)	2,340
Revaluation gains (losses)	*(1,159)*	*2,340*
Amounts transferred to income statement	—	—
Other reclassifications	—	—
Exchanges differences	3,082	(11,040)
Revaluation gains (losses)	*3,082*	*(11,040)*
Amounts transferred to income statement	—	—
Other reclassifications	—	—
Cash flow hedges (effective portion)	(938)	(53)
Revaluation gains (losses)	*(1,739)*	*799*
Amounts transferred to income statement	*801*	*(852)*
Transferred to initial carrying amount of hedged items	—	—
Other reclassifications	—	—
Hedging instruments (items not designated)	—	—
Revaluation gains (losses)	—	—
Amounts transferred to income statement	—	—
Other reclassifications	—	—
Debt instruments at fair value with changes in other comprehensive income	(3,250)	(100)
Revaluation gains (losses)	*(3,063)*	*692*
Amounts transferred to income statement	*(545)*	*(1,165)*
Other reclassifications	*358*	*373*
Non-current assets held for sale	—	—
Revaluation gains (losses)	—	—
Amounts transferred to income statement	—	—
Other reclassifications	—	—
Share of other recognised income and expense of investments	19	(151)
Income tax relating to items that may be reclassified to profit or loss	1,272	228
Total recognised income and expenses for the year	**9,433**	**(17,502)**
Attributable to non-controlling interests	1,255	245
Attributable to the parent	8,178	(17,747)

*Presented for comparison purposes only (note 1.d).

Santander

CONSOLIDATED STATEMENTS OF CHANGES IN TOTAL EQUITY FOR THE YEARS ENDED 31 DECEMBER 2021 AND 2020

EUR million

											Non-controlling interest		
	Capital	Share premium	Equity instruments issued (not capital)	Other equity instruments	Accumulated retained earnings	Revaluation reserves	Other reserves	(-) Own shares	Profit attributable to shareholders of the parent	(-) Interim dividends	Other comprehensive income	Other comprehensive income	Other items	Total
Balance at 31 December 2020*	**8,670**	**52,013**	**627**	**163**	**65,583**	**—**	**(3,596)**	**(69)**	**(8,771)**	**—**	**(33,144)**	**(1,800)**	**11,646**	**91,322**
Adjustments due to errors	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Adjustments due to changes in accounting policies	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Opening balance at 1 January 2021*	**8,670**	**52,013**	**627**	**163**	**65,583**	**—**	**(3,596)**	**(69)**	**(8,771)**	**—**	**(33,144)**	**(1,800)**	**11,646**	**91,322**
Total recognised income and expense	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**8,124**	**—**	**54**	**(274)**	**1,529**	**9,433**
Other changes in equity	**—**	**(4,034)**	**31**	**(11)**	**(5,310)**	**—**	**(881)**	**(825)**	**8,771**	**(836)**	**371**	**(30)**	**(948)**	**(3,702)**
Issuance of ordinary shares	—	—	—	—	—	—	—	—	—	—	—	—	17	17
Issuance of preferred shares	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Issuance of other financial instruments	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maturity of other financial instruments	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Conversion of financial liabilities into equity	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Capital reduction	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dividends	—	(477)	—	—	—	—	—	—	—	(836)	—	—	(648)	(1,961)
Purchase of equity instruments	—	—	—	—	—	—	—	(1,645)	—	—	—	—	—	(1,645)
Disposal of equity instruments	—	—	—	—	—	—	23	820	—	—	—	—	—	843
Transfer from equity to liabilities	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Transfer from liabilities to equity	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Transfers between equity items	—	(3,557)	—	—	(5,310)	—	(275)	—	8,771	—	371	(30)	30	—
Increases (decreases) due to business combinations	—	—	—	—	—	—	—	—	—	—	—	—	(5)	(5)
Share-based payment	—	—	—	(62)	—	—	—	—	—	—	—	—	—	(62)
Others increases or (-) decreases in equity	—	—	31	51	—	—	(629)	—	—	—	—	—	(342)	(889)
Balance at 31 December 2021	**8,670**	**47,979**	**658**	**152**	**60,273**	**—**	**(4,477)**	**(894)**	**8,124**	**(836)**	**(32,719)**	**(2,104)**	**12,227**	**97,053**

* Presented for comparison purpose only (note 1.d).

Santander

CONSOLIDATED STATEMENTS OF CHANGES IN TOTAL EQUITY FOR THE YEARS ENDED 31 DECEMBER 2020 AND 2019

EUR million

											Non-controlling interest			
	Capital	Share premium	Equity instruments issued (not capital)	Other equity instruments	Accumulated retained earnings	Revaluation reserves	Other reserves	(-) Own shares	Profit attributable to shareholders of the parent	(-) Interim dividends	Other comprehensive income	Other comprehensive income	Other items	Total
Balance at 31 December 2019*	**8,309**	**52,446**	**598**	**146**	**61,028**	**—**	**(3,110)**	**(31)**	**6,515**	**(1,662)**	**(24,168)**	**(982)**	**11,570**	**110,659**
Adjustments due to errors	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Adjustments due to changes in accounting policies	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Opening balance at 1 January 2020*	**8,309**	**52,446**	**598**	**146**	**61,028**	**—**	**(3,110)**	**(31)**	**6,515**	**(1,662)**	**(24,168)**	**(982)**	**11,570**	**110,659**
Total recognised income and expense	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**(8,771)**	**—**	**(8,976)**	**(818)**	**1,063**	**(17,502)**
Other changes in equity	**361**	**(433)**	**29**	**17**	**4,555**	**—**	**(486)**	**(38)**	**(6,515)**	**1,662**	**—**	**—**	**(987)**	**(1,835)**
Issuance of ordinary shares	361	(72)	—	—	—	—	70	—	—	—	—	—	5	364
Issuance of preferred shares	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Issuance of other financial instruments	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maturity of other financial instruments	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Conversion of financial liabilities into equity	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Capital reduction	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dividends	—	(361)	—	—	—	—	—	—	—	—	—	—	(465)	(826)
Purchase of equity instruments	—	—	—	—	—	—	—	(758)	—	—	—	—	—	(758)
Disposal of equity instruments	—	—	—	—	—	—	1	720	—	—	—	—	—	721
Transfer from equity to liabilities	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Transfer from liabilities to equity	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Transfers between equity items	—	—	—	—	4,555	—	298	—	(6,515)	1,662	—	—	—	—
Increases (decreases) due to business combinations	—	—	—	—	—	—	—	—	—	—	—	—	(54)	(54)
Share-based payment	—	—	—	(53)	—	—	—	—	—	—	—	—	—	(53)
Others increases or (-) decreases in equity	—	—	29	70	—	—	(855)	—	—	—	—	—	(473)	(1,229)
Balance at 31 December 2020*	**8,670**	**52,013**	**627**	**163**	**65,583**	**—**	**(3,596)**	**(69)**	**(8,771)**	**—**	**(33,144)**	**(1,800)**	**11,646**	**91,322**

* Presented for comparison purposes only (note 1.d).

Santander

CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED 2021 AND 2020

EUR million

	2021	2020*
A. CASH FLOWS FROM OPERATING ACTIVITIES	**56,691**	**66,153**
Profit or loss for the year	**9,653**	**(7,708)**
Adjustments made to obtain the cash flows from operating activities	**21,363**	**37,836**
Depreciation and amortisation cost	*2,756*	*2,810*
Other adjustments	*18,607*	*35,026*
Net increase/(decrease) in operating assets	**27,258**	**51,385**
Financial assets held-for-trading	*2,064*	*12,390*
Non-trading financial assets mandatorily at fair value through profit or loss	*969*	*(275)*
Financial assets at fair value through profit or loss	*(32,746)*	*(10,314)*
Financial assets at fair value through other comprehensive income	*(9,152)*	*6,549*
Financial assets at amortized cost	*73,181*	*43,541*
Other operating assets	*(7,058)*	*(506)*
Net increase/(decrease) in operating liabilities	**56,945**	**90,356**
Financial liabilities held-for-trading	*(1,386)*	*7,880*
Financial liabilities designated at fair value through profit or loss	*(14,316)*	*(10,907)*
Financial liabilities at amortized cost	*79,114*	*96,561*
Other operating liabilities	*(6,467)*	*(3,178)*
Income tax recovered/(paid)	**(4,012)**	**(2,946)**
B. CASH FLOWS FROM INVESTING ACTIVITIES	**(3,715)**	**(7,220)**
Payments	**11,669**	**11,976**
Tangible assets	*10,015*	*7,386*
Intangible assets	*1,388*	*1,134*
Investments	*126*	*525*
Subsidiaries and other business units	*140*	*2,931*
Non-current assets held for sale and associated liabilities	*—*	*—*
Other payments related to investing activities	*—*	*—*
Proceeds	**7,954**	**4,756**
Tangible assets	*6,382*	*2,014*
Intangible assets	*—*	*—*
Investments	*672*	*182*
Subsidiaries and other business units	*6*	*1,775*
Non-current assets held for sale and associated liabilities	*894*	*785*
Other proceeds related to investing activities	*—*	*—*
C. CASH FLOW FROM FINANCING ACTIVITIES	**(1,322)**	**(1,909)**
Payments	**7,741**	**6,978**
Dividends	*1,313*	*—*
Subordinated liabilities	*2,684*	*3,780*
Redemption of own equity instruments	*—*	*—*
Acquisition of own equity instruments	*1,645*	*758*
Other payments related to financing activities	*2,099*	*2,440*
Proceeds	**6,419**	**5,069**
Subordinated liabilities	*5,340*	*4,095*
Issuance of own equity instruments	*—*	*—*
Disposal of own equity instruments	*854*	*721*
Other proceeds related to financing activities	*225*	*253*
D. EFFECT OF FOREIGN EXCHANGE RATE DIFFERENCES	**5,196**	**(4,252)**

	2021	2020*
E. NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	**56,850**	**52,772**
F. CASH AND CASH EQUIVALENTS AT BEGINNING OF THE YEAR	**153,839**	**101,067**
G. CASH AND CASH EQUIVALENTS AT END OF THE YEAR	**210,689**	**153,839**
COMPONENTS OF CASH AND CASH EQUIVALENTS AT END OF THE YEAR		
Cash	*8,142*	*7,817*
Cash equivalents at central banks	*193,102*	*137,047*
Other financial assets	*9,445*	*8,975*
Less, bank overdrafts refundable on demand	—	—
TOTAL CASH AND CASH EQUIVALENTS AT END OF THE YEAR	**210,689**	**153,839**
In which, restricted cash	—	—

* Presented for comparison purposes only (note 1.d).

4. Distribution of Banco Santander's profit, shareholder remuneration scheme and earnings per share

a) Distribution of Banco Santander's profit and shareholder remuneration scheme

The distribution of the Bank's net profit against the results for 2021, that the board of directors will propose for approval by the shareholders at the annual general meeting is as follows:

EUR million	
To dividends	1,701
*Dividend paid prior to the meeting date**	*836*
*Complementary dividend***	*865*
To voluntary reserves****	2,231
Net profit for the year	**3,932**

* Total amount paid as interim dividend, at the rate of EUR 4.85 fixed cents per eligible share (recorded in 'Shareholders' equity - Interim dividends').

** Fixed dividend of EUR 5.15 gross cents per eligible share, payable in cash as from 2 May 2022. The total amount has been estimated on the assumption that, after the implementation of the second buy-back programme announced on 24 February 2022, the number of the Bank's outstanding shares eligible for the dividend will be 16,804,353,202.

*** Estimated amount corresponding to a final dividend of EUR 865 million. To be increased or reduced by the same amount by which the final dividend is lower or higher, respectively, than that amount.

The transcribed proposal comprises the part of the 2021 shareholder remuneration policy that is implemented through cash dividends (the interim dividend paid in November 2021 of EUR 4.85 cents per share with dividend entitlement and the final dividend expected to be paid as of 2 May 2022, subject to approval by the general meeting of shareholders, of EUR 5.15 cents per share with dividend entitlement).

In addition, the 2021 remuneration policy also provided for shareholder remuneration through the implementation of share buyback programs, which are not reflected in the above-transcribed proposal for the appropriation of earnings. The first of these programs, amounting to approximately EUR 841 million, was completed between October and November 2021. Subject to obtaining the appropriate regulatory approvals, a second repurchase program for approximately EUR 865 million is planned to be launched. Capital reduction resolutions are also submitted to the general shareholders' meeting to redeem the treasury shares acquired in each of the two repurchase programs, also subject to the relevant regulatory authorizations.

Finally, and although it is not part of the remuneration charged to the 2021 financial year, it should be noted that in May 2021 Banco Santander paid a dividend of EUR 2.75 cents in cash per share corresponding to the 2020 financial year against share premium, for an amount of EUR 477 million, this being the maximum amount allowed in accordance with the limit established by the recommendation of the European Central Bank of 15 December 2020. This payment was made in execution of the premium distribution resolution approved at the General Shareholders' Meeting of Banco Santander held on 27 October 2020.

b) Earnings/loss per share from continuing and discontinued operations

i. Basic earnings / loss per share

Basic earnings/loss per share are calculated by dividing the net profit attributable to the Group, adjusted by the after-tax amount of the remuneration of contingently convertible preference shares recognised in equity (see note 21) and the capital perpetual preference shares, if applicable, by the weighted average number of ordinary shares outstanding during that period, excluding the average number of own shares held through that period.

Accordingly:

	2021	2020
Profit (Loss) attributable to the Parent (EUR million)	8,124	(8,771)
Remuneration of contingently convertible preference shares (CCP) (EUR million) (note 21)	(566)	(552)
	7,558	(9,323)
Of which:		
Profit (Loss) from discontinued operations (non controlling interest net) (EUR million)	—	—
Profit (Loss) from continuing operations (PPC net) (EUR million)	*7,558*	*(9,323)*
Weighted average number of shares outstanding	17,272,055,430	17,316,288,908
Impact factor correction	Not applicable	Not applicable
Adjusted number of shares	17,272,055,430	17,316,288,908
Basic earnings (Loss) per share (euros)	**0.438**	**(0.538)**
Of which, from discounted operations (euros)	**—**	**—**
Basic earnings (Loss) per share from continuing operations (euros)	**0.438**	**(0.538)**

ii. Diluted earnings / loss per share

Diluted earnings/loss per share are calculated by dividing the net profit attributable to the Group, adjusted by the after-tax amount of the remuneration of contingently convertible preference shares recognised in equity (see note 21) and the capital perpetual preference shares, if applicable, by the weighted average number of ordinary shares outstanding during the year, excluding the average number of treasury shares and adjusted for all the dilutive effects inherent to potential ordinary shares (share options, and convertible debt instruments).

Accordingly, diluted earnings/loss per share were determined as follows:

	2021	2020
Profit (Loss) attributable to the Parent (EUR million)	8,124	(8,771)
Remuneration of contingently convertible preference shares (CCP) (EUR million) (note 21)	(566)	(552)
Dilutive effect of changes in profit for the period arising from potential conversion of ordinary shares	—	—
	7,558	(9,323)
Of which:		
Profit (Loss) from discontinued operations (net of non-controlling interests) (EUR million)	—	—
Profit (Loss) from continuing operations (net of non-controlling interests and CCP) (EUR million)	*7,558*	*(9,323)*
Weighted average number of shares outstanding	17,272,055,430	17,316,288,908
Dilutive effect of options/ rights on shares	48,972,459	Not applicable
Impact factor correction	Not applicable	Not applicable
Adjusted number of shares	17,321,027,889	17,316,288,908
Diluted earnings (Loss) per share (euros)	**0.436**	**(0.538)**
Of which, from discounted operations (euros)	**—**	**—**
Diluted earnings (Loss) per share from continuing operations (euros)	**0.436**	**(0.538)**

5. Remuneration and other benefits paid to the bank's directors and senior managers

The following section contains qualitative and quantitative disclosures on the remuneration paid to the members of the board of directors —both executive and non-executive directors— and senior managers for 2021 and 2020.

a) Remuneration of Directors

i. Bylaw-stipulated emoluments

The annual General Meeting held on 22 March 2013 approved an amendment to the Bylaws, whereby the remuneration of directors in their capacity as board members became an annual fixed amount determined by the annual General Meeting. This amount shall remain in effect unless the shareholders resolve to change it at a general meeting. However, the board of directors may elect to reduce the amount in any years in which it deems such action justified.

The remuneration established by the Annual General Meeting was EUR 6 million in 2021 (same amount as in 2020), with two components: (a) an annual emolument and (b) attendance fees.

In regard to 2020, as a gesture of responsibility in view of the situation created by the health emergency the board of directors agreed on 5 May 2020 to reduce their allotments by 20% for the balance of 2020, with effect from 1 April 2020, and propose that amounts saved thereby be used to finance the initiatives of the Bank to fight against the covid-19 pandemic.

The specific amount payable for the above-mentioned items to each of the directors is determined by the Board of Directors. For such purpose, it takes into consideration the positions held by each director on the Board, their membership of the Board and the board committees and their attendance to the meetings thereof, and any other objective circumstances considered by the Board.

The total bylaw-stipulated emoluments earned by the Directors in 2021 amounted to EUR 4.8 million (4.1 million in 2020).

Santander

Annual emolument

In 2021, the board voted not to change the fees amount set out in the 2020 policy ahead of the aforementioned exceptional decision and, per the remuneration policy approved at the 2021 AGM. Additionally, the innovation and technology committee also began to be remunerated, and its members received EUR 25,000 and its Chair, an additional EUR 70,000. The annual amounts received individually by the directors in 2021 and 2020 based on the positions held by them on the board and their membership of the board committees were as follows:

Amount per director in euros	2021	2020	
		1 Jan to 31 Mar	1 Apr to 31 Dec
Members of the board of directors	90,000	22,500	49,500
Members of the executive committee	170,000	42,500	93,500
Members of the audit committee	40,000	10,000	22,000
Members of the appointments committee	25,000	6,250	13,750
Members of the remuneration committee	25,000	6,250	13,750
Members of the risk supervision, regulation and compliance committee	40,000	10,000	22,000
Members of the responsible banking, sustainability and culture committee	15,000	3,750	8,250
Members of the innovation and technology committee	25,000	—	—
Chairman of the audit committee	70,000	17,500	38,500
Chairman of the appointments committee	50,000	12,500	27,500
Chairman of the remuneration committee	50,000	12,500	27,500
Chairman of the risk supervision, regulation and compliance committee	70,000	17,500	38,500
Chairman of the responsible banking, sustainability and culture committee	50,000	12,500	27,500
Chairman of the innovation and technology committee	70,000	—	—
Lead director*	110,000	27,500	60,500
Non-executive vice chairmen	30,000	7,500	16,500

*Mr. Bruce Carnegie-Brown, in view of the positions held on the board and its committees, in particular as chairman of the appointments and remuneration committees and as coordinating director, and the time and dedication required to properly perform such positions, has been assigned a minimum total annual remuneration of EUR 700,000 since 2015, including the annual allowance for the items corresponding to him of those indicated above and attendance fees. However, in line with the decision taken by the board of directors to reduce his fees by 20% with effect from April 1, 2020 to 31 December, which is shared by Mr. Bruce Carnegie-Brown, the same reduction was applied to this amount. Accordingly, the amount assigned for 2020 was EUR 595,000.

Attendance fees

The directors receive fees for attending board and committee meetings, excluding executive committee meetings, since no attendance fees are received for this committee.

Like the annual allotment, the board voted not to change the fees amount set out in the 2020 policy ahead of the aforementioned exceptional decision and, per the remuneration policy approved at the 2021 AGM, added attendance fees for innovation and technology committee members (which they did not receive before).

The fees for 2021 and 2020 are as follows:

Attendance fees per director per meeting in euros	2021	2020	
		1 Jan to 31 Mar	1 Apr to 31 Dec
Board of directors	2,600	2,600	2,080
Audit committee and risk supervision, regulation and compliance committee	1,700	1,700	1,360
Other committees (excluding executive committee)	1,500	1,500	1,200

ii. Salaries

The executive directors receive salaries. In accordance with the policy approved by the annual general meeting, salaries are composed of a fixed annual remuneration and a variable one, which consists in a unique incentive, which is a deferred variable remuneration plan linked to multi-year objectives, which establishes the following payment scheme:

- 40% of the variable remuneration amount, determined at year-end on the basis of the achievement of the established objectives, is paid immediately.
- The remaining 60% is deferred over five years, to be paid in five portions, provided that the conditions of permanence in the Group and non-concurrence of the malus clauses are met, and subject to long term metrics, taking into account the following accrual scheme:
  - The accrual of the first and second portion (payment in 2023 and 2024) will be conditional on none of the malus clauses being triggered.

- The accrual of the third, fourth, and fifth portion (payment in 2025, 2026 and 2027), is linked to objectives related to the period 2021—2023 and the metrics and scales associated with these objectives. The fulfilment of the objectives determines the percentage to be paid of the deferred amount in these three annuities, which, accordingly, might not be paid, where the maximum amount is the amount determined at closing of 2021, when the total variable remuneration is approved.

- In accordance with current remuneration policies, the amounts already paid will be subject to a possible recovery (clawback) by the Bank during the period set out in the policy in force at each moment.

The immediate payment (or short-term), as well as each deferred payment (linked to long term metrics and not linked to long-term metrics) will be settled 50% in cash and the remaining 50% in Santander shares.

In the case of Sergio Rial, he has been considered as an executive director since his appointment as director became effective on 30 May 2020 by virtue of Article 529 duodecies of the Spanish Companies Act in light of his role as CEO and vice-chairman of Banco Santander Brasil, S.A. In 2021 he received as fixed pay for his role as Regional head for South America, the EUR 750,000 euros that had been approved at the 2021 AGM as part of the 2021 remuneration policy. He has not received any other remuneration for executive functions in Banco Santander, S.A.

The same policy and principles above apply to Sergio Rial's remuneration as CEO in Santander Brasil.

Comparative of Executive Remuneration (Chairman and CEO)

The board resolved to maintain the same gross annual salary for Ana Botín and José Antonio Álvarez for 2021 as in 2020. It also maintained the fixed pension contribution of 22% of gross annual salary it had declared in 2020 for 2021.

Comparing with the previous year, it should be mentioned that amid the covid-19 health crisis in 2020, Ana Botín and José Antonio Álvarez proposed to reduce their total 2020 compensation (salary and bonus) by 50%.

To achieve the 50% reduction compared to 2019, the board of directors decided to apply an additional adjustment to Ana Botín's and José Antonio Alvarez's variable compensation, reducing the variable compensation by 74% in the case of Ana Botín and 79% in the case of José Antonio Álvarez.

And in 2021, the good business performance (which enabled Banco Santander to reach a 12.73% underlying RoTE, above the end of 2019), the excellent execution of our strategy (with the highest underlying attributable profit of the last 12 years), and the efficient capital management, boosted the bonus pool and thus the variable remuneration of corporate centre employees, (including executive directors).

iii. Detail by director

The detail, by bank director, of the short-term (immediate) and deferred (not subject to long-term goals) remuneration for 2021 and 2020 is provided below:

Santander

EUR thousand

	2021																			2020
	Bylaw-stipulated emoluments																			
	Annual emolument										Short-term and deferred (not subject to long-term goals) salaries of executive directors									
	Board[M]	Executive committee	Audit committee	Appointments committee	Remuneration committee	Risk supervision, regulation and compliance oversight committee	Responsible banking, sustainability and culture committee	Innovation and technology committee	Attendance fees and commissions	Fixed	Variable-immediate payment		Deferred variable		Total	Pension contribution	Other remuneration	Total	Total
											In cash	In shares	In cash	In shares					
Ana Botín	90	170	—	—	—	—	—	25	45	3,176	1,838	1,839	1,103	1,103	9,059	1,041	1,006	11,436	6,819
José Antonio Álvarez	90	170	—	—	—	—	—	25	45	2,541	1,241	1,240	744	745	6,511	783	1,536	9,160	6,019
Bruce Carnegie-Brown	276	170	—	75	75	—	—	25	80	—	—	—	—	—	—	—	—	700	595
Homaira Akbari	90	—	40	—	—	—	15	25	78	—	—	—	—	—	—	—	—	248	203
Javier Botín[A]	90	—	—	—	—	—	—	—	39	—	—	—	—	—	—	—	—	129	122
Álvaro Cardoso[B]	90	—	—	—	—	28	15	—	50	—	—	—	—	—	—	—	—	183	243
R.Martín Chávez[C]	90	—	—	25	25	40	—	95	99	—	—	—	—	—	—	—	—	374	37
Sol Daurella	90	—	—	25	25	—	15	—	84	—	—	—	—	—	—	—	—	239	214
Henrique de Castro[D]	90	—	40	—	25	—	—	25	87	—	—	—	—	—	—	—	—	267	217
Gina Díez[E]	90	—	—	1	—	—	—	—	39	—	—	—	—	—	—	—	—	130	4
Luis Isasi[F]	90	170	—	—	25	40	—	—	81	—	—	—	—	—	—	—	1,000	1,406	943
Ramiro Mato	90	170	40	—	—	40	65	—	94	—	—	—	—	—	—	—	—	499	431
Sergio Rial[G]	90	—	—	—	—	—	—	—	39	750	—	—	—	—	750	—	—	879	63
Belén Romana	90	170	40	—	—	93	15	25	100	—	—	—	—	—	—	—	—	533	418
Pamela Walkden[H]	90	—	110	—	—	27	—	—	76	—	—	—	—	—	—	—	—	303	214
Rodrigo Echenique[I]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,956
Ignacio Benjumea[J]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	276
Guillermo de la Dehesa[K]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	107
Esther Giménez-Salinas[L]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	192
Total 2021	**1,536**	**1,020**	**270**	**126**	**175**	**268**	**125**	**245**	**1,035**	**6,467**	**3,079**	**3,079**	**1,847**	**1,848**	**16,320**	**1,824**	**3,542**	**26,486**	**—**
Total 2020	**1,303**	**915**	**208**	**133**	**138**	**252**	**135**	**—**	**1,066**	**5,717**	**514**	**515**	**308**	**309**	**7,363**	**2,019**	**5,537**	**—**	**19,073**

A. All amounts received were reimbursed to Fundación Botín.
B. Director since 1 April 2018.
C. Director since 27 October 2020.
D. Director since 17 July 2019.
E. Director since 22 December 2020.
F. Director since 19 May 2020.
G. Executive director since 30 May 2020.
H. Director since 29 October 2019.
I. Stepped down as executive director on 30 April 2019. Non-executive director from 1 May 2019 to 22 December 2020.
J. Stepped down as director on 5 May 2020.
K. Stepped down as director on 3 April 2020.
L. Stepped down as director on 27 October 2020.
M Also includes emoluments for other roles in the board.

Following is the detail, by executive director, of the salaries linked to multi-year objectives at their fair value, which will only be received if the conditions of permanence in the group, non-applicability of malus clauses and achievement of the established objectives are met (or, as the case may be, of the minimum thresholds thereof, with the consequent reduction of amount agreed-upon at the end of the year) in the terms described in Note 42.

EUR thousand

	2021			2020
	Variable subject to Long-term objectives[1]			
	In cash	In shares	Total	Total
Ana Botín	1,158	1,158	2,316	420
José Antonio Álvarez	782	782	1,563	228
Total	**1,940**	**1,940**	**3,880**	**648**

1.Corresponds with the fair value of the maximum amount they are entitled to in a total of 3 years: 2025, 2026 and 2027, subject to conditions of continued service, with the exceptions provided, and to the non-applicability of malus clauses and achievement of the objectives established.

The fair value has been determined at the grant date based on the valuation report of an independent expert, Willis Towers Watson. Based on the design of the plan for 2021 and the levels of achievement of similar plans in comparable entities, the expert concludes that the reasonable range for estimating the initial achievement ratio is around 60% - 80%. Accordingly, it has been considered that the fair value is 70% of the maximum (see note 42).

Note 5.e below includes disclosures on the shares delivered from the deferred remuneration schemes in place in previous years and for which delivery conditions were met, as well as on the maximum number of shares that may be received in future years in connection with the aforementioned 2021 and 2020 variable remuneration plans.

In addition to the EUR 750,000 Sergio Rial received as Regional head for South America, he was paid the following amounts as CEO of Santander Brasil (additionally, in the following table, it is also disclosed the variable subject to long-term objectives at 70% of fair value):

2021	BRL thousand	EUR thousand
Base salary	12,645	1,985
Other fixed benefits	47	7
Pensions	7,350	1,153
Variable remuneration immediately payable and deferred (not linked to long-term objectives)	26,600	4,018
Total	**46,642**	**7,163**

EUR thousand

	2021			2020
	Variable subject to Long-term objectives			
	In cash	In shares	Total	Total
Sergio Rial	791	791	1,582	1,311

b) Remuneration of the Board members as representatives of the Bank

By resolution of the executive committee, all the remuneration received by the Bank's directors who represent the Bank on the Boards of Directors of listed companies in which the Bank has a stake, paid by those companies and relating to appointments made on or after 18 March, 2002, accrues to the Group. In 2021 and 2020 the Bank's directors did not receive any remuneration in respect of these representative duties.

On the other hand, in their personal capacity, in 2021 Álvaro Cardoso was paid BRL 2,130 thousand (EUR 334 thousand) as non-executive chairman of Banco Santander Brasil, S.A., Homaira Akbari was paid USD 190 thousand (EUR 161 thousand) as member of the board of Santander Consumer USA (SCUSA) and EUR 52 thousand as member of the Board of PagoNxt, and Henrique de Castro and R. Martín Chávez were each paid the same EUR 52 thousand as members of the board of PagoNxt. Likewise, Pamela Walkden was paid GBP 31 thousand (EUR 36 thousand) as member of Santander UK plc y Santander UK Group Holdings.

Likewise, Luis Isasi was paid EUR 1,000 thousand as non-executive chairman of the board of Santander Spain and for attending board and committee meetings (amounts paid by Banco Santander, S.A.).

c) Post-employment and other long-term benefits

In 2012, the contracts of Ms. Ana Botín and Mr. José Antonio Alvarez (and other members of the Bank's senior management) with defined benefit pension commitments were modified to transform these commitments into a defined contribution system, which covers the contingencies of retirement, disability and death. From that moment on, the Bank makes annual contributions to their pension system for their benefit.

This system gives them the right to receive benefits upon retirement, regardless of whether or not they are active at the Bank at such time, based on contributions to the system, and replaced their previous right to receive a pension supplement in the event of retirement.

Upon revision in 2021, José Antonio Álvarez's contract precluded the right to early retirement if terminated. Furthermore, Ana Botín is not entitled to early retirement if she freely resigns; however, she will still be entitled to it if Banco Santander terminates her contract before 31 August 2022, at which time early retirement will no longer be available. As long as she retains that right, she is entitled to an annual allotment equal to her total fixed remuneration, plus 30% of the average of up to her last three variable pays.

The initial balance for each of them in the new defined benefits system corresponded to the market value of the assets from which the provisions corresponding to the respective accrued obligations had materialised on the date on which the old pension commitments were transferred into the new benefits system.

Since 2013, the Bank has made annual contributions to the benefits system for executive directors and senior executives, in proportion to their respective pensionable bases, until they leave Grupo Santander or until their retirement within the Group, death, or disability.

The benefit plan system is outsourced to Santander Seguros y Reaseguros, Compañía Aseguradora, S.A., and the economic rights of the foregoing directors under this plan belong to them regardless of whether or not they are active at the Bank at the time of their retirement, death or disability.

In accordance with the provisions of the remuneration regulations, contributions made calculated on variable remuneration are subject to the discretionary pension benefits regime. Under this regime, contributions are subject to malus clauses and clawback according to the policy in force at any given time and during the same period in which the variable remuneration is deferred.

Furthermore, they must be invested in bank shares for a period of five years from the date when the executive director leaves the Group, regardless of whether or not they leave to retire. Once that period has elapsed, the amount invested in shares will be reinvested, along with the remainder of the cumulative balance corresponding to the executive director, or it will be paid to the executive director or to their beneficiaries in the event of a contingency covered by the benefits system.

As per the director´s remuneration policy approved at the 23 March 2018 general shareholder´s meeting, the system was changed with a focus on:

- Aligning the annual contributions with practices of comparable institutions.
- Reducing future liabilities by eliminating the supplementary benefits scheme in the event of death (death of spouse or parent) and permanent disability of serving directors.
- Not increasing total costs for the Bank.

The changes to the system were the following:

- Fixed and variable pension contributions were reduced to 22% of the respective pensionable bases. The gross annual salaries and the benchmark variable remuneration were increased in the corresponding amount with no increase in total costs for the Bank. The pensionable base for the purposes of the annual contributions for the executive directors is the sum of fixed remuneration plus 30% of the average of their last three variable remuneration amounts.
- The death and disability supplementary benefits were eliminated since 1 April 2018. A fixed remuneration supplement (included in other remuneration in section a.iii in this note) was implemented the same date.
- The total amount insured for life and accident insurance was increased.

The provisions recognised in 2021 and 2020 for retirement pensions and supplementary benefits (surviving spouse and child benefits, and permanent disability) were as follows:

EUR thousand		
	2021	2020
Ana Botín	1,041	1,155
José Antonio Álvarez	783	864
Total	**1,825**	**2,019**

Following is a detail of the balances relating to each of the executive directors under the welfare system as of 31 December 2021 and 2020:

EUR thousand

	2021	2020
Ana Botín	48,075	49,444
José Antonio Álvarez	18,821	18,082
Total	**66,896**	**67,526**

d) Insurance

The Group pays for life insurance policies for the Bank's directors, who will be entitled to receive benefits if they are declared disabled; in the event of death, the benefits will be payable to their heirs. The premiums paid by the Group are included in the 'Other remuneration' column of the table shown in Note 5.a.iii above. Also, the following table provides information on the sums insured for the Bank's executive directors:

Insured capital

EUR thousand

	2021	2020
Ana Botín	21,489	21,984
José Antonio Álvarez	18,028	18,703
Total	**39,517**	**40,687**

The insured capital has been modified in 2018 for Ms Ana Botín and Mr José Antonio Alvarez as part of the pension systems transformation set out in note 5.c) above, which has encompassed the elimination of the supplementary benefits systems (death of spouse and death of parent) and the increase of the life insurance annuities.

During 2021 and 2020, the Group has disbursed a total amount of EUR 25.5 million and EUR 19.5 million , respectively, for the payment of civil-liability insurance premiums. These premiums correspond to several civil-liability insurance policies that hedge, among others, directors, senior executives and other managers and employees of the Group and the Bank itself, as well as its subsidiaries, in light of certain types of potential claims. For this reason, it is not possible to disaggregate or individualize the amount that correspond to the directors and executives.

As of 31 December 2021 and 2020, no life insurance commitments exist for the Group in respect of any other directors.

e) Deferred variable remuneration systems

The following information relates to the maximum number of shares to which the executive directors are entitled at the beginning and end of 2021 and 2020 due to their participation in the deferred variable remuneration systems, which instrumented a portion of their variable remuneration relating to 2021 and prior years, as well as on the deliveries, in shares or in cash, made to them in 2021 and 2020 once the conditions for the receipt thereof had been met (see note 42):

i. Deferred conditional variable remuneration plan

From 2011 to 2015, the bonuses of executive directors and certain executives (including senior management) and employees who assume risk, who perform control functions or receive an overall remuneration that puts them on the same remuneration level as senior executives and employees who assume risk (all of whom are referred to as identified staff) have been approved by the Board of Directors and instrumented, respectively, through various cycles of the deferred conditional variable remuneration plan. Application of these cycles, insofar as they entail the delivery of shares to the plan beneficiaries, was authorized by the related Annual General Meetings.

The purpose of these plans was to defer a portion of the bonus of the plan beneficiaries (60% in the case of executive directors) over a period of five years (three years for the plans approved up to 2014) for it to be paid, where appropriate, in cash and in Santander shares. The remaining 40% portion of the bonus is paid in cash and Santander shares (in equal parts), upon commencement of this plan, in accordance with the rules set forth below.

In addition to the requirement that the beneficiary remains in Santander Group's employ, the accrual of the deferred remuneration was conditional upon none of the following circumstances existing in the opinion of the Board of Directors -following a proposal of the remuneration committee-, in relation to the corresponding year, in the period prior to each of the deliveries: (i) poor financial performance of the Group; (ii) breach by the beneficiary of internal regulations, including, in particular, those relating to risks; (iii) material restatement of the Group's consolidated financial statements, except when it is required pursuant to a change in accounting standards; or (iv) significant changes in the Group's economic capital or its risk profile. All the foregoing shall be subject in each case to the regulations of the relevant plan cycle.

Deferred amounts (whether or not contingent on multi-year targets) is earned if the beneficiary continues to work with the group14, and none of the circumstances triggering the malus clause arise before each payment, according to the section on malus and clawback clauses in the remuneration policy.

Similarly, Banco Santander can clawback any paid variable amounts in the scenarios and for the period dictated by the terms and conditions in the said policy.

On each delivery, the beneficiaries are paid an amount in cash equal to the dividends paid for the amount deferred in shares and the interest on the amount deferred in cash. If the Santander Dividendo Elección scrip dividend scheme is applied, payment will be based on the price offered by the Bank for the bonus share rights corresponding to those shares.

The maximum number of shares to be delivered is calculated taking into account the daily volume-weighted average prices for the 15 trading sessions prior to the date on which the board of directors approves the bonus for the Bank's Executive Directors for each year.

This plan and the Performance Shares (ILP) plan described below have been integrated for the executive directors and other senior managers in the deferred variable compensation plan linked to multiannual objectives, in the terms approved by the General Meeting of Shareholders held on March 18, 2016.

In the case of Sergio Rial, who does not receive any remuneration for executive duties in Banco Santander, S.A., the same policy principles, deferrals, multi year targets linked to the payment of deferred amounts and malus and clawback principles described herein apply to his variable remuneration in the subsidiary where he is the CEO.

ii. Deferred variable compensation plan linked to multiannual objectives

In the annual shareholders meeting of 18 March 2016, with the aim of simplifying the remuneration structure, improving the ex-ante risk adjustment and increasing the incidence of long-term objectives, the bonus plan (deferred and conditioned variable compensation plan) and ILP were replaced by one single plan, the deferred multiyear objectives variable remuneration plan.

The variable remuneration of executive directors and certain executives (including senior management) corresponding to 2021 has been approved by the Board of Directors and implemented through the sixth cycle of the deferred variable remuneration plan linked to multi-year objectives. The application of the plan was authorised by the annual general meeting of shareholders, as it entails the delivery of shares to the beneficiaries.

As indicated in section a.ii of this note, 60% of the variable remuneration amount is deferred over five years (three years for certain beneficiaries, not including executive directors), to be paid, where appropriate, in five portions, provided that the conditions of permanence in the group and non-concurrence of *malus* clauses are met, and subject to long term metrics, according to the following accrual scheme:

- The accrual of the first and second parts (instalments in 2023 and 2024) is conditional on none of the malus clauses being triggered.
- The accrual of the third, fourth and fifth parts (instalments in 2025, 2026 and 2027) is linked to the fulfilment of certain objectives related to the 2021-2023 period and the metrics and scales associated with those objectives, as well as to non-concurrence of malus clauses. These objectives are:
  - The growth of consolidated earnings per share in 2023 compared to 2020;
  - The relative performance of the Bank's total shareholder return (RTA) in the 2021-2023 period in relation to the weighted RTAs of a reference group of 9 credit institutions;
  - Compliance with the fully loaded ordinary level 1 capital objective for the year 2023.

The degree of compliance with the above objectives determines the percentage to be applied to the deferred amount in these three annuities, the maximum being the amount determined at the end of the year 2021 when the total variable remuneration is approved.

Both the immediate (short-term) and each of the deferred (long-term and conditioned) portions are paid 50% in cash and the remaining 50% in Santander shares.

The accrual of deferred amounts (whether or not subject to performance measures) is conditioned, in addition to the permanence of the beneficiary in the Group, to non-occurrence, during the period prior to each of the deliveries, of any the circumstances giving rise to the application of malus as set out in the Group's remuneration policy in its chapter related to malus and clawback. Likewise, the amounts already paid of the incentive will be subject to clawback by the Bank in the cases and during the term foreseen in said policy, and in accordance with the terms and conditions foreseen in it.

Malus and clawback clauses are triggered by poor financial performance of Banco Santander, a division or area, or exposures from staff as a result of an executive(s)'s management of, at least, one of these factors:

(i) Significant failures in risk management committed by the entity, or by a business unit or risk control.

(ii) The increase suffered by the entity or by a business unit of its capital needs, not foreseen at the time of generation of the exposures.

(iii) Regulatory sanctions or judicial sentences from events that could be attributable to the unit or the personnel responsible for those. Also, the breach of internal codes of conduct of the entity.

(iv) Irregular conduct, whether individual or collective. In this regard, the negative effects derived from the marketing of inappropriate products and the responsibilities of the people or bodies that made those decisions will be specially considered.

The maximum number of shares to be delivered is calculated by taking into account the average weighted daily volume of the average weighted listing prices corresponding to the fifteen trading sessions prior to the previous Friday (excluded) to the date on which the bonus is agreed by the board of executive directors of the Bank.

In the case of Mr. Sergio Rial, as explained above, he just received a fixed pay for executive duties in Banco Santander, S.A. (head for South America), and he is included as CEO of Santander Brasil in the deferred variable compensation plan linked to multiannual objectives and thus subject to the same conditions and principles of deferral, multiannual objectives, deferrals and malus and clawback herein in respect of the remuneration he receives in his role as CEO of this subsidiary.

iii. Shares assigned by deferred variable remuneration plans

The following table shows the number of Santander shares assigned to each executive director and pending delivery as of 1 January 2020, 31 December 2020 and 31 December 2021, as well as the gross shares that were delivered to them in 2020 and 2021, either in the form of an immediate payment or a deferred payment. In this case after having been appraised by the board, at the proposal of the remuneration committee, that the corresponding one-fifth of each plan had accrued. They come from each of the plans through which the variable remunerations of deferred conditional variable remuneration plans in 2015 and of the deferred conditional and linked to multi-year objectives in 2016, 2017, 2018, 2019, 2020 and 2021 were formalized.

Santander

Share-based variable remuneration

	Maximum number of shares to be delivered at January 1,2020	Shares delivered in 2020 (immediate payment 2019 variable remuneration)	Shares delivered in 2020 (deferred payment 2018 variable remuneration)	Shares delivered in 2020 (deferred payment 2017 variable remuneration)	Shares delivered in 2020 (deferred payment 2016 variable remuneration)	Variable remuneration 2020 (Maximum number of shares to be delivered)	Maximum number of shares to be delivered at December 31, 2020	Instruments matured but not consolidated at January 1, 2021	Shares delivered in 2021 (immediate payment 2020 variable remuneration)	Shares delivered in 2021 (deferred payment 2019 variable remuneration)	Shares delivered in 2021 (deferred payment 2018 variable remuneration)	Shares delivered in 2021 (deferred payment 2017 variable remuneration)	Shares delivered in 2021 (deferred payment 2016 variable remuneration)	Variable remuneration 2021 (Maximum number of shares to be delivered)	Maximum number of shares to be delivered at December 31, 2021
2015 variable remuneration															
Ms Ana Botín-Sanz de Sautuola y O'Shea	128,809	—	—	—	—	—	128,809	—	—	—	—	—	—	—	128,809
Mr José Antonio Álvarez Álvarez	85,620	—	—	—	—	—	85,620	—	—	—	—	—	—	—	85,620
	214,429						**214,429**								**214,429**
2016 variable remuneration															
Ms Ana Botín-Sanz de Sautuola y O'Shea	216,308	—	—	—	(72,102)	—	144,206	(34,177)	—	—	—	—	(72,102)	—	37,927
Mr José Antonio Álvarez Álvarez	145,998	—	—	—	(48,667)	—	97,331	(23,067)	—	—	—	—	(48,667)	—	25,597
	362,306				**(120,769)**		**241,537**	**(57,244)**					**(120,769)**		**63,524**
2017 variable remuneration															
Ms Ana Botín-Sanz de Sautuola y O'Shea	275,700	—	—	(68,925)	—	—	206,775	(112,692)	—	—	—	(68,925)	—	—	25,158
Mr José Antonio Álvarez Álvarez	184,377	—	—	(46,094)	—	—	138,283	(75,364)	—	—	—	(46,094)	—	—	16,825
	460,077			**(115,019)**			**345,058**	**(188,057)**				**(115,019)**			**41,983**
2018 variable remuneration															
Ms Ana Botín-Sanz de Sautuola y O'Shea	516,519	—	(103,304)	—	—	—	413,215		—	—	(103,304)	—	—	—	309,911
Mr José Antonio Álvarez Álvarez	345,161	—	(69,032)	—	—	—	276,129		—	—	(69,032)	—	—	—	207,097
	861,680		**(172,336)**				**689,344**				**(172,336)**				**517,008**
2019 variable remuneration															
Ms Ana Botín-Sanz de Sautuola y O'Shea	887,193	(354,877)	—	—	—	—	532,316	—	—	(106,463)	—	—	—	—	425,853
Mr José Antonio Álvarez Álvarez	592,915	(237,166)	—	—	—	—	355,749	—	—	(71,150)	—	—	—	—	284,599
	1,480,108	**(592,043)**					**888,065**			**(177,613)**					**710,452**

Santander

Share-based variable remuneration

	Maximum number of shares to be delivered at January 1,2020	Shares delivered in 2020 (immediate payment 2019 variable remuneration)	Shares delivered in 2020 (deferred payment 2018 variable remuneration)	Shares delivered in 2020 (deferred payment 2017 variable remuneration)	Shares delivered in 2020 (deferred payment 2016 variable remuneration)	Variable remuneration 2020 (Maximum number of shares to be delivered)	Maximum number of shares to be delivered at December 31, 2020	Instruments matured but not consolidated at January 1, 2021	Shares delivered in 2021 (immediate payment 2020 variable remuneration)	Shares delivered in 2021 (deferred payment 2019 variable remuneration)	Shares delivered in 2021 (deferred payment 2018 variable remuneration)	Shares delivered in 2021 (deferred payment 2017 variable remuneration)	Shares delivered in 2021 (deferred payment 2016 variable remuneration)	Variable remuneration 2021 (Maximum number of shares to be delivered)	Maximum number of shares to be delivered at December 31, 2021
2020 variable remuneration															
Ms Ana Botín-Sanz de Sautuola y O'Shea	—	—	—	—	—	310,615	310,615	—	(124,246)	—	—	—	—	—	186,369
Mr José Antonio Álvarez Álvarez	—	—	—	—	—	168,715	168,715	—	(67,486)	—	—	—	—	—	101,229
Mr Sergio Rial[2]	—	—	—	—	—	355,263	355,263	—	(142,105)	—	—	—	—	—	213,158
						834,593	**834,593**		**(333,837)**						**500,756**
2021 variable remuneration[1]															
Ms Ana Botín-Sanz de Sautuola y O'Shea	—	—	—	—	—	—	—	—	—	—	—	—	—	1,480,622	1,480,622
Mr José Antonio Álvarez Álvarez	—	—	—	—	—	—	—	—	—	—	—	—	—	999,259	999,259
Mr Sergio Rial[2]	—	—	—	—	—	—	—	—	—	—	—	—	—	625,000	625,000
														3,104,881	**3,104,881**

1. For each director, 40% of the shares indicated correspond to the short-term variable (or immediate payment). The remaining 60% is deferred for delivery, where appropriate, by fifths in the next five years, the last three being subject to the fulfilment of multiannual objectives.
2. Mr. Sergio Rial's share-based variable remuneration awarded in shares of Banco Santander (Brasil). He has the right to a maximum of 51,483 Santander shares and 269,148 options over Santander shares for his participation in the 2019 Digital Transformation Award.
   In addition, Mr. Rodrigo Echenique maintains the right to a maximum of 518,517 shares arising from his participation in the corresponding plans during his term as executive director.

In addition, the table below shows the cash delivered in 2021 and 2020, by way of either immediate payment or deferred payment, in the latter case once the Board had determined, at the proposal of the remuneration committee, that one-fifth relating to each plan had accrued:

EUR thousand

	2021		2020	
	Cash paid (immediate payment 2020 variable remuneration)	Cash paid (deferred payments from 2019, 2018, 2017 and 2016 variable remuneration)	Cash paid (immediate payment 2019 variable remuneration)	Cash paid (deferred payments from 2018, 2017, 2016 and 2015 variable remuneration)
Ms. Ana Botín-Sanz de Sautuola y O'Shea	334	1,550	1,302	1,383
Mr. José Antonio Álvarez Álvarez	181	1,037	870	925
Total	**515**	**2,586**	**2,172**	**2,308**

iv. Information on former members of the Board of Directors

The chart below includes information on the maximum number of shares to which former members of the Board of Directors who ceased in office prior to 1 January 2020 are entitled for their participation in the various deferred variable remuneration systems, which instrumented a portion of their variable remuneration relating to the years in which they were Executive Directors. Also set forth below is information on the deliveries, whether in shares or in cash, made in 2021 and 2020 to former board members, upon achievement of the conditions for the receipt thereof (see note 42):

MAXIMUM NUMBER OF SHARES TO BE DELIVERED

	2021	2020
Deferred conditional variable remuneration plan (2015)	—	60,847
Deferred conditional variable remuneration plan and linked to objectives (2016)	60,251	65,502
Deferred conditional variable remuneration plan and linked to objectives (2017)	64,659	47,956
Deferred conditional variable remuneration plan and linked to objectives (2018)	164,462	—
Deferred conditional variable remuneration plan and linked to objectives (2019)	130,790	—

NUMBER OF SHARES DELIVERED

	2021	2020
Deferred conditional variable remuneration plan (2015)	92,557	60,847
Performance shares plan ILP (2015)	—	—
Deferred conditional variable remuneration plan and linked to objectives (2016)	60,254	32,751
Deferred conditional variable remuneration plan and linked to objectives (2017)	32,330	35,132
Deferred conditional variable remuneration plan and linked to objectives (2018)	54,821	—
Deferred conditional variable remuneration plan and linked to objectives (2019)	32,698	—

In addition, EUR 1,213 thousand and EUR 612 thousand relating to the deferred portion payable in cash of the aforementioned plans were paid each in 2021 and 2020.

f) Loans

Grupo Santander's direct risk exposure to the bank's directors and the guarantees provided for them are detailed below. These transactions were made on terms equivalent to those that prevail in arm's-length transactions or the related compensation in kind was recognized:

EUR thousand

	2021			2020		
	Loans and credits	Guarantees	Total	Loans and credits	Guarantees	Total
Mrs Ana Botín-Sanz de Sautuola y O´Shea	25	—	25	14	—	14
Mr José Antonio Álvarez Álvarez	4	—	4	5	—	5
Mr Bruce Carnegie-Brown	—	—	—	—	—	—
Mr Javier Botín-Sanz de Sautuola y O´Shea	16	—	16	2	—	2
Mrs Sol Daurella Comadrán	69	—	69	22	—	22
Mrs Belén Romana García	—	—	—	—	—	—
Mr Ramiro Mato García-Ansorena	—	—	—	—	—	—
Mrs Homaira Akbari	—	—	—	—	—	—
Mr Álvaro Cardoso de Souza	—	—	—	—	—	—
Mr Henrique de Castro	—	—	—	—	—	—
Mrs Pamela Ann Walkden	—	—	—	—	—	—
Mr Luis Isasi Fernández de Bobadilla	—	—	—	—	—	—
Mr Sergio Agapito Lires Rial	1	—	1	—	—	—
Mr R. Martín Chávez Márquez	—	—	—	—	—	—
Mrs Gina Lorenza Díez Barroso	—	—	—	6	—	6
	115	**—**	**115**	**49**	**—**	**49**

g) Senior managers

The table below includes the amounts relating to the short-term remuneration of the members of senior management at 31 December 2021 and those at 31 December 2020, excluding the remuneration of the executive directors, which is detailed above:

EUR thousand

		Short-term salaries and deferred remuneration							
			Variable remuneration (bonus) - Immediate payment		Deferred variable remuneration				
Year	Number of persons	Fixed	In cash	In shares[2]	In cash	In shares[3]	Pensions	Other remuneration[1]	Total
2021	15	19,183	8,402	8,402	3,648	3,648	5,542	5,055	53,880
2020	18	21,642	5,739	5,740	2,470	2,471	6,039	6,312	50,413

1. Includes other remuneration items such as life and medical insurance premiums and localization aids.
2. The amount of immediate payment in shares for 2021 is 2,706,819 shares (2,135,700 Santander shares in 2020).
3. The deferred amount in shares not linked to long-term objectives for 2021 is 1,175,191 shares (919,308 Santander shares in 2020).

At the annual general meeting on 26 March 2021, shareholders approved the 2021 Digital Transformation Incentive, a variable remuneration scheme that delivers Santander shares and share options if the group hits major milestones on its digital roadmap.

In 2021, no senior executives are included in this programme. However, in 2020, three senior executives were included within this plan (aimed at a group of up to 250 employees whose functions are deemed essential to Santander Group's growth and digital transformation) and, thus, can receive a total of EUR 1,700 thousand to be paid in thirds on the third, fourth and fifth anniversary of the authorisation date (2024, 2025 and 2026). This amount was implemented in 316,574 Santander shares and 944,445 options over Santander shares, using for these purposes the fair value of the options at the moment of their grant (EUR 0.90).

See note 42 to the 2021, Bank's financial statement for further information on the Digital Transformation Incentive.

In 2021, the ratio of variable to fixed pay components was 125% of the total for senior managers, well within the maximum limit of 200% set by 2021 AGM.

Also, the detail of the breakdown of the remuneration linked to long-term objectives of the members of senior management at 31 December 2021 and 31 December 2020 is provided below. These remuneration payments shall be received, as the case may be, in the corresponding deferral periods, upon achievement of the conditions stipulated for each payment (see note 42):

EUR thousand

		Variable remuneration subject to long-term objectives[1]		
Year	Number of people	Cash payment	Share payment	Total
2021	15	3,830	3,830	7,660
2020	18	2,594	2,594	5,188

1.Relates to the fair value of the maximum annual amounts for years 2025, 2026 and 2027 of the sixth cycle of the deferred conditional variable remuneration plan (2024, 2025 and 2026 for the fifth cycle of the deferred variable compensation plan linked to annual objectives for the year 2020).

Senior executive vice presidents who retired in 2021 and, therefore, were not members of senior management at year-end, received in 2021 salaries and other remuneration amounting to EUR 5,294 thousand (EUR 5,984 thousand in 2020). Likewise, these same individuals have generated as senior managers the right to obtain variable remuneration linked to long-term objectives for a total amount of EUR 55 thousand (this right has been generated in 2020 for a total amount of EUR 133 thousand).

The maximum number of Santander shares that the members of senior management at each plan grant date (excluding executive directors) were entitled to receive as of 31 December 2021 and 31 December 2020 relating to the deferred portion under the various plans then in force is the following (see note 42):

Maximum number of shares to be delivered

	2021	2020
Deferred conditional variable remuneration plan (2015)	—	179,617
Deferred conditional variable remuneration plan (2017)	—	2,786
Deferred conditional variable remuneration plan (2018)	3,475	6,949
Deferred conditional variable remuneration plan and linked to objectives (2016)	150,445	417,818
Deferred conditional variable remuneration plan and linked to objectives (2017)	164,428	791,360
Deferred conditional variable remuneration plan and linked to objectives (2018)	803,056	1,512,992
Deferred conditional variable remuneration plan and linked to objectives (2019)	1,274,450	2,154,312
Deferred conditional variable remuneration plan and linked to objectives (2020)	1,829,720	—

Since the conditions established in the corresponding deferred share-based remuneration schemes for prior years had been met, the following number of Santander shares was delivered in 2021 and 2020 to the senior management, in addition to the payment of the related cash amounts:

Number of shares delivered

	2021	2020
Deferred conditional variable remuneration plan (2015)	146,930	179,614
Deferred conditional variable remuneration plan (2017)	2,786	2,786
Deferred conditional variable remuneration plan (2018)	3,474	3,474
Deferred conditional variable remuneration plan and linked to objectives (2016)	131,938	170,185
Deferred conditional variable remuneration plan and linked to objectives (2017)	79,104	219,363
Deferred conditional variable remuneration plan and linked to objectives (2018)	267,686	342,884
Deferred conditional variable remuneration plan and linked to objectives (2019)	321,006	—
Deferred conditional variable remuneration plan and linked to objectives (2020)	1,742,419	—

As indicated in note 5.c above, senior management participate in the benefit system created in 2012, which covers the contingencies of retirement, disability and death. Banco Santander makes annual contributions to the benefit plans of its senior managers. In 2012, the contracts of the senior managers with benefit pension commitments were amended to transform them into a contribution system. The system, which is outsourced to Santander Seguros y Reaseguros, Compañía Aseguradora, S.A., gives senior managers the right to receive benefits upon retirement, regardless of whether or not they are active at Banco Santander at such time, based on contributions to the system. This new system replaced their previous right to receive a pension supplement in the event of retirement. In the event of pre-retirement, and up to the retirement date, senior managers appointed prior to September 2015 are entitled to receive an annual allowance.

In addition, further to applicable remuneration regulations, from 2016 (inclusive), a discretionary pension benefit component of at least 15% of total remuneration in contributions to the pension system has been included. Under the regime corresponding to these discretionary benefits, the contributions that are calculated on variable remunerations are subject to malus and clawback clauses, subject to policies applicable at each time, and during the same period in which the variable remuneration is deferred.

Likewise, the annual contributions calculated on variable remunerations must be invested in Bank shares for a period of five years from the date that the senior manager leaves the Group, regardless of whether or not they leave to retire. Once that period has elapsed, the amount invested in shares will be reinvested, along with the remainder of the cumulative balance corresponding to the senior manager, or it will be paid to the senior manager or to their beneficiaries in the event of a contingency covered by the benefits system.

The contracts of some senior executives were modified at the beginning of 2018 with the same objective and changes indicated in section c of this note for Ms Ana Botín and Mr José Antonio Álvarez. The modifications, which are aimed at aligning the annual contributions with the practices of comparable institutions and reducing the risk of future obligations by eliminating the supplementary scheme for death (widowhood and orphanhood) and permanent disability in service without increasing the costs to the bank, are as follows:

- Contributions to the pensionable bases were reduced. Gross annual salaries were increased in the corresponding amount.
- The death and disability supplementary benefits were eliminated since January 1, 2018. A fixed remuneration supplement reflected in other remuneration in the table above was implemented on the same date.
- The amounts insured for life and accident insurance were increased.

All of the above was done without an increase in total cost for the Bank.

The balance as of 31 December 2021 in the pension system for those who were part of senior management during the year amounted to EUR 64.3 million (EUR 59.4 million at 31 December 2020).

The net charge to income corresponding to pension and supplementary benefits for widows, orphans and permanent invalidity amounted to EUR 5.5 million in 2021 (EUR 6.4 million in 31 December 2020).

In 2021 and 2020 there have been no payments in the form of a single payment of the annual voluntary pre-retirement allowance.

Additionally, the capital insured by life and accident insurance at 31 December 2020 of this group amounts to EUR 100 million (EUR 135.1 million at 31 December 2020).

h) Post-employment benefits to former Directors and former executive vice presidents

The post-employment benefits and settlements paid in 2021 to former directors of the Bank, other than those detailed in note 5.c amounted to EUR 5.6 million and EUR 11.2 million in 2020, respectively. Also, the post-employment benefits and settlements paid in 2021 to former executive vice presidents amounted to EUR 51.6 million and EUR 10.26 million in 2020, respectively.

Contributions to insurance policies that hedge pensions and complementary widowhood, orphanhood and permanent disability benefits to previous members of the Bank's board of directors, amounted to EUR 0.17 million in 2021 (EUR 0.17 million in 2020). Likewise, contributions to insurance policies that hedge pensions and complementary widowhood, orphanhood and permanent disability benefits for previous senior managers amounted to EUR 4.4 million in 2021 (EUR 5.8 million in 2020).

During the 2021 financial year, no release or charge was recorded in the consolidated income statement for pension commitments and similar obligations held by the Group with previous former members of the bank's board of directors (in 2020, five million releases were recorded), and no provisions/releases has been recorded in respect of former senior managers in 2021 and 2020.

In addition, 'Provisions - Pension Fund and similar obligations' in the consolidated balance sheet as at 31 December 2021 included EUR 50 million in respect of the post-employment benefit obligations to former Directors of the Bank (EUR 52 million at 31 December 2020) and EUR 114 million corresponding to former senior managers (EUR 159 million at 31 December 2020).

i) Pre-retirement and retirement

The board of directors approved an amendment to the contracts of the executive directors whereby:

- Ms Ana Botín ceases to have the right to pre-retire if she leaves the Bank out of her own volition, keeping this right in case of termination by the Bank until 1 September 2022. After this date, she does not have the right to pre-retire. While she keeps this right she will be entitled to an annual allotment equal to the sum of her fixed remuneration and 30% of the average amount of her last variable remuneration, to a maximum of three. This allotment is subject to the *malus* and clawback provisions in place for a period of five years.
- Mr. José Antonio Álvarez ceases to have the right to pre-retire in case of termination of his contract.

j) Contract termination

The executive directors and senior managers have indefinite-term employment contracts. Executive directors or senior managers whose contracts are terminated voluntarily or due to breach of duties are not entitled to receive any economic compensation. If Banco Santander terminates the contract for any other reason, they will be entitled to the corresponding legally-stipulated termination benefit, without prejudice to any compensation that may for non-competition obligations, as detailed in the directors' remuneration policy.

If Banco Santander were to terminate her contract, Ms. Ana Botín-Sanz de Sautuola y O'Shea would have to remain at Banco Santander's disposal for a period of 4 months in order to ensure an adequate transition, and would receive her fixed salary during that period.

k) Information on investments held by the directors in other companies and conflicts of interest

None of the members of the board of directors have declared that they or persons related to them may have a direct or indirect conflict of interest with the interests of Banco Santander, S.A., as set forth in Article 229 of the Corporate Enterprises Act.

Santander

6. Loans and advances to central banks and credit institutions

Set forth below is the breakdown of 'Loans and advances to credit institutions' according to their classification, nature and currency of the transactions:

EUR million

	2021	2020
CENTRAL BANKS		
Classification		
Financial assets held for trading	1,118	—
Financial assets designated at fair value through profit or loss	—	482
Financial assets designated at fair value through other comprehensive income	—	—
Financial assets at amortized cost	26	21
	1,144	**503**
Breeakdown by product		
Reverse repurchase agreements	1,118	482
Other term loans	25	20
Advances different from loans	1	1
Of which, impaired assets	—	—
Of which, valuation adjustments for impairment	—	—
	1,144	**503**
Currency		
Euro	1,143	502
US Dollars	1	1
	1,144	**503**
CREDIT INSTITUTIONS		
Classification		
Financial assets held for trading	6,980	3
Financial assets designated at fair value through profit or loss	3,445	9,888
Financial assets designated at fair value through other comprehensive income	—	—
Financial assets at amortized cost	35,084	34,159
	45,509	**44,050**
Breakdown by product		
Reverse repurchase agreements	13,602	15,897
Other term loans	21,192	17,671
Non-loans advances	10,715	10,482
Of which, impaired assets	—	—
Of which, valuation adjustments for impairment	*(4)*	*(6)*
	45,509	**44,050**
Currency		
Euro	32,341	30,815
Pound sterling	1,493	1,555
US dollar	11,395	10,632
Chilean pesos	3	741
Brazilian real	—	—
Other currencies	277	307
	45,509	**44,050**
TOTAL	**46,653**	**44,553**

The loans and advances classified in the 'Financial assets held for trading' portfolio correspond to temporary acquisitions of assets from Spanish and foreign institutions.

Deposits in credit institutions classified as 'Financial assets at amortized cost' are mainly term accounts and guarantees given in cash to credit institutions.

The loans and advances to credit institutions classified under 'Financial assets at amortized' are mainly time accounts and deposits. In addition, at December 31, 2021, there were outstanding balances with central banks and credit institutions of EUR 88,268 million and EUR 2,284 million, respectively (2020: EUR 63,984 million and EUR 2,275 million, respectively). The increase occurs due to the liquidity management carried out by the Bank. These balances are included under 'Cash, cash balances at central banks and other deposits on demand'.

Note 48 shows the details of the maturity terms of 'Financial assets at amortized cost' and 'Cash, cahs balances at central banks and other deposits on demand'.

The breakdown as of December 31, 2021 of the exposure and the provision fund for fiancial assets at amortized cost is EUR 35,114 million and EUR 4 million, respectively, all in Phase 1 (EUR 34,187 million and EUR 6 million, also Phase 1, in 2020).

7. Debt instruments

The detail, by classification, type, listing status and currency, of 'Debt instruments' in the accompanying balance sheets is as follows:

EUR millon

	2021	2020
Classification		
Financial assets held for trading	14,320	18,243
Non-trading financial assets mandatorily at fair value through profit or loss	734	671
Financial assets designated at fair value through profit or loss	—	—
Financial assets designated at fair value through other comprehensive income	9,394	15,146
Financial assets at amortized cost	17,208	11,413
	41,656	**45,473**
Type		
Central banks	892	362
Public sector	13,358	23,681
Credit institutions	14,771	10,123
Other financial institutions	11,356	10,169
Non-financial institutions	1,279	1,138
Of which, impaired assets	*144*	*134*
Of which, value adjustments for impairment	*(148)*	*(74)*
	41,656	**45,473**
Currency		
Euro	27,246	32,431
US dollar	7,764	6,105
Pound sterling	4,161	3,903
Brazilian real	1,245	1,491
Other currencies	1,240	1,543
	41,656	**45,473**

As of December 31, 2021, the nominal amount of the debt securities subject to own obligations, mostly as collateral for financing lines received by the Bank, amounts to EUR 14,877 million (EUR 9,495 million as of December 31 2020), of which EUR 8,067 million correspond to Spanish Public Debt (EUR 5,512 million as of December 31, 2020).

The breakdown as of December 31, 2021 of the exposure, by phase of impairment, of the assets subject to impairment is EUR 26,606 million in phase 1 and EUR 144 million in phase 3. In 2020 it was EUR 26,500 million in phase 1 and EUR 134 million in phase 3.

The breakdown as of December 31, 2021 of the provision fund by phase of impairment of assets subject to impairment is EUR 33 million in phase 1 and EUR 115 million in phase 3. In 2020 it was EUR 9 million in phase 1 and EUR 65 million in phase 3.

Note 25.e) shows the details of 'Other comprehensive income' accumulated in Equity for the 'Financial Assets designated at fair value through other comprehensive income'.

Note 48 contains details of the maturity periods of 'Loans and Advances and Financial Assets designated at fair value through other comprehensive income'.

8. Equity instruments

a) Breakdown

The detail, by classification and type, of Equity instruments in the accompanying balance sheets is as follows:

EUR million

	2021	2020
Classification		
Financial assets held for trading	14,619	9,758
Non-trading financial assets mandatorily at fair value through profit or loss	908	305
Financial assets designated at fair value through other comprehensive income	1,705	1,942
	17,232	**12,005**
Type		
Shares of Spanish companies	3,818	3,276
Shares of foreign companies	12,843	8,396
Investment fund units and shares	571	333
	17,232	**12,005**

Note 25.c contains a detail of the 'Other comprehensive income', recognized in equity, on 'Financial assets designated at fair value through other comprehensive income'.

b) Changes

The changes in 'Non-trading financial assets mandatorily at fair value through profit or loss' and 'Financial assets at fair value through other comprehensive income' during 2021 and 2020 were as follows:

EUR million

	2021	2020*
Balance at December 31 of the previous year	1,942	1,856
Purchases and capital increases	2	1,433
Of which		
Project Quasar Investments 2017, S.L.	—	*956*
Disposals and capital reductions	(4)	(372)
Of which		
Saudi British Bank	—	*(326)*
Valuation adjustment and other items*	(235)	(975)
Balance at end of the year	**1,705**	**1,942**

* Changes in value occurred during the year 2020, due to the fall in prices of listed companies covered under this heading.

During the 2021 financial year, there has been a reduction in the fair value of the stake in Project Quasar Investments 2017, S.L. derived from the updating of the valuation of the assets of said company, for an import of EUR 250 million.

In September 2020, as a result of the loss control over Project Quasar Investments 2017, S.L., Banco Santander's holding in the portfolio, until then registered under the heading 'Associated Entities' (see note 13 a.ii) and amounting to EUR 956 million, was reclassified to this portfolio.

Also, on September 7, 2020 and on December 1, 2020, Banco Santander proceeded to sell its shares owned by Saudi British Bank, which resulted in a reduction of its share valued at that time EUR 326 million.

c) Notifications of acquisitions of investments

The notifications of the acquisitions and disposals of holdings in investees made by the Bank in 2021, in compliance with Article 155 of the Spanish Limited Liability Companies Law and Article 125 of Spanish Securities Market Law 24/1998, are listed in appendix IV.

9. Derivatives (assets and liabilities) and Short positions

a) Trading derivatives

The detail, by type of inherent risk, of the fair value of the trading derivatives arranged by Banco Santander at 31 December 2021 and 2020 is as follows:

EUR million

	2021		2020	
	Debit balance	Credit balance	Debit balance	Credit
Interest rate	26,763	23,483	35,280	31,484
Equity instruments	1,393	955	1,873	918
Currency and Gold	13,739	15,911	16,062	17,986
Credit	104	252	77	223
Commodities	—	—	—	—
Others	24	71	70	65
Total	**42,023**	**40,672**	**53,262**	**50,676**

b) Short positions

The following is a breakdown of short positions:

EUR million

	2021	2020
Securities lending		
Equity instruments	318	289
Uncovered on assignments		
Debt instruments	8,926	10,049
Total	**9,244**	**10,338**

10. Loans and advances to customers

a) Detail

The detail, by classification, of 'Loans and advances to customers' on the balance sheets is as follows:

EUR million

	2021	2020
Financial assets held for trading	7,025	71
Non-trading financial assets mandatorily at fair value through profit or loss	713	1,249
Financial assets designated at fair value through profit or loss	9,958	23,529
Financial assets at fair value through other comprehensive income	3,936	5,535
Financial assets at amortized cost	286,735	265,427
Loans and advances to customers (carrying amount)	**308,367**	**295,811**
Of which		
Impairment losses	*(6,899)*	*(6,981)*
Loans and advances to customers disregarding impairment losses	**315,266**	**302,792**

Note 48 shows the details of the maturity periods of financial assets at amortized cost.

At 31 December 2021 and 2020, there were no loans and advances to customers for material amounts without fixed maturity dates.

b) Breakdown

The following is a breakdown of the loans and advances granted to Banco Santander´s clients, which include exposure to the Bank´s credit risk in its main activity, without considering the balance of impairment reserve or the valuation adjustments depending on the modality and situation of the operations, the geographical area of the residence of the borrower and the modality of interest rate of the operation:

EUR million

	2021	2020
Loan type and status		
On demand and with a short prior period	3,167	2,473
Credit cards receivables	1,269	1,264
Commercial credit	27,423	15,920
Finance leases	2,965	2,951
Reverse repurchase agreements	6,459	14,700
Other term loans	255,799	246,679
Non loans advances	11,285	11,824
Of which		
Impaired assets	*12,882*	*13,524*
Impairment losses	*(6,899)*	*(6,981)*
Book value	**35,084**	**295,811**
Gross book value	**315,266**	**302,792**
Geographical area		
Spain	211,525	213,407
European Union (excluding Spain)	28,469	27,949
United States of America and Puerto Rico	25,065	22,624
Other OECD countries	28,186	20,224
Latin America (non-OECD)	9,548	7,704
Rest of the world	12,473	10,884
	315,266	**302,792**
Interest rate:		
Fixed rate	143,101	137,397
Floating rate	172,165	165,395
	315,266	**302,792**

At December 31, 2021 and 2020 the Bank had EUR 13,819 and 11,767 million, respectively, of loans and advances granted to Spanish public administrations whose rating at December 31, 2021 is A (rating at December 31, 2020 was A) and with EUR 2,085 and 1,691 million, respectively, granted to the Public Sector of other countries (as of December 31, 2021 this amount was composed, based on the rating of the issuer as follows: 1% AAA, 19% AA, 20% A, 12% BBB and 48% lower than BBB).

The above-mentioned ratings were obtained by converting the internal ratings awarded to customers by Banco Santander (see note 49) into the external ratings classification established by Standard & Poor's, in order to make them more readily comparable.

Without considering the Public Administrations, the amount of the loans and advances at 31 December 2021 and 2020 amounts to EUR 299,362 million and EUR 289,334 million, of which EUR 286,480 million and EUR 275,810 million are classified as performing, respectively.

The following is a detail, by activity, of the loans to customers at 31 December 2021, net of impairment losses:

EUR million

			Secured loans						
			Net exposure		Loan-to-value ratio***				
	Total*	Without collateral	Of which, property collateral	Of which, other collateral	Less than or equal to 40%	More than 40% and less than or equal to 60%	More than 60% and less than or equal to 80%	More than 80% and less than or equal to 100%	More than 100%
Public sector	14,030	13,280	163	587	56	79	25	590	—
Other financial institutions and individual traders (business financial activity)	54,658	38,209	1,198	15,251	572	614	222	14,628	413
Non-financial companies and individual entrepreneurs (non-financial business activity) (broken down by purpose)	150,865	107,895	21,371	21,599	8,968	7,388	4,735	16,563	5,316
Of which									
Construction and property development (including land)	*2,418*	*11*	*2,388*	*19*	*1,011*	*763*	*500*	*24*	*109*
Civil engineering construction	*1,690*	*943*	*33*	*714*	*16*	*76*	*10*	*603*	*42*
Large companies	*96,636*	*74,601*	*5,847*	*16,188*	*2,773*	*2,318*	*1,443*	*12,014*	*3,487*
SMEs and individual traders	*50,121*	*32,340*	*13,103*	*4,678*	*5,168*	*4,231*	*2,782*	*3,922*	*1,678*
Other households (broken down by purpose)	77,529	9,035	66,938	1,556	18,584	21,058	21,118	5,069	2,665
Of which									
Residential	*61,961*	*746*	*61,023*	*192*	*16,680*	*19,288*	*19,345*	*4,166*	*1,736*
Consumer loans	*8,607*	*7,782*	*412*	*413*	*193*	*154*	*239*	*160*	*79*
Other purposes	*6,961*	*507*	*5,503*	*951*	*1,711*	*1,616*	*1,534*	*743*	*850*
Total*	**297,082**	**168,419**	**89,670**	**38,993**	**28,180**	**29,139**	**26,100**	**36,850**	**8,394**
Memorandum item									
*Refinanced and restructured transactions***	*15,301*	*7,542*	*6,472*	*1,287*	*1,517*	*1,466*	*1,144*	*1,514*	*2,118*

* Not including loan advances.
** Includes the net balance of value adjustments associated with impaired assets.
*** The ratio is the carrying amount of the transactions at 31 December 2021 calculated using the latest available appraisal value of the collateral.

Note 49 contains information relating to the forborne loan portfolio.

Below is a breakdown of the movement in gross exposure by impairment stage of loans and advances from customers recorded under the headings 'Financial assets at amortized cost' and 'Financial assets at fair value through other comprehensive income' under Bank of Spain Circular 4/2017 to 31 December 2021 and 2020:

2021

EUR million	Stage 1	Stage 2	Stage 3	Total
Balance at beginning of the year	252,388	12,031	13,524	277,943
Movements				
Transfers				
Transfer to Stage 2 from Stage 1	(8,873)	8,873		—
Transfer to Stage 3 from Stage 1	(1,368)		1,368	—
Transfer to Stage 3 from Stage 2		(1,116)	1,116	—
Transfer to Stage 1 from Stage 2	1,386	(1,386)		—
Transfer to Stage 2 from Stage 3		357	(357)	—
Transfer to Stage 1 from Stage 3	36		(36)	—
Net changes on financial assets	24,411	(2,051)	(278)	22,082
Failed			(2,455)	(2,455)
Differences in change and other movements				
Balance at end of the year	**267,980**	**16,708**	**12,882**	**297,570**

2020

EUR million	Stage 1	Stage 2	Stage 3	Total
Balance at beginning of the year	226,826	9,288	13,994	250,108
Movements				
Transfers				
Transfer to Stage 2 from Stage 1	(6,288)	6,288		—
Transfer to Stage 3 from Stage 1	(812)		812	—
Transfer to Stage 3 from Stage 2		(1,910)	1,910	—
Transfer to Stage 1 from Stage 2	1,818	(1,818)		—
Transfer to Stage 2 from Stage 3		301	(301)	—
Transfer to Stage 1 from Stage 3	259		(259)	—
Net changes on financial assets	30,585	(118)	(702)	29,765
Failed	—	—	(1,930)	(1,930)
Differences in change and other movements				
Balance at end of the year	**252,388**	**12,031**	**13,524**	**277,943**

As of December 31, 2021, the total net exposure of loans and advances to the Bank's customers is EUR 290,671 million, of which EUR 267,471 million correspond to phase 1, EUR 16,002 million to phase 2 and EUR 7,198 millionto phase 3. This exposure includes EUR 233 million (EUR 284 million as of December 31, 2020) in impaired assets purchased with impairment, classified in phase 3, which correspond mainly to business combinations carried out by the Bank.

c) Impairment losses on loans and advances to customers at amortized cost and at fair value through other comprehensive income

The changes in the impairment losses on the assets making up the balances of financial assets at amortized cost and at fair value through other comprehensive income 'Loans and advances to customers':

EUR million

	2021	2020
Balance at beginning of the year	6,981	6,245
Net impairment losses charged to income for the year	2,304	2,577
Of which		
Impairment losses charged to profit or loss	*3,535*	*4,075*
Impairment losses reversed with a credit to profit or loss	*(1,231)*	*(1,498)*
Write-off of impaired balances against recorded impairment allowance	(2,455)	(1,930)
Exchange differences and other changes	69	89
Balance at end of the year	**6,899**	**6,981**
Of which	—	
By status of the asset		
Impaired assets	*5,684*	*5,782*
Of which, due to country risk	*7*	*—*
Other assets	*1,208*	*1,199*
Balance at end of the year	**6,899**	**6,981**
Of which		
Individually calculated	*881*	*909*
Collective calculated	*6,018*	*6,072*

The net provision charged to results for the year includes provisions for renegotiation or contractual modification for EUR 75 million (EUR 38 million on December 31, 2020).

Taking into account the assets in suspense recovered, which amount to EUR 89 million as of December 31, 2021 (EUR 82 million as of December 31, 2020) and adding to the net provision of the previous table, the impairment of 'Credit Entities and Debt Securities' (see notes 6 and 7), the amount recorded under the heading 'Impairment or reversal of impairment of financial assets not measured at fair value through profit or loss and net gains or losses' , due to changes in 'Financial assets at fair value with changes in other comprehensive income' and 'Financial assets at amortized cost', amounts to EUR 2,287 million as of December 31, 2021 (EUR 2,559 million as of December 31, 2020) .

The following is the movement of loan loss provisions broken down by impairment stage of loans and advances to customers, during 2021 and 2020:

2021

EUR million

	Stage 1	Stage 2	Stage 3	Total
Balance at beginning of the year	485	714	5,782	6,981
Transfers				
Transfer to Stage 2 from Stage 1	(19)	248		229
Transfer to Stage 3 from Stage 1	(52)		240	188
Transfer to Stage 3 from Stage 2		(119)	384	265
Transfer to Stage 1 from Stage 2	4	(76)		(72)
Transfer to Stage 2 from Stage 3		23	(77)	(54)
Transfer to Stage 1 from Stage 3	1		(13)	(12)
Net changes of the exposure and modifications in the credit risk	71	(84)	1,773	1,760
Changes due to update in the methodology of estimates of the entity				
Write-offs			(2,455)	(2,455)
FX and other movements	19	—	50	69
Gross carrying amount end of the year	**509**	**706**	**5,684**	**6,899**

2020

EUR million

	Stage 1	Stage 2	Stage 3	Total
Balance at beginning of the year	335	513	5,397	6,245
Transfers				
Transfer to Stage 2 from Stage 1	(138)	242		104
Transfer to Stage 3 from Stage 1	(94)		382	288
Transfer to Stage 3 from Stage 2		(122)	288	166
Transfer to Stage 1 from Stage 2	10	(82)		(72)
Transfer to Stage 2 from Stage 3		22	(65)	(43)
Transfer to Stage 1 from Stage 3	6		(19)	(13)
Net changes of the exposure and modifications in the credit risk	359	131	1,657	2,147
Changes due to update in the methodology of estimates of the entity				
Write-offs			(1,930)	(1,930)
FX and other movements	7	10	72	89
Gross carrying amount end of the year	**485**	**714**	**5,782**	**6,981**

d) Impaired assets

The detail of the movement in the balance of financial assets classified as 'Loans and advances to customers' and considered to be impaired by reason of their credit risk:

EUR million

	2021	2020
Balance at beginning of the year	13,524	13,994
Net additions	1,813	1,460
Written-off assets	(2,455)	(1,930)
Other changes	—	—
Balance at end of the year	**12,882**	**13,524**

This amount, once the corresponding provisions have been deducted, is Banco Santander´s best estimate of the discounted value of the cashflows that are expected to be recovered from impaired assets.

At 31 December 2021, the balance of the assets written-off amounted to EUR 8,198 million. (December 2020: EUR 8,660 million).

The following are the credit impaired financial assets and related guarantees maintained to mitigate potential losses as of 31 December 2021:

EUR million

	Gross amount	Allowance recognized	Estimated collateral value*
Without associated real collateral	4,881	2,973	—
With associated real collateral	7,093	2,275	4,508
With other collateral	908	436	255
Total	**12,882**	**5,684**	**4,763**

* Collects the estimated value of the collateral associated with each loan. Consequently, it does not include any other cash flow that could be obtained, such as those from the personal guarantees of the accredited.

When classifying assets in the previous table, the main factors considered by Banco Santander to determine whether an asset has become impaired are the existence of amounts past due -assets impaired due to arrears- or other circumstances may be arise which will not result in all contractual cash flow being recovered, such as a deterioration of the borrower's financial situation, the worsening of its capacity to generate funds or difficulties experienced by it in accessing credit.

e) Transferred credits

The heading 'Loans and advances to customers' includes, among others, those loans transferred to third parties by securitisation on which risks and profits are maintained, albeit partially, which is why and in accordance with the accounting regulations that apply, they cannot be removed from the balance sheet. This is mainly due to mortgage loans, loans to companies and consumer loans. The breakdown of securitised loans held on the balance sheet, taking into account the nature of the financial instrument from which they originate, is shown below.

EUR million

	2021	2020
Retained on the balance sheet	15,347	20,113
Of which, mortgage assets are securitized through:		
*Mortgage transfer certificates (nota 20.c)**	*11,133*	*17,610*
Total	**15,347**	**20,113**

* Note 19 reports the liabilities associated with securitization operations, discounting the bonds of the securitization funds repurchased by the Bank.

The evolution of this activity responds to its use as a regulatory capital management tool and as a resource for the diversification of Banco Santander's liquidity sources. During 2021 and 2020 the Bank didn't derecognized any of the securitizations carried out in years mentioned before, and the balance derecognized at those dates corresponds to securitizations carried out in previous years.

On the other hand, as of December 31, 2021, Banco Santander has credits derecognized from the balance sheet and on which the administration maintains for an amount of EUR 2,397 million (EUR 2,783 million as of December 31, 2020). Within the total loans written off the balance sheet, as of December 31, 2021, there are EUR 845 million (EUR 1,005 million in 2020) of securitized assets.

f) Guarantee

Below is the breakdown of the liabilities issued guaranteed by assets, discounting own values as of 31 December 2021 and 2020:

EUR million

	2021	2020
Liabilities secured by assets:		
Mortgage-backed bonds	22,274	23,589
Asset-backed securities	2,290	381
Territorial bonds	625	872
Total	**25,189**	**24,842**

The mortgage-backed bonds ('*cédulas hipotecarias*') are secured by mortgage loans with average maturities of more than ten years. In order to calculate the amount of the qualifying assets, the following transactions are excluded from the total base of the unsecuritized mortgage portfolio:

- Transactions classified as at pre-action stage and procedural stage.
- Transactions without appraisal by a specialist valuer.
- Transactions exceeding 80% of the appraized value in residential financing and 60% in the case of other assets.
- Second mortgages or mortgages with insufficient collateral.
- Transactions without insurance or with insufficient insurance.

The asset-backed securities, including asset-backed securities and notes issued by special-purpose vehicles (SPVs), are secured by:

- Mortgage loans to individuals to finance the acquisition and refurbishment of homes with an average maturity of more than ten years.
- Personal consumer finance loans with no specific guarantee and unsecured loans with an average maturity of five years.
- Loans to SMEs (non-financial small and medium-sized enterprises) secured by State guarantees, and loans to companies (SMEs -self-employed, microbusinesses, small and medium-sized enterprises- and large companies) secured by property mortgages, the borrower's personal guarantee, guarantees and other collateral other than property mortgages, with an average maturity of seven years.
- Mortgage and non-mortgage loans to finance municipalities, autonomous communities and subsidiaries with an average maturity of more than ten years.
- Asset-backed securities issued by various European special-purpose vehicles backed by German and Italian loans for the purchase of vehicles and Italian personal loans, with an average maturity of eight years.
- Commercial credit of Banco Santander (ordinary and occasional invoice discounting and advances to customers on legitimate receivables) with an average maturity of 45 days.

The fair value of the guarantees received by Banco Santander (financial and non-financial assets) which the Bank is authorized to sell or pledge even if the owner of the guarantee has not defaulted is scantly material taking into account the Bank's financial statements as a whole.

11. Trading derivatives

The detail of the notional and/or contractual amounts and the market values of the trading derivatives held by the Bank in 2021 and 2020 is as follows:

EUR million

	2021		2020	
	Notional value	Market value	Notional value	Market value
Held for trading:				
Interest rate	4,163,388	3,280	4,423,110	3,795
Options	203,013	(304)	247,858	(441)
Other	3,960,375	3,584	4,175,252	4,236
Equity instruments	55,548	439	50,733	955
Options	36,920	(231)	39,270	4
Other	18,628	670	11,463	951
Currency	687,473	(2,172)	618,977	(1,925)
Options	43,666	48	39,842	41
Other	643,807	(2,220)	579,135	(1,966)
Credit	12,856	(147)	11,652	(146)
Hedging default derivative and total through out	12,856	(147)	11,652	(146)
Securities and commodities derivatives and other	5,518	(49)	6,067	7
	4,924,783	**1,351**	**5,110,539**	**2,686**

12. Non-current assets held for sale

The balance detail under this heading of the attached balance sheets is shown below:

EUR million

	2021	2020
Foreclosed assets	966	1,001
Other assets leased out under an operating lease	27	231
Investment property	—	55
Total	**993**	**1,287**

As of December 31, 2021, reducing the balance of this heading, there were EUR 644 million corresponding to value adjustments due to impairment of said assets, which entails a coverage of 39.3% of them (EUR 626 million, with a coverage of 32.7%, in the 2021 financial year) of which EUR 70 million have been recorded during the 2020 financial year (EUR 68 million in the 2020 financial year) under the heading 'Gains or losses from non-current assets and groups disposal of items classified as held for sale not eligible as discontinued operations' (see Note 46)

At December 31, 2021 there are no liabilities associated in disposable groups of items that have been classified as held for sale associated with other non-current assets and alienable groups of items that have been classified as held for sale.

13. Investments

a) Associated entities

'Investments - Associates' in the accompanying balance sheets includes Banco Santander`s ownership interests in associates (see note 2.b).

Appendix II contains a detail of these companies, indicating the percentages of direct or indirect ownership and other relevant information.

At 31 December 2021 there were no capital increases in progress at any associated company.

i. Breakdown

The detail of the balance of this heading of the attached balances, based on the contracting currency and the admission or non-listing of the securities, is as follows:

EUR million

	2021	2020
Currency:		
Euro	3,020	3,082
Foreign Currency	—	—
	3,020	**3,082**
Listing status:		
Listed	1,917	1,978
Unlisted	1,103	1,104
	3,020	**3,082**

ii. Changes

The changes in 2021 and 2020 in 'Investments - Associates'', disregarding impairment losses, were as follows, (see note 13.a.iii):

EUR million

	2021	2020
Balance at the beginning of the year	3,363	5,432
Purchases, capital increases and mergers	20	512
Of which		
Popular Spain Holding de Inversiones, S.L.U. (before Allianz Popular, S.L.)	*—*	*414*
Merlín Properties, SOCIMI, S.A.	*6*	*87*
Redsys Servicios de Procesamiento, S.L.	*10*	*—*
Promontoria Manzana, S.A.	*—*	*3*
Disposals, reductions and mergers:	(78)	(9)
Of which		
Merlin Properties, SOCIMI, S.A.	*(25)*	*—*
Metrovacesa, S.A.	*(52)*	*—*
Promontoria Manzana, S.A.	*—*	*(4)*
Transfers	—	(2,535)
Of which		
Popular Spain Holding de Inversiones, S.L.U. (before Allianz Popular, S.L.)	*—*	*(834)*
Project Quasar Investment 2017, S.L.	*—*	*(1,701)*
Other changes (net)	7	(37)
Balance at end of the year	**3,312**	**3,363**

In April 2021, the company Merlín Properties, SOCIMI, S.A. has made a distribution of dividends charged to the issue premium, with Banco Santander receiving an amount of EUR 27 million, which has led to the recording of a reduction in the cost of the participation of EUR 25 million and the recording of an income of EUR 2 million.

Additionally, during the 2021 financial year, Banco Santander has acquired, through various purchases in the stock market, shares of the entity Merlín Properties, SOCIMI, S.A. for a net total of EUR 6 million.

In May and December 2021, Metrovacesa, S.A. made two distributions of dividends charged to the unrestricted reserve (issue premium), with Banco Santander receiving two payments of EUR 19 million. These operations have entailed a reduction in the cost of the participation of EUR 52 million and an impairment application of EUR 14 million.

In July 2021 and September 2021, as a result of changes in the composition of the Spanish banking sector, Banco Santander has exercised its preferential acquisition right, included in the partners' agreement dated June 29, 2021, of shares in Redsys Servicios of Procesamiento, S.L. for imports of EUR 2 million and EUR 8 million, respectively, until reaching the maximum established share of 24.9%.

On January 31, 2020, Banco Santander proceeded to repurchase 60% of the stake in Allianz Popular, S.L., reaching a 100% stake in this company. The total cost of this participation after this acquisition has been fixed at EUR 834 million, and then reclassify it to the heading of 'Group Entities' (see note 13.b.ii).

In addition, during the year 2020, Banco Santander acquired shares of Merlín Properties, SOCIMI, S.A. through various purchases on the stock market for a net total of EUR 87 million.

Also, in September 2020, on the occasion of the loss of control over the entity Project Quasar Investments 2017, S.L., Banco Santander's share in the same, amounting to EUR 1,701 million (EUR 956 million net impairment fund), was reclassified to the portfolio of Equity Instruments (see note 8.b.ii).

iii. Impairment losses

The changes in the balance of this item were as follows:

EUR million

	2021	2020
Balance at the beginning of the year	281	572
Net impairment losses (reversals) (note 44)	24	460
Other changes	(13)	(751)
Balance at end of the year	**292**	**281**

b) Group entities

'Investments - Group entities' includes the equity instruments owned by Banco Santander and issued by subsidiaries belonging to Grupo Santander.

Relevant information on these companies is provided in Appendix I.

i. Breakdown

The detail, by currency and listing status, of 'Investments - Subsidiaries' on the balance sheets as at 31 December 2021 and 2020 is as follows:

EUR million

	2021	2020
Currency:		
Euro	45,780	44,346
Pound Sterling	13,303	12,163
Other currencies	26,189	25,051
	85,272	**81,560**
Listing status:		
Listed	6,338	5,968
Unlisted	78,934	75,592
	85,272	**81,560**

ii. Changes

The changes in 2021 and 2020 in 'Investments - Subsidiaries', disregarding impairment losses, were as follows:

EUR million

	2021	2020
Balance at beginning of the year	93,918	89,318
Acquisitions, contributions, capital increase payments and mergers	6,593	7,108
Of which		
Contingently convertible debt (AT1)	*996*	*—*
PagoNXT, S.L. (before Santander Digital Businesses, S.L.)	*917*	*1,030*
Ablasa Participaciones, S.L.	*616*	*—*
Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México	*343*	*—*
PagoNXT Merchant Solutions, S.L. (before Santander Merchant Platform Solutions, S.L.)	*296*	*—*
Tresmares Santander Direct Lending, SICC, S.A.	*274*	*—*
Retail Company 2021, S.L.U.	*262*	*—*
Banco Santander de Negocios Colombia S.A.	*178*	*—*
Openbank, S.A.	*170*	*—*
Open Digital Services, S.L.	*161*	*—*
Deva Capital Holding Company, S.L.	*96*	*—*
Santander Fintech Holding, S.L.	*62*	*—*
Landcompany 2020, S.L. (before Landmark Ibérica, S.L.)	*21*	*33*
Santander Totta, SGPS, S.A.	*—*	*4,949*
SAM Investment Holdings, S.L.	*—*	*292*
Uro Property Holdings, SOCIMI, S.A. (OCI portfolio transfer)	*—*	*179*
Disposals, capital reductions and mergers	(4,841)	(3,725)
Of which		
Contingently convertible debt (AT1)	*(1,157)*	*—*
Popular Spain Holding de Inversiones, S.L.U. (before Allianz Popular, S.L.)	*(542)*	*(292)*
PagoNXT Merchant Solutions, S.L. (before Santander Merchant Platform Solutions, S.L.)	*(296)*	*(150)*
Sterrebeck B.V.	*(264)*	*—*
Getnet Europe, Entidad de Pago, S.L. (before Santander España Merchant Services, Entidad de Pago, S.L.)	*(185)*	*—*
Grupo Empresarial Santander, S.L.	*(141)*	*—*
Banco Santander (Brasil) S.A.	*—*	*(2,478)*
Santander Global Property, S.L.U.	*—*	*(255)*
Inmobiliaria Viagracia, S.A.U.	*—*	*(109)*
Inversiones Capital Global, S.A. Unipersonal	*—*	*(67)*
BPE Financiaciones, S.A.U.	*—*	*(1)*
Transfers	—	1,013
Of which		
Popular Spain Holding de Inversiones, S.L.U. (before Allianz Popular, S.L.)	*—*	*834*
FX and other movements*	1,054	204
Balance at end of the year	**96,724**	**93,918**

* In 2020 it includes EUR 2,507 million corresponding to the contingently convertible debt instruments (AT1) transferred under this heading.

On May 14, 2021, Banco Santander has subscribed a capital increase in the company Landcompany 2020, S.L. (formerly Landmark Iberia, S.L.) through a non-monetary contribution of land for a total amount of EUR 21 million, reaching a participation percentage of 17.66%.

In June 2021, the companies PagoNxt Merchant Solutions, S.L. (formerly Santander Merchant Platform Solutions, S.L.), Grupo Empresarial Santander, S.L. and Sterrebeck B.V. drafted two partial spin-off projects pursuant to which the spun-off companies (Grupo Empresarial Santander, S.L. and Sterrebeck B.V.) transfer en bloc and by universal succession a part of their assets consisting of all the shares representing the share capital of Getnet Adquirência e Serviços para Meios de Pagamento S.A. (Getnet Brasil) of its ownership to the beneficiary company (PagoNxt Mechant Solutions, S.L.). This has led to a capital increase in PagoNxt Merchant Solutions, S.L. and a decrease in Grupo Empresarial Santander, S.L. and Sterrebeck B.V. for amounts of EUR 141 million and EUR 264 million, respectively. The Bank, as shareholder of the spun-off companies, has received shares of PagoNxt Merchant Solutions, S.L.

On the other hand, throughout the 2021 financial year, Banco Santander has made various monetary contributions to the equity of the company PagoNxt, S.L. (formerly Santander Digital Businesses, S.L.) amounting EUR 407 million. Likewise, during the 2021 financial year it has also subscribed non-monetary contributions to this company for a total of EUR 510 million, through the contribution of its participation in the following companies: EUR 215 million by Getnet Europe, Entidad de Pago, S.L. (formerly Santander España Merchant Services, Entidad de Pago, S.L.) and EUR 295 million for PagoNxt Merchant Solutions, S.L. (formerly Santander Merchant Platform Solutions, S.L.).

In July 2021, the Bank proceeded to purchase the remaining 8% of its stake in Parque Solar Páramo, S.L. for an amount of EUR 6 million, transferring it from the portfolio of investments in joint ventures to the portfolio of investments in subsidiaries (see note 13.c.). Subsequently, this interest was transferred to the heading 'Non-current assets held for sale', due to Management's intention to sell them during the year (see note 12).

On July 5, 2021, the merger by absorption of Santander Global Operations, S.A. was signed (absorbed company) by Santander Global Tecnhnology, S.L. (absorbing company), with dissolution without liquidation of the absorbed company and en bloc transfer of its assets to the absorbing company. The new company resulting from the merger is renamed Santander Global Technology and Operations, S.L.

On October 21, 2021, within the process of rationalizing and optimizing the corporate structure of Grupo Santander, a segregation project was signed by virtue of which Banco Santander has segregated the autonomous economic unit that integrates the branch management business empty bank offices, with closure project or leased to third parties not linked to the banking activity of Banco Santander (split company), including the contracts linked to them and the employees currently in charge of their management, in favor of a newly creation called Retail Company 2021, S.L.U (beneficiary company). The amount of the segregation has risen to EUR 262 million.

On December 7, 2021, within the framework of the Public Offer for the Acquisition of shares of Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México, for up to all of the Series B shares representing the capital stock, Banco Santander has acquired 4.51% of the shares of said company, both in Mexico and in the United States. This has meant a disbursement of EUR 343 million, including the expenses of the operation.

On December 16, 2021, the deed of merger by absorption by the Bank of the companies Popular Spain Holding de Inversiones, S.L.U. (formerly Allianz Popular, S.L.), Santander Investment I, S.A.U. and Administration of Bancos Latinoamericanos Santander, S.L., incorporating, among other assets, the companies Ablasa Participaciones, S.L. and Banco Santander de Negocios Colombia. The net amount registered under this heading for this operation was EUR 223 million, with a credit in reserves of EUR 1,039 million.

Also, throughout the 2021 financial year Banco Santander has subscribed capital increases and made partner contributions, the most relevant being: EUR 274 million euros to Tresmares Santander Direct Lending, SICC, S.A., EUR 170 million to Open Bank, S.A., EUR 161 million to Open Digital Services, S.L., EUR 96 million to Deva Capital Holding Company, S.L. and EUR 62 million to Santander Fintech Holdings, S.L.

On January 31, 2020, Banco Santander proceeded to transfer to this heading 100% of its stake in Popular Spain Holding de Inversiones, S.L.U. (formerly Allianz Popular, S.L.) amounting EUR 834 million (see note 13.a.ii). Next, on 28 April 2020, Popular Spain Holding de Inversiones, S.L.U. approved a refund of the issuance premium of EUR 292 million to Banco Santander by transferring a credit right derived from the deferred price of two contracts for the sale of shares.

Banco Santander also made a contribution to their own funds of SAM Investment Holdings, S.L. for the same amount, by the assignment of the said right.

On May 8, 2020, Banco Santander signed two successive capital increases by Landcompany 2020, S.L. (before Landmark Iberia, S.L.) through non-cash contributions of land totaling EUR 33 million, reaching a share rate of 17.22%.

On June 30, 2020, the sole partner of Investments Capital Global, S.A.U. approved a partial distribution of the shared premium, which has meant a decrease Banco Santander´s share in the company of EUR 67 million.

In September 2020, Banco Santander acquired 85.03% of the shares of Uro Property Holdings, SOCIMI, S.A. reaching a total share of 99.99%. As a result of this acquisition, this stake was enforced under this heading at a total cost of EUR 179 million.

On December 22, 2020, in the context of the reorganization of the shareholder of Banco Santander (Brasil) S.A. within the Group, Banco Santander sold 13.89% of its stake in that entity to Grupo Empresarial Santander, S.L. for EUR 3,605 million. As a result of this sale, the Bank recorded a profit of EUR 1,127 million (see note 45).

Also, on December 23, 2020, the deeds of merger by absorption by Banco Santander of the entities Santander Global Property, S.L.U., Inmobiliaria Viagracia, S.A.U. and BPE Financiaciones, S.A.U. raised to the public. The amount discharged under this heading for this operation was EUR 365 million.

In addition, on December 28, 2020, Banco Santander acquired 99.85% of Santander Totta, SGPS, S.A. shares from Santusa Holding, S.A. for an amount of EUR 4,949 million.

In addition, during the year 2020, Banco Santander made various monetary contributions to the own funds of the company PagoNxt, S.L. (formerly Santander Digital Businesses, S.L.) totaling EUR 754 million. In addition, it signed capital increases during 2020 and made non-cash contributions to this company totaling EUR 276 million, by contributing its participation in the following companies: EUR 45 million by Ebury Partners Limited, EUR 31 million by Moneybit, S.L. (currently PagoNxt Trade Services, S.L.) EUR 150 million for Santander Merchant Solutions, S.L. (before PagoNxt Merchant Solutions, S.L.) and EUR 50 million for PagoNxt Solutions, S.L.

iii. Impairment losses

The changes in the balance of this item were as follows:

EUR million

	2021	2020
Balance at beginning of the year	12,358	7,095
Net impairment losses (reversals) (note 44)	(851)	5,466
Other changes	(55)	(203)
Balance at end of the year	**11,452**	**12,358**

The Management carries out an analysis of the potential loss of value of the investments in subsidiaries, joint ventures and associates that it has registered with respect to their book value. Said analysis is carried out using different parameters, such as equity value, listed value and recoverable value, which is obtained from estimates of expected cash flows or net worth corrected by tacit capital gains existing on the date of the valuation.

In accordance with the foregoing, Banco Santander has carried out in December 2021 the evaluation of its investees. The provisions for impairment made by the Bank during the 2021 financial year include EUR 144 million corresponding to the impairment of the stake held in Open Digital Services, S.L. Additionally, during the year impairment releases have been made that include EUR 887 million corresponding to the stake in Santander UK Group Holdings plc, derived from the results obtained by the group of entities of which it is the parent and the positive evolution of the interest rate of exchange affected.

During the 2020 financial year, considering the expected evolution of the macroeconomic variables included in the valuation of its investees and the impact of the covid-19 crisis, the Bank made provisions for impairment that included EUR 4,313 million corresponding to the impairment of the investment held in Santander UK Group Holdings plc.

c) Joint venture entities

The cost of the investee entities registered under this heading as of 31 of December 2021 amounts to EUR 451 million, while impairment provisions recorded at that date are EUR 194 million (EUR 420 millon and EUR 172 million in 2020).

In July 2021, Banco Santander proceeded to purchase the remaining 8% of its stake in Parque Solar Páramo, S.L. for an amount of EUR 6 million, transferring it to the Group's portfolio of investments in subsidiaries (see note 13.b.ii).

Likewise, in December 2021, UCI, S.A. approved a capital increase, corresponding to Banco Santander an amount of EUR 30 million.

During the 2021 financial year, Banco Santander has provided impairment for a net amount of EUR 27 million for the entities registered under this heading, mainly by the company UCI, S.A., while in the 2020 financial year it released provisions of EUR 5 million for the same company.

14. Insurance contracts linked to pensions

The detail of Insurance contracts linked to pensions in the accompanying balance sheets are as follows:

EUR million

	2021	2020
Assets relating to insurance contracts covering post-employment benefit plan obligations (notes 17 and 23)	381	423
Total	**381**	**423**

Santander

15. Tangible assets

a) Changes

The movement under this heading of the balance sheet during the financial year 2021 and 2020 was as follows:

EUR million

	Tangible assets				Of which, right-of-use for operating lease			
	For own use	Leased out under an operating lease	Investment property	Total	For own use	Leased out under an operating lease	Investment property	Total
Cost								
Opening balance at 1 January 2020	8,597	850	337	9,784	2,946	—	—	2,946
Additions/disposals (net)	174	126	—	300	8	—	—	8
Transfers and other	(455)	—	(10)	(465)	—	—	—	—
Balance at 31 December 2020	**8,316**	**976**	**327**	**9,619**	**2,954**	**—**	**—**	**2,954**
Additions/disposals (net)	110	147	(2)	255	(51)	—	—	(51)
Transfers and others	(627)	—	55	(572)	(8)	—	—	(8)
Balance at 31 December 2021	**7,799**	**1,123**	**380**	**9,302**	**2,895**	**—**	**—**	**2,895**
Accumulated depreciation								
Opening balance at 1 January 2020	(2,298)	(199)	(21)	(2,518)	(268)	—	—	(268)
Charge for the year	(453)	(99)	(2)	(554)	(262)	—	—	(262)
Disposals	43	69	—	112	28	—	—	28
Transfers and others	195	—	7	202	—	—	—	—
Balance at 31 December 2020	**(2,513)**	**(229)**	**(16)**	**(2,758)**	**(502)**	**—**	**—**	**(502)**
Charge for the year	(455)	(114)	(4)	(573)	(276)	—	—	(276)
Disposals	93	72	—	165	84	—	—	84
Transfers and others	606	—	(2)	604	133	—	—	133
Balance at 31 December 2021	**(2,269)**	**(271)**	**(22)**	**(2,562)**	**(561)**	**—**	**—**	**(561)**
Impairment losses								
Opening balance at 1 January 2020	(46)	—	(89)	(135)	—	—	—	—
Charge for the year	(62)	—	—	(62)	—	—	—	—
Disposals	—	—	—	—	—	—	—	—
Transfers and others	20	—	(4)	16	—	—	—	—
Balance at 31 December 2020	**(88)**	**—**	**(93)**	**(181)**	**—**	**—**	**—**	**—**
Charge for the year	(85)	—	—	(85)	—	—	—	—
Disposals	—	—	—	—	—	—	—	—
Transfers and others	35	—	6	41	—	—	—	—
Balance at 31 December 2021	**(138)**	**—**	**(87)**	**(225)**	**—**	**—**	**—**	**—**
Tangible assets, net								
Balance at 31 December 2020	**5,715**	**747**	**218**	**6,680**	**2,452**	**—**	**—**	**2,452**
Balance at 31 December 2021	**5,392**	**852**	**271**	**6,515**	**2,334**	**—**	**—**	**2,334**

b) Property, plant and equipment for own use

The detail, by class of asset, of 'Property, plant and equipment - For own use' on the balance 2021 and 2020 sheets is as follows:

EUR million

	Cost	Accumulated depreciation	Impairment losses	Carrying amount	Of which, right-of-use for operating lease
Land and buildings	5,514	(644)	(88)	4,782	2,452
Furniture, fixtures and vehicles	2,130	(1,322)	—	808	—
Computer hardware	634	(547)	—	87	—
Other	38	—	—	38	—
Balance at 31 December 2020	**8,316**	**(2,513)**	**(88)**	**5,715**	**2,452**
Land and buildings	5,389	(740)	(138)	4,511	2,334
Furniture, fixtures and vehicles	2,037	(1,278)	—	759	—
Computer hardware	326	(251)	—	75	—
Other	47	—	—	47	—
Balance at 31 December 2021	**7,799**	**(2,269)**	**(138)**	**5,392**	**2,334**

The carrying amount at 31 December 2021 in the table above includes the following approximate amounts:

- EUR 3 million (31 December 2020: EUR 2 million) relating to property, plant and equipment owned by Banco Santander's branches located abroad.
- EUR 484 million (31 December 2020: EUR 549 million) relating to property, plant and equipment held under finance leases by Banco Santander, of which EUR 360 million related to leases in effect as of 31 December 2021 (31 December 2020: EUR 427 million).

c) Tangible assets - Leased out under an operating lease

Banco Santander has assets assigned under operating lease where the company is the lessor and they do not meet the accounting requirements to be classified as financial leases. The net cost of these leases is recorded as an asset and is depreciated on a straight-line basis over the contractual term of the lease up to the expected residual value.

The expected residual value and, consequently, the monthly depreciation expense may change during the term of the lease. The Bank estimates expected residual values using independent data sources and internal statistical models. Likewise, it evaluates the estimate of the residual value of said leases and adjusts the depreciation rate based on the change in the expected value of the asset at the end of the lease.

Banco Santander periodically evaluates its investment in operating leases and whenever there are indications of impairment, such as a systemic and material decrease in the values of the assigned assets. If assets leased under operating leases are considered to be impaired, impairment is measured as the amount by which the assets' carrying amount exceeds fair value as estimated by discounted cash flows. During the years 2021 and 2020, the Bank has not recorded any material impairment for this concept.

During the 2021 financial year, no significant variable payments have been made not included in the valuation of lease assets.

16. Intangible assets

a) Goodwill

The detail of the 'Goodwill', on the balance sheets is as follows:

EUR million

	2021	2020
Santander España	623	623
Amortization charge	(227)	(165)
Balance at end of year	**396**	**458**

The movement during the years 2021 and 2020 has been as follows:

EUR million

	2021	2020
Balance at beginning of the year	458	521
Additions (note 3)	—	—
Amortization charge	(62)	(63)
Impairment losses	—	—
Disposals or changes in scope	—	—
Balance at end of year	**396**	**458**

Neither in 2021, nor in 2020 has goodwill been generated.

All of the goodwill recorded at the end of the 2021 and 2020 financial years comes from the following corporate operations that were carried out in the 2018 financial year:

- Merger by absorption of Banco Popular Español, S.A.U. On June 7, 2017, Banco Santander acquired 100% of the share capital of Banco Popular Español, S.A.U. Subsequently, on September 28, 2018, the deed of merger by absorption of Banco Popular Español, S.A.U. was registered in the Mercantile Registry of Cantabria by Banco Santander, S.A. with accounting effects January 1, 2018, transferring to the books of Banco Santander a gross goodwill of EUR 248 million.
- Repurchase of the credit and debit card business marketed by Grupo Banco Popular in Spain and Portugal generating the business combination a goodwill of EUR 375 million.

In accordance with Bank of Spain Circular 4/2017, the goodwill is amortized within a period of ten years. In addition, the Bank periodically reviews the term and method of amortization and, if deemed inappropriate, the impact will be treated as a change in accounting estimates.

As of 31 December 2021 and 31 December 2020, the amount of goodwill recorded by Banco Santander, net of accumulated depreciation, amounted to EUR 396 million and EUR 458 million, respectively.

Banco Santander, at least annually and whenever there are indicators of impairment, conducts an analysis of the potential loss of value of the trade funds it has recorded in respect of their recoverable value.

The first step in carrying out this analysis requires the identification of the cash-generating units, which are the smallest identifiable groups of assets in Banco Santander that generate cash inflows and are largely independent of the cash flows of other assets or asset groups.

For the purposes of those mentioned in the preceding paragraph, the Bank's administrators have identified the commercialbanking business in Spain as the cash-generating unit to which to allocate goodwill arising both by the acquisition and subsequent merger by absorption of Banco Popular Español, S.A.U. and by the repurchase of the credit and debit cards from Grupo Banco Popular.

Its carrying value is determined taking into account the book value of all the assets and liabilities that make up the commercial banking business in Spain, together with the corresponding goodwill.

The recoverable amount of Santander España cash-generating unit has been determined as the fair value of such cash-generating unit obtained using quotes, market references (multiples) or internal estimates.

Based on previous data, and in accordance with the estimates of the Bank's administrators, during the years 2021 and 2020 the Bank has not recorded any amount under the heading 'Impairment in value or reversal of impairment in value of non-financial assets - intangible assets' in concept of impairment of goodwill.

b) Other intangible assets

i. Breakdown

The detail of Intangible assets 'Other intangible assets' on the balance sheets is as follows:

EUR million

	2021	2020
With finite useful life		
IT Developments	1,106	996
Accumulated amortization	(606)	(506)
Balance at end of year	**500**	**490**

ii. Changes

The changes in Intangible assets 'Other intangible assets' on the balance sheets were as follows:

EUR million

	2021	2020
Balance at end of prior year	490	164
Net additions and disposals	110	447
Amortization charge	(100)	(120)
Impairments losses	—	(1)
Balance at end of year	**500**	**490**

17. Other assets and Other liabilities

The detail of 'Other assets and Other liabilities' on the accompanying balance sheets is as follows:

EUR million

	Assets		Liabilities	
	2021	2020	2021	2020
Transactions in transit	11	—	—	20
Insurance contracts linked to pensions (note 14)	381	423	—	—
Inventory	—	—	—	—
Prepayments and accrued income	504	447	2,133	1,789
Other*	1,044	3,304	1,138	1,758
Total	**1,940**	**4,174**	**3,271**	**3,567**

* Includes, mainly, unsettled transactions.

Santander

18. Deposits from central banks and credit institutions

The detail by classification, type and currency of 'Deposits from central banks' and 'Deposits from credit institutions' on the accompanying balance sheets is as follows:

EUR million

	2021	2020
CENTRAL BANKS		
Classification		
Financial liabilities held for trading	44	—
Financial liabilities designated at fair value through profit or loss	607	1,469
Financial liabilities at amortized cost	64,649	60,372
	65,300	**61,841**
Type		
Time deposits	63,161	60,932
Deposits available with prior notice	—	—
Repurchase agreements	2,139	909
	65,300	**61,841**
Currency		
Euro	60,343	56,306
US dollar	2,809	4,909
Pound Sterling	2,110	593
Other currencies	38	33
	65,300	**61,841**
CREDIT INSTITUTIONS		
Classification		
Financial liabilities held for trading	5,718	—
Financial liabilities designated at fair value through profit or loss	1,067	4,496
Financial liabilities at amortized cost	35,262	40,725
	42,047	**45,221**
Nature		
Current accounts / Intraday deposits	15,989	14,280
Time deposits	15,698	23,869
Deposits available with prior notice	—	—
Repurchase agreements	10,360	7,072
	42,047	**45,221**
Currency		
Euro	31,067	32,063
US dollar	7,737	8,963
Pound Sterling	2,577	3,541
Other currencies	666	654
	42,047	**45,221**
Total	**107,347**	**107,062**

Banco Santander, following the various long-term financing programmes of the European Central Bank (TLTRO), mantain deposits at amortized cost from the TLTRO III programme amounting to EUR 61,183 million as of 31 December 2020 (EUR 56,288 million as at 31 December 2021 from TLTRO III). As of December 2021, the income recognized in the profit and loss account, corresponding to TLTRO III, is EUR 608 million (EUR 299 millions as at 31 December 2020).

The deposits classified in the 'Liabilities held for trading' portfolio correspond to temporary transfers of assets of Spanish and foreign institutions.

Note 48 contains a detail of the residual maturity periods of financial liabilities at amortized cost.

19. Customer deposits

The detail by classification, type, sector and geographical area, of 'Customer deposits' is as follows:

EUR million

	2021	2020
Classification		
Financial liabilities held for trading	1,291	—
Financial liabilities designated at fair value through profit or loss	11,069	10,925
Financial liabilities at amortized cost	296,243	275,740
	308,603	**286,665**
Type		
Current accounts / Intraday deposits	269,721	247,394
Time deposits	36,644	36,660
Deposits available with prior notice	—	—
Repurchase agreements	2,238	2,611
Of which, subordinated deposits	—	—
Of which, issued securities	*2,290*	*381*
	308,603	**286,665**
Sector		
Public sector	23,231	21,754
Other financial companies	43,610	47,169
Non-financial companies	95,810	75,877
Households	145,952	141,865
	308,603	**286,665**
Geographical area		
Spain	262,261	249,522
European Union (excluding Spain)	25,002	21,801
United States and Puerto Rico	9,027	7,902
Other OECD countries	6,699	3,116
Latin America (non-OECD)	2,796	2,385
Rest of the world	2,818	1,939
	308,603	**286,665**

Funds received under 'Financial asset' transfers in the table above include the liabilities associated with securitisation transactions (see note 10.e).

Note 48 contains a detail of the residual maturity periods of financial liabilities at amortized cost.

Santander

20. Marketable debt securities

a) Breakdown

The detail by classification and type, of 'Marketable debt securities' in the accompanying balance sheets is as follows:

EUR million

	2021	2020
Classification:		
Financial liabilities at amortized cost	104,094	87,902
	104,094	**87,902**
Type:		
Certificates of deposit	4,444	3,921
Guaranteed bonds	62,454	55,110
Mortgage bonds	49,764	44,343
Others mortgage bonds and guaranteed bonds	12,690	10,767
Other issued securities (note 21)	76,890	59,209
Of which, subordinated liabilities	*20,399*	*17,124*
Treasury shares*	(41,018)	(32,430)
Valuation adjustments	1,324	2,092
	104,094	**87,902**

* At 31 December 2021 y 2020, the registered balance corresponds mainly to guaranteed bonds.

Note 48 contains a detail of the residual maturity periods of financial liabilities at amortized cost.

b) Certificates of deposit

The detail of certificates of deposits by currency of issuance is as follows:

	EUR million		2021	
Currency of issuance	2021	2020	Outstanding issue amount in foreign currency (million)	Annual interest rate*
US dollar	1,564	2,351	1,772	0.35 %
Hong Kong Dollars	2,880	21	2,419	0.17 %
Pound Sterling	—	1,549	—	— %
Balance at end of the year	**4,444**	**3,921**		

* Average interest rates for different issue based on their nominal values.

i. Changes

The movement that has occurred in the certificate of deposit account during the years 2021 and 2020 is as follows:

EUR million

	2021	2020
Balance at end of the prior year	3,921	3,661
Issues	15,684	10,193
Redemptions	(15,386)	(9,530)
Exchange differences and other changes	225	(403)
Balance at end of the year	**4,444**	**3,921**

As at 31 December 2021, the Bank issued certificates of deposit issues amounting to EUR 15,684 million (EUR 10,193 million as at 31 December 2020), with an average maturity of 3 months (6 months during the 2020 financial year), of which EUR 15,386 million have been amortized (EUR 9,530 million as at December 2020).

c) Mortgage bonds

The detail by currency of issuance, of 'Marketable mortgage-backed securities' is as follows:

	EUR million		2021
Currency of issuance	2021	2020	Annual interest rate*
Euros	49,764	44,343	0.82 %
Balance at end of the year	**49,764**	**44,343**	

* Average interest rate of the various issues based on their nominal values.

i. Changes

The changes in 2021 and 2020 in 'Marketable mortgage-backed securities' were as follows:

EUR million

	2021	2020
Balance at the end of the prior year	44,343	41,199
Reclassification of deposits	—	—
Issues	12,720	6,250
Of which		
April 2020	—	*2,750*
May 2020	—	*1,000*
June 2020	—	*2,000*
October 2020	—	500
June 2021	*6,000*	—
July 2021	*4,970*	—
September 2021	*1,000*	—
December 2021	*750*	—
Transfers	1	(66)
Amortizations on maturity	(7,300)	(3,040)
Balance at end of the year	**49,764**	**44,343**

ii. Disclosures required pursuant to the Mortgage Market Law 2/1981, of 25 March, of the Spanish Royal Decree 716/2009, of 24 April, implementing certain provisions of this Law, and to Bank of Spain Circular 7/2010, of 30 November, and Bank of Spain Circular 5/2011, of 30 November

The members of the board of directors hereby state that the Bank and the companies of the Group that operating in the Spanish mortgage-market issues area have established and implemented specific policies and procedures to cover all activities carried on and guarantee strict compliance with mortgage-market regulations applicable to these activities as provided for in Royal Decree 716/2009, of 24 April implementing certain provisions of Mortgage Market Law 2/1981, of 25 March, and, by application thereof, in Bank of Spain Circulars 7/2010 and 5/2011, and other financial and mortgage system regulations. Also, financial management defines the Grupo Santander's funding strategy.

The risk policies applicable to mortgage market transactions envisage maximum loan-to-value (LTV) ratios, and specific policies are also in place adapted to each mortgage product, which occasionally require the application of stricter limits.

Grupo and Banco Santander's general policies in this respect require the repayment capacity of each potential customer (the effort ratio in loan approval) to be analysed using specific indicators that must be met. This analysis must determine whether each customer's income is sufficient to meet the repayments of the loan requested. In addition, the analysis of each customer must include a conclusion on the stability over time of the customer's income considered with respect to the life of the loan. The aforementioned indicator used to measure the repayment capacity (effort ratio) of each potential customer takes into account mainly the relationship between the potential debt and the income generated, considering on the one hand the monthly repayments of the loan requested and other transactions and, on the other, the monthly salary income and duly supported income.

Grupo and Banco Santander have specialised document comparison procedures and tools for verifying customer information and solvency (see note 49).

Grupo and Banco Santander's procedures envisage that each mortgage originated in the mortgage market must be individually valued by an appraisal company not related to the Group.

In accordance with Article 3 of Mortgage Market Law 41/2007, any appraisal company approved by the Bank of Spain may issue valid appraisal reports. However, as permitted by this same article, the Group and the Bank perform several checks and select, from among these companies, a small group with which they enter into cooperation agreements with special conditions and automated control mechanisms. The Group and the Bank internal regulations specify, in detail, each of the internally approved companies, as well as the approval requirements and procedures and the controls established to uphold them. In this connection, the regulations establish the functions of an appraisal company committee on which the various areas of the Group and the Bank related to these companies are represented. The aim of the committee is to regulate and adapt the internal regulations and the activities of the appraisal companies to the current market and business situation (see note 2.i).

Basically, the companies wishing to cooperate with the Group and the Bank must have a significant level of activity in the mortgage market in the area in which they operate, they must pass a preliminary screening process based on criteria of independence, technical capacity and solvency -in order to ascertain the continuity of their business- and, lastly, they must pass a series of tests prior to obtaining definitive approval.

In order to comply in full with the legislation, any appraisal provided by the customer is reviewed, irrespective of which appraisal company issues it, to check that the requirements, procedures and methods used to prepare it are formally adapted to the valued asset pursuant to current legislation and that the values reported are customary in the market.

Mortgage-backed bonds

The mortgage-backed bonds (*'cédulas hipotecarias'*) issued by the Bank are securities the principal and interest of which are specifically secured by mortgages, there being no need for registration in the property register, by mortgage on all those that at any time are recorded in favour of the issuer and are not affected by the issuance of mortgage bonds and / or are subject to mortgage participations, and / or mortgage transfer certificates, and, if they exist, by substitution assets eligible to be hedged and for the economic flows generated by derivative financial instruments linked to each issue, and without prejudice to the issuer's unlimited liability.

The mortgage bonds include the credit right of its holder against the issuing entity, guaranteeing in the manner provided for in the previous paragraph, and involve the execution to claim from the issuer the payment after due date. The holders of these securities are recognised as preferred creditors, singularly privileged, with the preference, included in number 3º of article 1,923 of the Spanish Civil Code against any other creditor, in relation with the entire group of loans and mortgage loans registered in favour of the issuer, except those that act as coverage for mortgage bonds and / or are subject to mortgage participations and / or mortgage transfer certificates.

In the event of insolvency, the holders of mortgage-backed bonds, as long as they are not considered 'person especially related' to the issuing entity in accordance with Royal Legislative Decree 1/2020, of 5 May, approving the revised text of the Bankruptcy Law , will enjoy the special privilege established in Article 270.1.1 of the aforementioned Bankruptcy Law. Without prejudice to the foregoing, in accordance with Article 242.10 of the Bankruptcy Law, during the insolvency proceedings, the payments relating to the repayment of the principal and interest of the bonds issued and outstanding at the date of the insolvency filing will be settled up to the amount of the income received by the insolvent party from the mortgage loans and credits and, where appropriate, from the replacement assets backing the bonds and from the cash flows generated by the financial instruments associated with the issues (Article 14 of Law 2/1981 of 25 March 1981 regulating the mortgage market).

If, due to a timing mismatch, the income received by the insolvent party is insufficient to meet the payments described in the preceding paragraph, the insolvency managers must settle them by realising the replacement assets set aside to cover the issue and, if this is not sufficient, they must obtain financing to meet the mandated payments to the holders of the mortgage-backed bonds, and the finance provider must be subrogated to the position of the bond-holders.

In the event that it would be necessary to proceed in accordance with the terms of Article 212.1 and, in accordance with the requirements of Article 413 of the Insolvency Law, the payments to all holders of the mortgage-backed bonds issued would be made on a pro-rata basis, irrespective of the issue dates of the bonds. If the same credit or loan is subject to the payment of bonds and a mortgage bond issue, it will be paid first to the holders of the bonds.

Mortgage-backed bond issuers have an early redemption option for the purpose of complying with the limits on the volume of outstanding mortgage-backed bonds stipulated by mortgage market regulations. In addition, the issuing entity may advance the mortgage-backed bonds, if this has been expressly established in the final conditions of the issue in question and under the conditions set out therein.

None of the mortgage-backed bonds issued by the Group and Bank had replacement assets assigned to them.

The following is a detail, by their main features and nominal amounts, of the marketable mortgage-backed bonds outstanding at 31 December 2021 and 2020:

	Code ISIN	EUR million			Annual interest rate (%)
		2021	2020	Nominal amount	
Issues					
Euros					
Issue February 2006	ES0413900129	1,500	1,500	1,500	3.87 %
Issue May 2007	ES0413900160	1,500	1,500	1,500	4.63 %
Issue January 2010	ES0413900194	100	100	100	— %
Issue November 2014	ES0413900368	1,750	1,750	1,750	1.13 %
Issue November 2014	ES0413900376	1,250	1,250	1,250	2.00 %
Issue September 2015	ES0413900384	1,000	1,000	1,000	0.75 %
Issue January 2016	ES0413900392	1,000	1,000	1,000	1.50 %
Issue February 2016	ES0413900400	907	907	907	2.04 %
Issue March 2016	ES0413900418	100	100	100	1.52 %
Issue June 2016	ES0413900434	—	4,000		
Issue December 2016	ES0413900467	—	250		
Issue June 2017	ES0413900475	350	350	350	0.13 %
Issue June 2017	ES0413900483	—	2,000		
Issue June 2017	ES0413900491	2,000	2,000	2,000	0.16 %
Issue November 2017	ES0413900509	12	12	12	— %
Bonds Pitch		300	300	300	5.13 %
Issue April 2013	ES0413790256	—	200		
Issue July 2013	ES0413790264	15	15	15	5.28 %
Issue July 2013	ES0413790280	400	400	1,250	1.19 %
Issue July 2013	ES0413790298	500	500	1,500	1.44 %
Issue July 2013	ES0413790306	1,500	1,500	1,500	1.69 %
Issue December 2013	ES0413790322	—	100		
Issue February 2014	ES0413790330	1,000	1,000	1,500	1.95 %
Issue March 2014	ES0413790348	200	200	200	1.08 %
Issue March 2014	ES0413790389	250	250	250	0.23 %
Issue April 2015	ES0413790397	1,000	1,000	1,000	1.00 %
Issue June 2015	ES0413790405	575	575	575	— %
Issue October 2015	ES0413790421	—	750		
Issue March 2016	ES0413790439	1,500	1,500	1,500	1.00 %
Issue December 2016	ES0413790462	250	250	250	1.13 %
Issue March 2017	ES0413790470	1,000	1,000	1,000	0.25 %
Issue April 2017	ES0413790488	1,600	1,600	1,600	0.51 %
Issue July 2014 (Banco Pastor)	ES0405035009	1,000	1,000	1,000	2.72 %
Issue June 2018	ES0413900517	350	350	350	— %
Issue October 2018	ES0413900533	1,000	1,000	1,000	1.12 %
Issue October 2018	ES0413900525	2,000	2,000	2,000	0.29 %
Issue November 2018	ES0413900541	200	200	200	0.40 %
Issue May 2019	ES0413900558	1,500	1,500	1,500	0.88 %
Issue July 2019	ES0413900566	1,500	1,500	1,500	0.25 %
Issue December 2019	ES0413900574	1,750	1,750	1,750	0.13 %
Issue February 2020	ES0413900590	1,250	1,250	1,250	0.01 %
Issue February 2020	ES0413900608	1,250	1,250	1,250	0.10 %
Issue February 2020	ES0413900582	250	250	250	0.05 %
Issue March 2020	ES0413900616	1,000	1,000	1,000	0.01 %
Issue April 2020	ES0413900624	2,000	2,000	2,000	0.27 %
Issue October 2020	ES0413900699	500	500	500	0.01 %
Issue June 2021	ES0413900723	4,000	—	4,000	0.18 %
Issue June 2021	ES0413900731	2,000	—	2,000	0.19 %
Issue July 2021	ES0413900749	4,000	—	4,000	0.18 %

	Code ISIN	EUR million			Annual interest rate (%)
		2021	2020	Nominal amount	
Issue July 2021	ES0413900756	220	—	220	0.18 %
Issue July 2021	ES0413900764	750	—	750	0.02 %
Issue September 2021	ES0413900772	1,000	—	1,000	0.11 %
Issue December 2021	ES0413900780	750	—	750	— %
Balance at end of the year		**49,829**	**44,409**	**52,179**	

The detail of the principal amount of Banco Santander mortgage securities outstanding at 31 December 2021 and 2020 is as follows:

EUR million

	Principal amount	
	2021	2020
1. Mortgage bonds outstanding	**—**	**—**
2. Mortgage-backed bonds issued (note 10.f)	**49,829**	**44,409**
Of which, recognized in liabilities	*22,274*	*23,589*
2.1. Debt instruments. Issued through a public offering	49,829	44,409
- Term to maturity of up to one year	7,700	7,300
-Term to maturity of one to two years	1,125	7,700
-Term to maturity of two to three years	3,000	1,125
-Term to maturity of three to five years	7,150	6,250
-Term to maturity of five to ten years	26,947	16,627
-Term to maturity of more than ten years	3,907	5,407
2.2. Debt instruments. Other issues	—	—
2.3 Deposits	—	—
3. Mortgage transfer certificates issued (1)	**—**	**—**
4. Mortgage transfer certificates issued (1) (2)	**11,133**	**17,610**
4.1. Issued through a public offering (note 10.e)	11,133	17,610

(1) Relating solely to mortgage loans and credits not derecognized.
(2) The average term to maturity weighted by amount, expressed in months, rounded up, was 496 months .

Asset transactions

According to Bank of Spain Circulars 7/2010 and 5/2011, of 30 November, on the implementation of certain aspects of the mortgage market, the table below details: the principal amount of all the mortgage loans and credits, those that are eligible pursuant to Royal Degree 716/2009 on the regulation of the Spanish mortgage market for the purposes of calculating the limit of mortgage-backed bond issues, the mortgage loans and credits covering mortgage bond issues, those that have been transferred through mortgage participation certificates or mortgage transfer certificates, and the uncommitted transactions relating to Banco Santander. The breakdown of the mortgage loans at 31 December 2021 and 2020 indicating their eligibility and computability for mortgage market regulatory purposes, is as follows:

EUR million

	Principal amount	
	2021	2020
Total mortgage loans and credits (1)	94,975	95,114
Mortgage participation certificates issued	1,699	1,811
Of which, loans recognized in assets	—	—
Mortgage transfer certificates issued	11,590	18,305
Of which, loans recognized in assets (note 10.e)	*11,133*	*17,610*
Mortgage loans and credits backing mortgage and mortgage-backed bond issues (2)	81,686	74,998
i) Non-eligible mortgage loans and credits (3)	17,744	18,652
- Which comply with the eligibility requirements, except for the limit established in Article 5.1 of Royal Decree 716/2009	11,357	11,621
- Other non-eligible loans	6,387	7,031
ii) Eligible mortgage loans and credits (4)	63,942	56,346
- Un-measurable amounts (5)	—	—
- Measurable amounts	63,942	56,346
a) Mortgage loans and credits covering mortgage bond issues	—	—
b) Mortgage loans and credits eligible to cover mortgage-backed bond issues	63,942	56,346

(1) Including mortgage loans and credits acquired through mortgage participation certificates and mortgage transfer certificates, irrespective of whether they have been derecognized.
(2) Total loans less mortgage participation certificates issued, mortgage transfer certificates issued and mortgage loan securing borrowings.
(3) Due to non-compliance with the requirements of Art. 3 of Royal Decree 716/2009.
(4) Pursuant to Art. 3 of Royal Decree 716/2009, without taking into account the measurement limits established in Art. 12 of Royal Decree 716/2009.
(5) Pursuant to Art. 12 of Royal Decree 716/2009.

The following is a detail of the principal amount of the outstanding mortgage loans and credits and of the principal amount of the loans and credits that are eligible pursuant to Royal Decree 716/2009, without considering the measurement limits established under Article 12 of Royal Decree 716/2009, by origin, currency, payment status, average term to maturity, interest rate, borrower and type of guarantee:

EUR million

	Principal amount			
	2021		2020	
	Mortgage loans and credits backing mortgage and mortgage-backed bond issues	Of which, eligible loans*	Mortgage loans and credits backing mortgage and mortgage-backed bond issues	Of which, eligible loans*
By origin of transactions				
Originated by the entity	80,951	63,246	74,238	55,621
From subrogations	735	696	760	725
	81,686	**63,942**	**74,998**	**56,346**
By currency				
Euro	80,984	63,942	74,299	56,346
Other currencies	702	—	699	—
	81,686	**63,942**	**74,998**	**56,346**
By payment status				
Current	73,299	62,148	66,215	54,967
Past due	8,387	1,794	8,783	1,379
	81,686	**63,942**	**74,998**	**56,346**
By term to maturity				
Less than 10 years	25,460	15,418	26,072	15,185
10 to 20 years	30,185	26,059	27,436	23,249
20 to 30 years	25,125	22,125	20,301	17,445
More than 30 years	916	340	1,189	467
	81,686	**63,942**	**74,998**	**56,346**
By interest rate				
Fixed-rate loans	20,601	17,944	13,623	10,921
Floating-rate loans	61,085	45,998	61,375	45,425
	81,686	**63,942**	**74,998**	**56,346**
By borrower				
Legal entities and individual traders	23,554	12,877	25,492	13,290
Of which, property developments(including land)	*2,572*	—	*2,837*	—
Other individuals and non-profit institutions serving households	58,132	51,065	49,506	43,056
	81,686	**63,942**	**74,998**	**56,346**
By type of guarantee				
Completed buildings – residential	63,465	53,989	55,297	46,001
Of which, officially sponsored housing	*8,837*	*6,419*	*4,996*	*3,452*
Completed buildings – commercial	5,744	3,652	6,908	3,782
Completed buildings – other	9,035	5,212	9,085	5,343
Buildings under construction – residential	1,031	—	1,225	1
Of which, officially sponsored housing	*33*	—	*99*	—
Buildings under construction – commercial	67	—	46	—
Buildings under construction – other	46	5	57	1
Land – developed consolidated land	1,110	382	801	434
Land – other	1,188	702	1,579	784
	81,686	**63,942**	**74,998**	**56,346**

* Pursuant to Art. 3 of Royal Decree 716/2009, without taking into account measurement limits established in Art. 12 of Royal Decree 716/2009.

The following is a detail, by loan-to-value ratio, of the principal amount of the eligible mortgage loans and credits pursuant to Royal Decree 716/2009, without considering the measurement limits established in Article 12 of Royal Decree 716/2009:

EUR million

	31 December 2021				
	Principal amount by LTV range				
	<=40%	>40%, <= 60%	>60%, <= 80%	>80%	TOTAL
Mortgage loans and credits for mortgage and mortgage-backed bond issues	24,614	23,674	15,654	—	63,942
Home property	18,771	19,564	15,654	—	53,989
Other property	5,843	4,110	—	—	9,953

* Pursuant to Art. 3 of Royal Decree 716/2009, without taking into account measurement limits established in Art. 12 of Royal Decree 716/2009.

The following is a detail of the changes in 2021 in the principal amount of eligible and non-eligible mortgage loans and credits pursuant to Royal Decree 716/2009:

EUR million

	Eligible mortgage loans and credits*	Non-eligible mortgage loans and credits**
Balance at 31 December 2020	56,346	18,652
Period additions:	16,897	12,618
Originated by Banco Santander	10,256	3,595
Subrogations from other entities	11	6
Other	6,630	9,017
Period disposals:	9,301	13,526
Repayments on maturity	205	2,206
Early repayments	3,558	2,260
Other***	5,538	9,060
Balance at 31 December 2021	**63,942**	**17,744**

* Pursuant to Art. 3 of Royal Decree 716/2009, without taking into account the measurement limits established in Art. 12 of Royal Decree 716/2009.
** That do not comply with the requirements of Art. 3 of Royal Decree 716/2009.
*** The Bank performs a reappraisal its mortgage portfolio on a regular basis and, as a result, the measurable amount is updated.

Below is a breakdown of the available balances of the mortgage loans and credits that back the issuance of mortgage bonds and mortgage bonds:

EUR million

	Principal amount*	
	2021	2020
Potentially eligible **	662	589
Non-eligible	1,608	1,387

* Amounts committed less amounts drawn down, including amounts delivered to property developers only when the housing units are sold.
** Pursuant to Art. 3 of Royal Decree 716/2009.

d) Other mortgage bonds and guaranteed bonds

The balance of 'Other mortgage bonds and guaranteed bonds' relates to the rest of covered bonds and certificates. The breakdown, by issue currency and interest rate, is as follows:

Currency of issuance	EUR million		2021
	2021	2020	Annual interest rate*
Euro	8,452	7,671	0.18 %
US dollar	4,238	3,096	0.58 %
Balance at end of the year	**12,690**	**10,767**	

* Average interest rate of the various securities at 31 December 2021 based on their nominal amounts.

Internationalisation bonds were repaid early in February 2020, replaced by internationalisation bonds, issued in April 2020.

i. Changes

The following movement in 2021 and 2020 in the 'Other non-convertible marketable securities' account was as follows:

	EUR million		2021	
	2021	2020	Annual interest rate (%)**	Maturity date
Balance at end of the prior year	10,767	8,411		
Issues	1,851	10,145		
Of which	—	—		
April, 2020	—	*1,100*	*— %*	*abr-25*
April, 2020	—	*1,200*	*— %*	*abr-27*
April, 2020	—	*3,095*	*0.66 %*	*abr-27*
June, 2021	—	*750*	*0.07 %*	*jun-27*
June, 2021	—	*2,000*	*0.06 %*	*jun-27*
July, 2021	—	*2,000*	*0.01 %*	jul-27
March, 2021	*851*	—	*0.26 %*	mar-26
May, 2021	*1,000*	—	*0.20 %*	may-31
Amortizations	(218)	(7,789)		
Exchange differences	290	—		
Balance at end of the year	**12,690**	**10,767**		

In May 2021, Banco Santander has amortized the outstanding territorial bonds as of December 2020 for an amount of EUR 218 million.

In March 2021, Internalization Bonds were issued for an amount of USD 1,000 million (EUR 851 million) and in May, Territorial Bonds were issued for an amount of EUR 1,000 million.

In February 2020 Banco Santander has amortized the live internationalization bonds to December 2019 in the amount of EUR 2,639 million.

In addition, there have been other depreciations in territorial ballot cards amounting to EUR 4,900 million.

Three new issues of territorial cards were made in the financial year two of them amounting to 2 billion and a third EUR 750 million.

In April 2020, 3 new issues of internalization cards amounting EUR 5,396 million were formalized.

ii. Territorial bonds

The members of the board of directors have stated that in the territorial bond issuances Banco Santander has established specific policies and procedures in relation to the financing activities of public entities pursuant to Bank of Spain Circular 4/2017, of 27 November.

The following is a detail of the total principal amount of the loans used to secure the territorial bonds outstanding at 31 December 2021:

EUR million	
	Principal amount*
Central governments	103
Autonomous or regional governments	10,216
Local governments	769
Total	**11,088**

* Unrepaid portion of the loan nominal amounts.

The following is a detail of the territorial bonds issued and outstanding at 31 December 2021:

EUR million	
	Principal amount
Issued through a public offering	—
Other emissions	**6,154**
Of which,treasury shares	*5,529*
Term to maturity of up to one year	309
Term to maturity of one to two years	95
Term to maturity of two to three years	250
Term to maturity of three to five years	—
Term to maturity of five to ten years	5,500
Term to maturity of more than ten years	—

The coverage ratio of the territorial bonds with respect to the loans was 55.50% at 31 December 2021 (54.39% at 31 December 2020).

iii. Internationalization bonds

The following is a detail of the face value of all loans that serve as collateral to live internationalization bonds as of December 31, 2021:

	Nominal value (EUR million)
Eligible loans under Article 34.6 and 7 of Law 14/2013	11,806
Less: loans that support the issuance of internationalization bonds	—
Less: loans in arrears to be deducted in the calculation of the emission limit, in accordance with Article 13 of Royal Decree 579/2014	—
Total loans included in the base of the emission limit	**11,806**

Below is a detail of the internationalization bonds issued live on December 31, 2021:

	Nominal value (EUR million)
(1) Debt securities. Issued by public offer	—
Of which, own values	—
Residual maturity up to one year	—
Residual maturity greater than one year and up to two years	—
Residual maturity greater than two and up to three years	—
Residual maturity greater than three and up to five years	—
Residual maturity greater than five and up to ten years	—
(2) Debt securities. Other emissions	—
Of which, own values	*6,538*
Residual maturity up to one year	6,538
Residual maturity greater than one year and up to two years	—
Residual maturity greater than two and up to three years	—
Residual maturity greater than two and up to three years	—
Residual maturity greater than three and up to five years	1,983
Residual maturity greater than five and up to ten years	4,555
Residual maturity greater than ten years	—
(3) Deposits	—
Residual maturity up to one year	—
Residual maturity greater than one year and up to two years	—
Residual maturity greater than two and up to three years	—
Residual maturity greater than three and up to five years	—
Residual maturity greater than five and up to ten years	—
Residual maturity greater than ten years	—
TOTAL	**6,538**

The coverage ratio of internationalization bonds on loans is 55.38% as of December 31, 2021 (55.11% as of December 31, 2020)

21. Other issuances

a) Breakdown

The following is a breakdown of the balance under this heading on the attached balance sheets, taking into account their nature and currency of the transactions:

EUR million*

	2021	2020
Type		
Other issuances	76,890	59,209
Of which, subordinated liabilities	*20,399*	*17,124*
	76,890	**59,209**
Currency		
Euro	39,266	34,321
US dollar	27,628	18,848
Pound Sterling	5,240	2,692
Other currencies **	4,756	3,348
	76,890	**59,209**

* This amount includes the principal, in other currencies.

** As of December 31, 2021, the most significant currencies are yen (EUR 1,283 million), Swiss Frankfurt (EUR 1,431 million) and Australian Dollar (EUR 1,310 million).

b) Changes

The changes in 'Subordinated marketable debt securities' in the foregoing table for the years 2021 and 2020 are as follows:

EUR million

	2021	2020
Balance at the end of prior year	59,209	59,273
Issues	43,474	28,255
Redemptions	(28,107)	(26,297)
Exchange differences	2,314	(2,022)
Balance at end of the year	**76,890**	**59,209**

Within the sub-heading Other Non-convertible Marketable Securities there are commercial paper issues as well as other issuances made by Banco Santander.

- Commercial paper

On April 15, 2021, Banco Santander has approved the annual renewal of the 'European Commercial Paper Issuance Program' for a maximum nominal global amount of up to EUR 15,000 million. On November 22, 2021, the 'American Commercial Paper Issuance Program' was renewed for a global nominal amount of up to USD 25,000 million.

As of December 31, 2021, the interest rate is between -0.88% and 0.33% per year, with the average nominal interest rate being 0.125% per year. At the end of the 2020 financial year, the interest rate was between -0.66% and 3.0% per year, with the average nominal interest rate being 1.059% per year.

On 16 April 2020, Banco Santander approved the annual renewal of the 'European Commercial Paper Issue Programme' for a maximum nominal global amount of up to EUR 15,000 million. On November 2020, the 'American Commercial Paper Issue Program' was renewed for a nominal global amount of up to USD 15,000 million.

- Remaining emissions

During the 2021 fiscal year, Banco Santander, S.A. has reported 37 issues for a nominal amount of EUR 11,846 million (without considering perpetual issues amounting to EUR 2,568 million , see note 21.c), of which the Bank has repurchased a balance of EUR 74 million. The average remuneration of these issues has been set at 1.30% per year.

During the financial year 2020, Banco Santander reported 17 issues at a nominal amount of EUR 8,088 million (excluding perpetual issues amounting to EUR 1,500 million, see note 21.c). The average remuneration of these emissions has been set at 1.63% per annum.

c) Other disclosures

This caption includes contingent convertible or redeemable preferred participations, as well as other subordinated financial instruments issued, which do not qualify as equity (preferred shares).

Banco Santander's contingently convertible preferred participations are subordinated debentures and rank after common creditors and any other subordinated credit that by law and/or by their terms, to the extent permitted by Spanish law, ranks higher than the contingently convertible preferred participations. Their remuneration is conditioned to the obtainment of sufficient distributable profits, and to the limitations imposed by the regulations on shareholders' equity, and they have no voting rights. The other issues of Banco Santander, S.A. mentioned in this caption are also subordinated debentures and, for credit ranking purposes, they rank behind all the common creditors of the issuing entities and ahead of any other subordinated credit that ranks pari passu with the Bank's contingently convertible preferred participations.

The main issues of subordinated debt securities issued, broken down , are detailed below:

Issues by Banco Santander, S.A.

At 22 November 2021, Banco Santander, S.A. issued subordinated debentures for a term of eleven years, with a redemption option on the tenth anniversary of the issue date, in the amount of USD 1,000 million (EUR 1,007 million at the exchange rate on the day of issue). The issue bears interest at an annual rate of 3.225%, payable semi-annually, for the first ten years (then repricing at a margin of 160 points over the one-year U.S. government bond).

At 4 October 2021, Banco Santander, S.A. issued subordinated debentures for a term of eleven years, with a redemption option on the sixth anniversary of the issue date, amounting to GBP 850 million (EUR 887 million at the exchange rate on the day of issue). The issue bears interest at an annual rate of 2.25%, payable annually for the first six years (then repricing at a margin of 165 points over the 5-year UK government bond).

At 21 September 2021, Banco Santander, S.A. carried out a placement of preferential shares contingently convertible into newly issued ordinary shares of the Bank ('PPCC') for a nominal amount of EUR 1,000 million (issue placed on the market EUR 997 million.

The issuance has been carried out at par and the remuneration of the PPCC, whose payment is subject to certain conditions and is also discretionary, has been set at 3.625% per year for the first eight years, being reviewed every five years applying a margin of 376 basis points over the 5-year Mid-Swap Rate.

At 11 September 2021, Banco Santander, S.A. proceeded to redeem early and voluntarily the entire issue made on 11 September 2014 of tier 1 contingently convertible preference shares (PPCC) with ISIN code XS110729154 which are traded in the Irish Stock Exchange Market 'Global Exchange Market', for a total nominal amount of EUR 1,500 million.

At 12 May 2021, Banco Santander placed the issue of preference shares contingently convertible into newly issued ordinary shares of the Bank, previously announced, for a total nominal amount of EUR 1,578 million, issued in a Series in Dollars of USD 1,000 million (EUR 828 million at the exchange rate on the day of issue) and a Series in Euros for an amount of EUR 750 million.

The issuance is carried out at par and the remuneration of the PPCC, whose payment is subject to certain conditions and is also discretionary, has been set (i) for the Series in Dollars at 4.750% per annum for the first six years, being revised every five years applying a margin of 375.3 basis points over the 5-year UST rate and (ii) for the Series in Euros by 4.125% per annum for the first seven years, being revised every five years applying a margin of 431.1 basis points over the applicable 5-year euro mid-swap.

At 3 December 2020, Banco Santander, S.A. issued subordinated debentures with a ten-year term of USD 1,500 million (EUR 1,222 million at the date of issue). The issue bears interest at an annual rate of 2.749%, payable semiannually.

At 22 October 2020, it carried out a ten-year subordinated debenture issue for an amount of EUR 1,000 million. The issue bears interest at an annual rate of 1.625%, payable annually.

At 12 March 2020, it proceeded to redeem early and voluntarily the entire outstanding issue of Tier 1 Contingently Convertible Preferred Participations Series I/2014, for a total nominal amount of EUR 1,500 million.

At 14 January 2020, it carried out a placement of contingently convertible preferred participations into newly issued ordinary shares of the Bank (the 'PPCCs'), excluding the pre-emptive subscription rights of its shareholders and for a nominal amount of EUR 1,500 million (the 'Issue' and the 'PPCCs').

The Issue was made at par and the remuneration of the PPCCs, the payment of which is subject to certain conditions and is also discretionary, was set at 4.375% per annum for the first six years, revised every five years thereafter by applying a margin of 453.4 basis points over the 5-year Mid-Swap Rate (5-year Mid-Swap Rate).

At 19 May 2019, the voluntary early redemption of the preferred shares relating to the second issue made on 9 May 2014 (code ISIN XS1066553329) was communicated for an amount of USD 1,500 million (EUR 1,345 million) at the redemption date.

At 8 February 2019, Banco Santander, S.A, carried out an issue of PPCC for a nominal amount of USD 1,200 million (EUR 1,056 million). The remuneration of the issues whose payment is subject to certain conditions and is also discretionary was set at 7.50% per annum, for the first five years (revised thereafter by applying a margin of 498.9 points over the mid-swap rate).

At 19 March 2018, a 'PPCC' issue was carried out, for a nominal amount of EUR 1,500 million. The remuneration of the issue, the payment of which is subject to certain conditions and is also discretionary, was set at 4.75% per annum, payable quarterly, for the first seven years (revised thereafter by applying a margin of 410 basis points over the Mid-swap rate).

At 8 February 2018, a 10-year subordinated debenture issue of EUR 1,250 million was carried out. The issue accrues annual interest of 2.125% payable annually.

At 25 April and 29 September 2017, Banco Santander, S.A. carried out issues of 'PPCCs', for a nominal amount of EUR 750 million, and EUR 1,000 million respectively. The remuneration of the PPCCs, the payment of which is subject to certain conditions and is also discretionary, was set at 6.75% per annum for the first five years (revised thereafter by applying a margin of 680.3 basis points over the 5-year Mid-Swap Rate) for the issue disbursed in April, at 5.25% per annum for the first six years (revised thereafter by applying a margin of 499.9 basis points over the 5 years Mid-Swap Rate) for the issue disbursed in September.)

22. Other financial liabilities

a) Breakdown

The following is a detail of 'Other financial liabilities' on the accompanying balance sheets:

EUR million

	2021	2020
Trade payables	888	721
Payment obligations	2,711	2,864
Public agency revenue collection accounts	4,506	3,498
Unsettled financial transactions	617	797
Other accounts	1,302	2,000
Total	**10,024**	**9,880**

b) Average payment period to suppliers

Set forth below are the disclosures required by Additional Provision Three of Law 15/2010, of 5 July (amended by Final Provision Two of Law 31/2014, of 3 December), prepared in accordance with the Spanish Accounting and Audit Institute (ICAC) Resolution of 29 January 2016 on the disclosures to be included in notes to financial statements in relation to the average period of payment to suppliers in commercial transactions.

	2021	2020
	Days	
Average period of payment to suppliers	10	11
Ratio of transactions paid	10	11
Ratio of transactions pending payments	—	—
	EUR million	
Total payments made	2,848	2,966
Total payments outstanding	—	—

In accordance with the ICAC Resolution, the average period of payment to suppliers was calculated by taking into account commercial transactions relating to the supply of goods or services for which payment has accrued since the date of issuance of Law 31/2014, of December, 3.

For the sole purpose of the disclosures provided for in the Resolution, suppliers are considered to be the trade creditors for the supply of goods or services.

"Average period of payment to suppliers" is taken to be the period that elapses from the delivery of the goods or the provision of the services by the supplier to the effective payment of the transaction,

Note 48 contains a detail of the maturity periods of 'Other financial liabilities' at each year-end.

c) Lease liabilities

The total lease cash outflow in fiscal year 2021 was EUR 301 million (EUR 324 millon during 2020). The analysis of maturities corresponding to lease liabilities, as of December 31, 2021, is as follows:

EUR million

	2021	2020
Maturity Analysis – Discounted payments		
Within 1 year	351	289
Between 1 and 3 years	445	485
Between 3 and 5 years	317	349
Later than 5 years	1,336	1,411
Total Discounted payments at 31 December 2021	**2,449**	**2,534**

During 2021, no significant variable payments have been made not included in the measurement of lease liabilities.

23. Provisions

a) Breakdown

The detail of 'Provisions' in the balance sheets at 31 December 2021 and 2020 is as follows:

EUR million

	2021	2020
Provision for pensions and similar obligations	2,730	3,430
Of which		
Pensions and similar defined benefit obligations post-employment	*1,677*	*1,849*
Other long-term remunerations to employees	*1,053*	*1,581*
Restructuring	439	484
Provisions for taxes and other legal contingencies	516	496
Provisions for commitments and guarantees given	190	157
Other provisions	474	440
Total	**4,349**	**5,007**

b) Changes

The changes in 'Provisions' in 2021 and 2020 were as follows:

EUR million

	2021					2020				
	Post-employment	Long – Term	Contingent liabilities and commitments	Other provisions	Total	Post-employment	Long - Term	Contingent liabilities and commitments	Other provisions	Total
Balance at end of prior year	1,849	1,581	157	1,420	5,007	3,918	1,220	180	1,172	6,490
Changes in value recognized in equity	(29)	—	—	—	(29)	77	—	—	—	77
Additions charged to income	(9)	24	24	747	786	(340)	728	(20)	804	1,172
(Interest income)/ Interest expense (notes 34 and 35)	12	11	—	—	23	20	8	—	—	28
Staff costs (note 42)	4	1	—	—	5	10	1	—	—	11
Provisions or reversal of provision	(25)	12	24	747	758	(370)	719	(20)	804	1,133
Payments to pensioners and pre-retirees	(164)	(552)	—	—	(716)	(1,817)	(367)	—	—	(2,184)
Amounts used and other changes	30	—	9	(738)	(699)	11	—	(3)	(556)	(541)
Balances at end of year	**1,677**	**1,053**	**190**	**1,429**	**4,349**	**1,849**	**1,581**	**157**	**1,420**	**5,007**

c) Provision for pensions and similar obligations

The detail of 'Provision for pensions and similar obligations' at 31 December 2021 and 2020 is as follows:

EUR million

	2021	2020
Provisions for pensions and similar defined benefit plan obligations	2,730	3,430
Of which		
Provisions for pensions	*1,677*	*1,849*
Provisions for similar obligations	*1,053*	*1,581*
Of which, pre-retirements	*1,041*	*1,567*
Provisions for pensions and similar defined contribution plan obligations	—	—
Total provisions for pensions and similar obligations	**2,730**	**3,430**

i. Defined contribution plans

At the end of 2012, Banco Santander reached an agreement with workers' representatives to transform the defined benefit commitments derived from the collective agreement into defined contribution plans. Similarly, the contracts for senior management staff with pension commitments in the defined benefit modality were amended to transform them into a defined contribution provision system.

Almost all of the pension commitments with active personnel correspond to defined contribution plans. The total contributions made to these plans during 2021 amounted to EUR 77 million (EUR 80 million during 2020) (see nota 42).

ii. Defined Benefit Plans

In addition to the previous defined contribution plans, as of December 31, 2021, Banco Santander maintained definite service commitments. Below is the present value of the Bank`s commitments in post-employment remuneration for defined benefit programs, as well as the value of the reimbursement entitlements for insurance contracts linked to those obligations as of 31 December 2021 and preceding years:

EUR million

	2021	2020	2019
Present value of the obligations			
To current employees	42	78	78
To retired employees	2,806	3,304	5,378
Other	—	—	—
	2,848	**3,382**	**5,456**
Fair value of plan assets	(1,205)	(1,537)	(1,543)
Assets not recognized	5	4	5
Provisioned assets on the balance sheet	29	—	—
Provisions - Provisions for pensions	**1,677**	**1,849**	**3,918**
Of which			
Internal provisions for pensions	*1,296*	*1,426*	*3,407*
Insurance contracts linked to pensions (note 14)	*381*	*423*	*511*
Of which			
Group insurance entities	*232*	*249*	*319*
Other insurers	*149*	*174*	*192*

On July 8, 2021, the Bank reached an agreement with the employees' representatives for the transformation of the defined benefit pension commitments into defined contribution for certain retired personnel from Banco Popular and Banco Pastor.

Through the previously mentioned Collective Agreement, an aggrement has been to carry out an offer to replace the annuities that the passive personnel included in the scope of application of said Collective Agreement had been receiving with a capitalization fund in the Santander Employees pension plan.

The number of beneficiaries who exercised the voluntary option to accept the substitution of the life annuity for a capitalization fund in the Santander Employees pension plan amounted to 1,468 people. The effect of the reduction of the aforementioned commitments is shown in the tables below under the headings 'Benefits paid by settlement' amounting to EUR 166 million and 'Effect reduction / settlement' amounting to EUR 36 million.

In December 2019 Banco Santander reached an agreement with the workers' representatives to offer during 2020 to part of its passive staff, the possibility of collecting in the form of a single consideration or split in a maximum of 5 equal annuities, the pensionable rights derived from the collective agreement. The proposal was also extended to personnel with pensionable rights recognized under individual contracts or agreements. The number of beneficiaries who exercised the voluntary option of accepting the substitution of the life annuity for the payment of a lump sum in the form of a capital sum or in installments of a maximum of 5 annuities amounted to 15,613 people. The effect of the reduction of the aforementioned commitments is shown in the following tables.

The amount of the defined benefit obligations was determined on the basis of the work performed by independent actuaries using the following actuarial techniques:

1. Valuation method: projected unit credit method, which sees each period of service as giving rise to an additional unit of benefit entitlement and measures each unit separately.
2. Actuarial assumptions used: unbiased and mutually compatible. Specifically, the most significant actuarial assumptions used in the calculations were as follows:

EUR million

	2021	2020
Annual discount rate	0.90 %	0.60 %
Expected return on plan assets rate	0.90 %	0.60 %
Mortality tables	PE2020 M/F Col. Orden 1	PE2020 M/F Col. Orden 1
Cumulative annual CPI growth	1.00 %	1.00 %
Annual pension increase rate	1.00 %	1.00 %

3. The discount rate used for the flows was determined referencing to high-quality corporate bonds.
4. The estimated retirement age of each employee is the first at which the employee is entitled to retire or the agreed-upon age, as appropriate.
5. The fair value of insurance contracts was determined as the present value of the related payment obligations, taking into account the following assumptions:

EUR million

	2021	2020
Expected rate of return on reimbursement rights	0.90 %	0.60 %

The amounts recognized in the accompanying income statements in relation to the aforementioned defined benefit obligations are as follows:

EUR million

	2021	2020
Service cost:		
Current service cost (note 42)	4	10
Past service cost (including reductions)	13	2
Pre-retirement cost	—	—
Settlements	(38)	(372)
Net interest (note 35)	24	26
Expected return on insurance contracts linked to pensions (note 34)	(12)	(6)
Total	**(9)**	**(340)**

In addition, in 2021 'Other comprehensive income – items not reclassified to profit or loss - Actuarial gains or (-) losses on defined benefit pension plans' has caused an additional actuarial profits of EUR 30,7 million in respect to defined benefit obligations (2020: EUR 78,7 million of actuarial loss).

The changes in 2021 and 2020 of the present value of the accrued defined benefit obligations were as follows:

EUR million

	2021	2020
Present value of the obligations at beginning of the year	3,382	5,456
Current service cost	4	10
Interest cost	36	39
Pre-retirement cost	—	—
Settlements	(60)	(372)
Benefits paid for settlements	(166)	(1,551)
Other benefits paid	(245)	(356)
Past service cost	13	2
Actuarial (gains)/losses*	(122)	160
Exchanges rate differences and others	6	(6)
Present value of the obligations at end of the year	**2,848**	**3,382**

* Included in 2021 are demographic actuarial losses of EUR 9 million and financial actuarial profits of EUR 131 million (2020: demographic actuarial losses of EUR 90 million and financial actuarial losses of EUR 70 million).

The changes in 2021 and 2020 in the fair value of the plan assets are as follows:

EUR million

	2021	2020
Fair value of plan assets at beginning of year	1,537	1,543
Expected return on plan assets	12	13
Benefits paid	(262)	(94)
Contributions payable by the employer	14	5
Settlements gains/(losses)	(22)	—
Exchange rate differences and others	5	(6)
Actuarial gains/(losses)	(79)	76
Fair value of plan assets at end of year	**1,205**	**1,537**

The changes in 2021 and 2020 in the fair value of the insurance contracts linked to pensions are as follows:

EUR million

	2021	2020
Fair value of insurance contracts linked to pensions at beginning of the year	423	511
Expected return on insurance contracts (note 34)	12	6
Actuarial gains/(losses)	(12)	5
Premiums paid/(surrenders)	—	(7)
Benefits paid	(42)	(92)
Fair value of insurance contracts linked to pensions at end of the year (note 14)	**381**	**423**

Plan assets and pension insurance contracts linked to pensions are mainly appear in insurance policies.

iii. Other long-term employee benefits

In various years, Banco Santander offered to some certain of its employees the possibility of leaving its employ prior to their retirement. Therefore, provisions are recognized to cover the obligations to pre-retirees -in terms of both salaries and other employee benefit costs- from the date of their pre-retirement to the date of their effective retirement.

The present value of the aforementioned obligations and the fair value of the assets arising from insurance contracts linked to these obligations at 31 December 2021 and for the preceding years are as follows:

EUR million

	2021	2020	2019
Present value of the obligations:			
To pre-retirees	1,052	1,580	1,220
Long-service bonuses and other benefits	11	13	14
	1,063	**1,593**	**1,234**
Fair value of plan assets	(10)	(12)	(14)
Provisions - Provisions for pensions	**1,053**	**1,581**	**1,220**
Insurance plans linked to pensions	—	—	—
Group insurers	—	—	—
Other insurance entities	—	—	—

In December 2020, Banco Santander reached an agreement with the workers' representatives to implement an early retirement and incentivized termination plan, which is expected to benefit 3,572 employees during 2021, with the provision set up to cover these commitments amounting to EUR 674 million. In addition, the provision set up to cover the dismissal of employees who have taken advantage of early retirement offers and incentivized dismissals during 2020 amounted to EUR 63 million. In 2021, to complete the plan announced in 2020, EUR 82 million have been allocated, increasing the number of early retirements and incentivized dismissals to 3,643 employees in the total period.

The amount of the other long-term remuneration commitments defined benefit has been determined on the basis of work performed by independent actuaries, applying the following criteria to quantify them:

1. Valuation method: projected unit credit method.
2. Actuarial assumptions used: unbiased and mutually compatible. Specifically, the most significant actuarial assumptions used in the calculations were as follows:

EUR million

	2021	2020
Annual discount rate	0.90 %	0.60 %
Expected return on plan assets rate	0.90 %	0.60 %
Mortality tables	PE2020 M/F Col. Orden 1	PE2020 M/F Col. Orden 1
Cumulative annual CPI growth	1.00 %	1.00 %
Annual benefit increase rate	Entre 0% y 1,5%	Entre 0% y 1,5%

3. The discount rate used for the flows was determined by reference to high-quality corporate bonds.
4. The estimated retirement age of each employee is the first at which the employee is entitled to retire or the agreed-upon age, as appropriate.
5. The amounts recognised in the income statement in relation to the aforementioned defined benefit obligations are as follows:

EUR million

	2021	2020
Service cost:		
Current service cost	1	1
Interest cost (note 35)	11	8
Extraordinary charges		
Actuarial (gains)/losses recognized in the year	(14)	(3)
Pre-retirement cost	81	737
Other	(55)	(15)
Total	**24**	**728**

The changes in 2021 and 2020 in the present value of the accrued obligations for other long-term benefits were as follows:

EUR million

	2021	2020
Present value of the obligations at beginning of the year	1,593	1,234
Current service cost	1	1
Cost per interest (note 35)	11	8
Past service cost	—	—
Pre-retirement cost	81	737
Effect of curtailment/settlement	(55)	(15)
Benefits paid	(554)	(369)
Actuarial (gains)/losses	(14)	(3)
Other	—	—
Present value of the obligations at end of the year	**1,063**	**1,593**

The movement that has occurred, during the years 2021 and 2020, in the fair value of the assets of the plan, has been as follows:

EUR million

	2021	2020
Fair value of plan assets at the beginning of the year	12	14
Expected return on plan assets	—	—
Benefits paid	(2)	(2)
Contributions by the employer	—	—
Contributions by the employee and others	—	—
Actuarial gains / (losses)	—	—
Present value of the obligations at end of the year	**10**	**12**

iv. Sensitivity analysis

Any changes in the main assumptions could affect the calculation of the obligations, At 31 December 2021, if the discount rate used had been decreased or increased by 50 basis points, there would have been an increase or decrease in the present value of the post-employment obligations of 5.00% and -5.06%, respectively, and an increase or decrease in the present value of the long-term obligations of 1.18% and -1.18%, These changes would be offset in part by increases or decreases in the fair value of the assets and insurance contracts linked to pensions.

The following table shows the estimate of benefits to be paid as of December 31, 2021 for the next ten years:

EUR Million

2022	571
2023	436
2024	376
2025	311
2026	267
2027 to 2030	878

d) Provisions for taxes and other legal contingencies and Other provisions

'Provisions - Provisions for taxes and other legal contingencies' and 'Provisions - Other provisions', which include, inter alia, provisions for restructuring costs and tax-related and non-tax-related proceedings, were estimated using prudent calculation procedures in keeping with the uncertainty inherent to the obligations covered. The definitive date of the outflow of resources embodying economic benefits for the Bank depends on each obligation. In certain cases, these obligations have no fixed settlement period and, in other cases, depend on the legal proceedings in progress.

'Provisions for taxes and other legal contingencies' include proceedings and other legal proceedings such as judicial, arbitral or administrative proceedings initiated against Banco Santander. Qualitative information on the main disputes is provided in note 23.e. For their part, the provisions for restructuring include only costs arising from restructuring processes incurred at Banco Santander.

The Bank's general policy is to record provisions for tax and legal proceedings in which we assess the chances of loss to be probable and we do not record provisions when the chances of loss are possible or remote. We determine the amounts to be provided for as our best estimate of the expenditure required to settle the corresponding claim based, among other factors, on a case-by-case analysis of the facts and the legal opinion of internal and external counsel or by considering the historical average amount of the loss incurred in claims of the same nature. The definitive date of the outflow of resources embodying economic benefits for the Bank depends on each obligation. In certain cases, the obligations do not have a fixed settlement term and, in others, they depend on legal proceedings in progress.

Regarding the provision for restructuring, in 2020 EUR 299 million were allocated in relation to the agreement reached with the worker's' representatives in order to implement an early retirement and incentivized dismissal plan, in that said year. The amounts associated with this plan were recorded according to their nature under the heading 'Provisions for restructuring' and under the heading 'Provisions for pensions and similar obligations', explained in note 23.c above. The increase in the provision for restructuring was offset by the application of EUR 99 million in 2020.

As for the 'Other provisions' contains very atomized and individually insignificant provisions, such as the provisions corresponding to cover other operational risks of the Bank.

e) Litigation and other matters

i. Tax-related litigation

At 31 December 2021 the main tax-related proceedings concerning the Group and the Bank were as follows:

- Legal actions filed by Banco Santander (Brasil) S.A. and other Group entities to avoid the application of Law 9.718/98, which modifies the basis to calculate PIS and COFINS social contribution, extending it to all the entities income, and not only to the income from the provision of services. In relation of Banco Santander (Brasil) S.A. process, in May 2015 the Federal Supreme Court (FSC) admitted the extraordinary appeal filed by the Federal Union regarding PIS, and dismissed the extraordinary appeal lodged by the Brazilian Public Prosecutor's Office regarding COFINS contribution, confirming the decision of Federal Regional Court favourable to Banco Santander (Brasil) S.A. of August 2007. The appeals filed by the other entities before the Federal Supreme Court, both for PIS and COFINS, are still pending. These claims are fully provisioned.
- Banco Santander (Brasil) S.A. and other Group companies in Brazil have appealed against the assessments issued by the Brazilian tax authorities questioning the deduction of loan losses in their income tax returns (IRPJ and CSLL) in relation to different administrative processes of various years on the ground that the requirements under the applicable legislation were not met. The appeals are pending decision in CARF. No provision was recognised in connection with the amount considered to be a contingent liability.
- Banco Santander (Brasil) S.A. and other Group companies in Brazil are involved in administrative and legal proceedings against several municipalities that demand payment of the Service Tax on certain items of income from transactions not classified as provisions of services. There are several cases in different judicial instances. A provision was recognised in connection with the amount of the estimated loss.
- Banco Santander (Brasil) S.A. and other Group companies in Brazil are involved in administrative and legal proceedings against the tax authorities in connection with the taxation for social security purposes of certain items which are not considered to be employee remuneration. There are several cases in different judicial instances. A provision was recognised in connection with the amount of the estimated loss.

- In May 2003 the Brazilian tax authorities issued separate infringement notices against Santander Distribuidora de Títulos e Valores Mobiliarios, Ltda. (DTVM, actually Santander Brasil Tecnología S.A.) and Banco Santander (Brasil) S.A. in relation to the Provisional Tax on Financial Movements (CPMF) of the years 2000 to 2002. The administrative discussion ended unfavourably for both companies, and on July 3, 2015, filed a lawsuit requesting the cancellation of both tax assessments. The lawsuit was judged unfavourably in first instance. Therefore, both plaintiffs appealed to the court of second instance. On December 2020, the appeal was decided unfavourably. Against the judgment, the bank filed a motion for clarification which has not been accepted. Currently it is appealed to higher courts. There is a provision recognized for the estimated loss.
- In December 2010 the Brazilian tax authorities issued an infringement notice against Santander Seguros S.A. (Brazil), currently Zurich Santander Brasil Seguros e Previdência S.A., as the successor by merger to ABN AMRO Brasil dois Participações S.A., in relation to income tax (IRPJ and CSLL) for 2005, questioning the tax treatment applied to a sale of shares of Real Seguros, S.A. The administrative discussion ended unfavourably, and the CARF decision has been appealed at the Federal Justice. As the former parent of Santander Seguros S.A. (Brasil), Banco Santander (Brasil) S.A. is liable in the event of any adverse outcome of this proceeding. No provision was recognised in connection with this proceeding as it is considered to be a contingent liability.
- In November 2014 the Brazilian tax authorities issued an infringement notice against Banco Santander (Brasil) S.A. in relation to corporate income tax (IRPJ and CSLL) for 2009 questioning the tax-deductibility of the amortisation of the goodwill of Banco ABN AMRO Real S.A. performed prior to the absorption of this bank by Banco Santander (Brasil) S.A., but accepting the amortisation performed after the merger. Actually it is appealed before the Higher Chamber of CARF. No provision was recognised in connection with this proceeding as it was considered to be a contingent liability.
- Banco Santander (Brasil) S.A. has also appealed against infringement notices issued by the tax authorities questioning the tax deductibility of the amortisation of the goodwill arising on the acquisition of Banco Comercial e de Investimento Sudameris S.A from years 2007 to 2012. No provision was recognised in connection with this matter as it was considered to be a contingent liability.
- Banco Santander (Brasil) S.A. and other companies of the Group in Brazil are undergoing administrative and judicial procedures against Brazilian tax authorities for not admitting tax compensation with credits derived from other tax concepts, not having registered a provision for the amount considered to be a contingent liability.
- Banco Santander (Brasil) S.A. is involved in appeals in relation to infringement notices initiated by tax authorities regarding the offsetting of tax losses in the CSLL ('Social Contribution on Net Income') of year 2009. The appeal is pending decision in CARF. No provision was recognised in connection with this matter as it is considered to be a contingent liability.
- Brazilian tax authorities have issued infringement notices against Getnet Adquirência e Serviços para Meios de Pagamento S.A and Banco Santander (Brasil) S.A. as jointly liable in relation to corporate income tax (IRPJ and CSLL) for 2014 to 2018 questioning the tax-deductibility of the amortization of the goodwill from the acquisition of Getnet Tecnologia Proces S.A., considering that the company would not have complied with the legal requirements for such amortization. A defense against the tax assessment notices were submitted, and the appeal is pending decision in CARF. No provision was recognized as it is considered to be a contingent liability.

  The total amount for the aforementioned Brazil lawsuits that are fully provisioned is EUR 848 million, and for lawsuits that qualify as contingent liabilities is EUR 3,690 million.
- Legal action brought by Sovereign Bancorp, Inc. (currently Santander Holdings USA, Inc.) claiming its right to take a foreign tax credit for taxes paid outside the United States in fiscal years 2003 to 2005 as well as the related issuance and financing costs. On 17 July 2018, the District Court finally ruled against Santander Holdings USA, Inc. On September 5, 2019 the Federal District Court in Massachusetts entered a judgement resolving the Company's tax liability for fiscal years 2003 to 2005, which had no effect on income. The Company has agreed to resolve the treatment of the same transactions for 2006 and 2007, consistent with the September 5, 2019 judgment. The Congressional Joint Committee on Taxation has completed its review of the proposed resolution of the 2006 and 2007 tax years, with no objection. The IRS finalized its administrative process to close-out the issue, which resulted in no impact on net income.

- Banco Santander appealed before European Courts the Decisions 2011/5/CE of 28 October 2009 (First Decision), and 2011/282/UE of 12 January 2011 (Second Decision) of the European Commission, ruling that the deduction of the financial goodwill regulated pursuant to Article 12.5 of the Corporate Income Tax Law constituted illegal State aid. On October 2021 the Court of Justice has definitively confirmed these Decisions. The dismissal of the appeal, that only affects these two decisions, has no effect on equity.

At the date of approval of these interim financial statements certain other less significant tax-related proceedings are also in progress.

ii. Non-tax-related proceedings

At 31 December 2021 the main non-tax-related proceedings concerning the Group and the Bank were as follows:

- Payment Protection Insurance (PPI): In recent years Santander UK plc has processed customer claims associated with the sale of payment protection insurance (PPI), derived from the Financial Conduct Authority guidelines. As of 31 December 2021 there is no provision related to those claims as the deadline for presenting them has already expired. However, customers can still commence in-court litigation for the mis-sale of PPI and a provision for the best estimate of any obligation to pay compensation in respect of current and future claims is recognized for this purpose.

  In addition, there is a legal dispute regarding allocation of liability for pre-2005 PPI policies underwritten by two entities (Axa France) that Axa Group acquired from Genworth Financial International Holdings, Inc. in September 2015. The dispute involves Santander Cards UK Limited (formerly known as GE Capital Bank Limited which was acquired by Banco Santander, S.A. from GE Capital group in 2008) which was the distributor of the policies in dispute and Santander Insurance Services UK Limited (the Santander Entities).

  In July 2017, the Santander Entities notified Axa France that they did not accept liability for losses on PPI policies relating to the referred period. Santander UK plc entered in a Complaints Handling Agreement –that included a standstill agreement- agreeing to handle complaints on Axa France, whilst Axa France accepted paying redress assessed to be due to relevant policyholders on a without prejudice basis.

  After the termination of the Complaints Handling Agreement, on 30 December 2020 Axa France provided written notice to the Santander Entities to terminate the standstill agreement. On 5 March 2021, the Santander Entities were served with a Claim Form and Brief Details of Claim by Axa France, claiming that the Santander Entities are liable to reimburse Axa France for pre-2005 PPI mis-selling losses, currently estimated at GBP 636 million (EUR 739 million). On 22 March 2021, the Santander Entities acknowledged service of the claim and notified the court of their intention to defend the claim in full and issued an application for Axa Frances's claim to be struck out/ summarily dismissed, which is being heard by the Commercial Court on 22 and 23 February 2022. Decision is not expected until second quarter 2022.

  In the event the claim is not dismissed, there are still ongoing factual issues to be resolved during the trial, which may have legal consequences including in relation to liability. These issues create uncertainties which mean that it is difficult to reliably predict the outcome or the timing of the resolution of the matter. The provision includes our best estimate of the Santander Entities' liability for this matter.

- Delforca: dispute arising from equity swaps entered into by Gaesco (now Delforca 2008, S.A.) on shares of Inmobiliaria Colonial, S.A. Banco Santander, S.A. is claiming to Delforca before the Court of Barcelona in charge of the bankruptcy proceedings, a total of EUR 66 million from the liquidation resulting from the early termination of financial transactions due to Delforca's non-payment of the equity swaps. In the same bankruptcy proceedings, Delforca and Mobiliaria Monesa have in turn claimed the Bank to repay EUR 57 million, which the Bank received for the enforcement of the agreed guarantee, as a result of the aforementioned liquidation. On 16 September 2021 the Commercial Court Number 10 of Barcelona has ordered Delforca to pay the Bank EUR 66 million plus EUR 11 million in interest and has dismissed the claims filed by Delforca. This decision has been appealed by Delforca, Mobiliaria Monesa and the bankruptcy administrator. The appeal which the Bank has already opposed to will be resolved by the Provincial Court of Barcelona.

  Separately, Mobiliaria Monesa, S.A. (parent of Delforca) filed in 2009 a civil procedure with the Courts of Santander against the Bank claiming damages that have not been specified to date. The procedure is suspended.

- Former employees of Banco do Estado de São Paulo S.A., Santander Banespa, Cia. de Arrendamiento Mercantil: claim initiated in 1998 by the association of retired Banespa employees (AFABESP) requesting the payment of a half-yearly bonus contemplated in the by-laws of Banespa in the event that Banespa obtained a profit and that the distribution of this profit were approved by the Board of Directors. The bonus was not paid in 1994 and 1995 since Banespa had not made a profit during those years. Partial payments were made from 1996 to 2000, as approved by the Board of Directors. The relevant clause was eliminated in 2001. The Tribunal Regional do Trabalho (Regional Labour Court) and the High Employment Court (TST) ordered Santander Brazil, as successor to Banespa, to pay this half-yearly bonus for the period from 1996 to the present. On 20 March 2019, the Supreme Federal Court (STF) rejected the extraordinary appeal filed by Santander Brazil.

  Santander Bank Brazil filed a rescissory action before the TST to nullify the decisions of the main proceedings and suspend the execution of the judgment, which was deemed inadmissible, therefore its execution was suspended. The rescissory action was dismissed and a motion for clarification was filed, due to the absence of an explicit argument to deny the rescissory action filed by Santander Brazil. After the decision of the motion for clarification, Santander Brazil filed an extraordinary appeal in the rescissory action in February 2021, which was denied in an interlocutory decision in June 2021 by the TST. As Santander Brazil understands there is a conflict between the TST decision and the doctrine set by the STF, Santander Brazil has appealed this decision. This appeal is pending.

  In August 2021, a first instance court has ruled that the enforcement of the TST decision shall be carried out individually, at the jurisdiction pertaining to each person. AFABESP appealed this decision. In December 2021, the Regional Labor Court denied the appeal filed by AFABESP. This decision has not been appealed by AFABESP, and therefore it has become firm.

  Santander Brazil external advisers have classified the risk as probable. The recorded provisions are considered sufficient to cover the risks associated with the legal claims that are being substantiated as of 31 December 2021.

- 'Planos Económicos': like the rest of the banking system in Brasil, Santander Brazil has been the target of customer complaints and collective civil suits stemming mainly from legislative changes and its application to bank deposits ('economic plans'). At the end of 2017, an agreement between regulatory entities and the Brazilian Federation of Banks (Febraban) with the purpose of closing the lawsuits was reached and was approved by the Supremo Tribunal Federal. Discussions focused on specifying the amount to be paid to each affected client according to the balance in their notebook at the time of the Plan. Finally, the total value of the payments will depend on the number of adhesions there may be and the number of savers who have demonstrated the existence of the account and its balance on the date the indexes were changed. In November 2018, the STF ordered the suspension of all economic plan proceedings for two years from May 2018. On 29 May 2020, the STF approved the extension of the agreement for P5Y additional years starting from 3 June 2020. Condition for this extension was to include in the agreement actions related to the “Collor I Plan”. On 31 December 2021, the provision recorded for the economic plan proceedings amounts to EUR 277 million.

- Floor clauses: as a consequence of the acquisition of Banco Popular Español, S.A.U. the Group has been exposed to a material number of transactions with floor clauses. The so-called "floor clauses" are those under which the borrower accepts a minimum interest rate to be paid to the lender, regardless of the applicable reference interest rate. Banco Popular Español, S.A.U. included "floor clauses" in certain asset-side transactions with customers. In relation to this type of clauses, and after several rulings made by the Court of Justice of the European Union and the Spanish Supreme Court, and the extrajudicial process established by the Spanish Royal Decree-Law 1/2017, of 20 January, Banco Popular Español, S.A.U. made provisions that were updated in order to cover the effect of the potential return of the excess interest charged for the application of the floor clauses between the contract date of the corresponding mortgage loans and May 2013. At 31 December 2021, after having processed most of the customer requests, the potential residual loss associated with ongoing court proceedings is estimated at EUR 46 million, amount which is fully covered by provisions.

- Banco Popular´s acquisition: considering the declaration setting out the resolution of Banco Popular Español, S.A.U., the redemption and conversion of its capital instruments and the subsequent transfer to Banco Santander, S.A. of the shares resulting from this conversion in exercise of the resolution instrument involving the sale of the institution's business, in application of the single resolution framework regulation, some investors have filed claims against the EU's Single Resolution Board decision, the FROB's resolution executed in accordance to the aforementioned decision, and claims have been filed and may be filed in the future against Banco Santander, S.A. or other Santander Group companies deriving from or related to the acquisition of Banco Popular Español, S.A.U.

  At this stage, it is not possible to foresee the total number of claims that could be filed by the former holders of shares and capital instruments (arising from the acquisition by investors of such shares and capital instruments of Banco Popular prior to resolution, including in particular, without limitation, the shares acquired in the context of the capital increase with pre-emptive subscription rights carried out in 2016), and their economic implications (especially considering that the decision to resolve in application of the new regulation has no precedent, and that it may be possible that future claims do not specify a specific amount, put forward new legal interpretations or involve a large number of parties).

  In this respect, on 2 September 2020, the Provincial Court of La Coruña has referred a preliminary ruling to the Court of Justice of the European Union ("CJEU") asking for the correct interpretation of Article 60(2) of Directive 2014/59/EU of the European Parliament and of the Council, dated 15 May 2014, which establishes a framework for the restructuring and resolution of credit institutions and investment firms. This article establishes that, in cases of redemption of capital instruments in a bank resolution, no liability shall remain in relation to the amount of the instrument that has been redeemed. On 2 December 2021, the CJEU Advocate General issued his opinion, considering that the Directive precludes former Banco Popular shareholders from bringing claims for compensation against Banco Santander. The judgement of the CJEU in this case is still pending and is likely to condition the outcome on the judicial proceedings that are currently ongoing.

  Likewise, the Central Court of Instruction 4 is currently conducting preliminary proceedings 42/2017, in which, amongst other things, is being investigated the following: (i) the accuracy of the prospectus for the capital increase with subscription rights carried out by Banco Popular in 2016; and (ii) the alleged manipulation of the share price of Banco Popular until the resolution of the bank, in June 2017. During the course of the proceedings, on 30 April 2019, the Spanish National Court, ruled in favour of Banco Santander, S.A. declaring that Banco Santander, S.A. cannot inherit Banco Popular's potential criminal liability. This ruling was appealed before the Supreme Court, which rejected it. In this proceedings, Banco Santander, S.A. could potentially be subsidiarily liable for the civil consequences.

  The estimated cost of any compensation to shareholders and bondholders of Banco Popular recognized in the 2017 accounts amounted to EUR 680 million, of which EUR 535 million were applied to the commercial loyalty program. At 31 December 2021, the provisions recorded are considered sufficient to cover the risks associated with the court claims that can be estimated to date. However, if additional amounts have to be paid for claims already raised with an undetermined economic interest or for new claims which cannot be reliably estimated because of their specific circumstances, this could have a significant adverse effect on the Santander Group's results and financial situation.

- German shares investigation: the Cologne Public Prosecution Office is conducting an investigation against the Bank, and other group entities based in UK - Santander UK plc, Santander Financial Services Plc and Cater Allen International Limited -, in relation to a particular type of tax dividend linked transactions known as cum-ex transactions.

  The Group is cooperating with the German authorities. According to the state of the investigations, the result and the effects for the Group, which may potentially include the imposition of material financial penalties, cannot be anticipated. For this reason, the Bank has not recognized any provisions in relation to the potential imposition of financial penalties.

- Banco Santander, S.A. has been sued in a legal proceeding in which the plaintiff alleges that a contract was concluded whereby he would be entrusted with the functions of CEO of the Bank. In the complaint, the claimant mainly requests a declaratory ruling that affirms the validity and conclusion of such contract and its enforcement together with the payment of certain amounts. If the main request is not granted, the claimant sought a compensation for a total amount of approximately EUR 112 million or, an alternative relief for other minor amounts. Banco Santander, S.A. answered to the complaint stating that the conditions to which the appointment was subject to were not met and that the contract required by law was not concluded. On 17 May 2021, the plaintiff reduced his claims for compensation to EUR 61.9 million.

On 9 December 2021, the Court has rendered its decision ordering the Bank to compensate the plaintiff in the amount of EUR 67.8 million. On 13 January 2022, the Court has corrected and supplemented its judgment, reducing the total amount to EUR 51.4 million and establishing that part of this amount (EUR 18.6 million) would have to be paid in shares of Banco Santander and subject to the application of the same terms provided in the applicable Santander executives' remuneration program (on a deferred basis, and in accordance with the applicable plan in the offer). The Bank will file appeal against the judgment before the Provincial Court of Madrid. The provisions recorded are considered to be sufficient to cover the risks deriving from this claim.

- Universalpay Entidad de Pago, S.L. has filed a lawsuit against Banco Santander, S.A. for breach of the marketing alliance agreement (MAA) and claim payment (EUR 1,050 million). The claim is being processed in the Court of First Instance no. 81 of Madrid. The MAA was originally entered into by Banco Popular Español, S.A.U. and its purpose is the rendering of acquiring services (point of sale payment terminals) for businesses in the Spanish market. The lawsuit is mainly based on the potential breach of clause 6 of the MAA, which establishes certain obligations of exclusivity, non-competition and customer referral. The claim is at a very early stage, and there are factual issues pending resolution, which may have legal consequences and affect any potential liability. This uncertainty makes it impossible to reliably predict the resolution of the issue, the timing or the significance of the potential economic impact. The Bank has answered the complaint. The pretrial hearing could not take place on 16 December 2021 and has been rescheduled on 11 March 2022.

- CHF Polish Mortgage Loans: On 3 October 2019, the Court of Justice of the European Union (CJEU) rendered its decision in relation to a judicial proceeding against an unrelated bank in Poland considering that certain contractual clauses in CHF-indexed loan agreements were abusive. The CJEU has left to Polish courts the decision on whether the whole contract can be maintained once the abusive terms have been removed, which should in turn decide whether the effects of the annulment of the contract are prejudicial to the consumer. In case of maintenance of the contract, the court may only integrate the contract with subsidiary provisions of national law and decide, in accordance with those provisions, on the applicable rate.

On 2 September 2021, the Supreme Court was expected to take a position regarding the key issues in disputes concerning loans based on foreign currency, clarifying the discrepancies and unifying case law. The resolution was not adopted and instead, the Supreme Court referred questions to the CJEU on constitutional issues of the Polish judiciary system. No new date for consideration of the issue has been set and no comprehensive decision by the Supreme Court on CHF of the issue is expected in the near future. In the absence of a comprehensive position of the Supreme Court, it is difficult to expect a full unification of judicial decisions, and decisions of the Supreme Court and CJEU issued on particular issues may be important for shaping further case law on CHF matters.

As of 31 December 2021, Santander Bank Polska S.A. and Santander Consumer Bank S.A. maintain a portfolio of mortgages denominated in or indexed to CHF for an approximate amount of 9,265 million zlotys (EUR 2,083 million). During the year, provisions recorded amounted to 1,453 million zlotys (EUR 319 million), leaving the provision fund as of 31 December 2021 at 2,056 million zlotys (EUR 447 million). This provision represents the best estimate at 31 December 2021 given the difficulty to predict the financial impact, as it is for national courts to decide the relevant issues and the process of analyzing and deciding on the KNF proposal described below has not yet been completed. Santander Bank Polska and Santander Consumer Bank Poland will continue to monitor and assess appropriateness of those provisions.

In December 2020, the Chairman of the Polish Financial Supervision Authority (KNF) presented a proposal for voluntary settlements between banks and borrowers under which CHF loans would be retrospectively settled as PLN loans bearing an interest rate based on WIBOR plus margin. This proposal is currently under analysis within Santander Bank Polska S.A. and Santander Consumer Bank S.A., depending on the results of this analysis, Santander Bank Polska and Santander Consumer Bank Poland will decide whether to adhere to this proposal and will proceed to include additional scenarios in the models for calculating provisions and reflect the estimated impact on their level.

While the above referred events could lead to significant changes in the level of expected provisions, in the opinion of Santander Bank Polska S.A. and Santander Consumer Bank S.A., it is not possible to reliably estimate the value of their impact on their financial position at 31 December 2021.

- Banco Santander Mexico. Dispute regarding a testamentary trust constituted in 1994 by Mr. Roberto Garza Sada in Banca Serfin (currently Santander Mexico) in favor of his four sons in which he affected shares of Alfa, S.A.B. de C.V. (respectively, "Alfa" and the "Trust"). During 1999, Mr. Roberto Garza Sada instructed Santander México in its capacity as trustee to transfer 36,700,000 shares from the Trust's assets to his sons and daughters and himself. These instructions were ratified in 2004 by Mr. Roberto Garza Sada before a Notary Public.

  Mr. Roberto Garza Sada, passed away on 14 August 2010 and subsequently, in 2012, his daughters filed a complaint against Santander Mexico alleging it had been negligent in its trustee role. The lawsuit was dismissed at first instance in April 2017 and on appeal in 2018. In May 2018, the plaintiffs filed an appeal (recurso de amparo) before the First Collegiate Court of the Fourth Circuit based in Nuevo León, which ruled in favor of the plaintiffs on 7 May 2021, annulling the 2018 appeal judgment and condemning Santander Mexico to the petitions claimed, consisting of the recovery of the amount of 36,700,000 Alfa shares, together with dividends, interest and damages.

  On 7 June 2021, Santander México filed an appeal for constitutional review against the decision of the Collegiate Court before the Supreme Court of Justice of the Nation, considering that this court was not empowered to resolve substantive issues that had not been raised by the parties, lack of procedural standing, and the absence of a decision imposing the plaintiffs to pay costs. This appeal was rejected by the President of the Supreme Court of Justice of the Nation on 1 October 2021 on the grounds that the matter, although it refers to constitutional matters, is not of exceptional interest.

  On 6 October 2021, Santander México filed an appeal against this decision before the Supreme Court itself, which was rejected in limine by the President of the Court by order dated 11 October 2021, considering that against the dismissal of the appeal for constitutional review, there is no possible appeal pursuant to the Constitutional Reform of March 2021. Against this decision, on 8 December 2021, a new appeal was filed for this matter to be reviewed by the First Chamber of the Supreme Court of Justice of the Nation, considering that the failure to accept the appeal constitutes a retroactive application of the law, and that this violates the transitory fifth article of the reform of the "Ley de Amparo" published on 7 June 2021.

  In compliance with the aforementioned ruling of 7th May 2021, the Seventh Civil Chamber of the Superior Court of Justice of Nuevo León has issued a judgement imposing Santander Mexico to pay the benefits claimed by the plaintiffs. As a result of this judgement, Santander Mexico has filed a new appeal (recurso de amparo) and will request that it be resolved by the Supreme Court of Justice of the Nation.

  Santander México estimates that the actions taken should prevail and reverse the decision against it. However, given the procedural stage of the case, Santander México has classified this risk as possible. The impact of a potential unfavorable resolution for Santander México will be determined in a subsequent proceeding and will also depend on the additional actions that Santander México may take in its defense, so it is not possible to determine it at this time.

- URO Property Holdings, SOCIMI SA: In December 2021, BNP Paribas Trust Corporation UK Limited ("BNP") informed Uro Property Holdings SOCIMI, SA ("Uro") – subsidiary from Banco Santander, S.A.-, that it is considering taking legal action against Uro. On 16 February 2022, BNP commenced legal proceedings against Uro in the Commercial Court in London. On 31 December 2021, Uro lost its status as a SOCIMI (Sociedad Anónima Cotizada de Inversión Inmobiliaria). The potential litigation concerns certain terms of a financing granted to Uro which was supported by a bond issue in 2015. BNP, acting as trustee on behalf of the bondholders, claims that based on those terms, and in relation to the loss of SOCIMI status, Uro would be obliged to pay an additional premium above the nominal value of the financing repayment. Uro denies being liable to pay that additional premium and intends to defend the claim. It is estimated that the maximum loss associated with this possible contingency, amounts to approximately EUR 250 million. There is no date for trial hearing yet.

Banco Santander and the other Group companies are subject to claims and, therefore, are party to certain legal proceedings incidental to the normal course of their business including those in connection with lending activities, relationships with employees and other commercial or tax matters additional to those referred to here.

With the information available to it, the Bank considers that, at 31 December 2021, it had reliably estimated the obligations associated with each proceeding and had recognized, where necessary, sufficient provisions to cover reasonably any liabilities that may arise as a result of these tax and legal risks. Disputes in which provisions have been registered but are not disclosed is justified on the basis that it would be prejudicial to the proper defense of the Bank. Subject to the qualifications made, it also believes that any liability arising from such claims and proceedings will not have, overall, a material adverse effect on the Group's business, financial position, or results of operations.

24. Tax matters

a) Consolidated Tax Group

Pursuant to current legislation, the Consolidated Tax Group includes Banco Santander, S.A. (as the parent) and the Spanish subsidiaries that meet the requirements provided for in Spanish legislation regulating the taxation of the consolidated profits of corporate groups (as the controlled entities).

b) Years open for review by the tax authorities

In June and November 2021 acts with agreement, conformity and non-conformity relating to the corporate income tax financial years 2012 to 2015 were formalised. The adjustments signed in conformity and with agreement had not impact on results and, in relation to the concepts signed in disconformity both in this year and in previous years (corporate income tax 2003 to 2011), Banco Santander, S.A., as the Parent of the Consolidated Tax Group, considers, in accordance with the advice of its external lawyers, that the adjustments made should not have a significant impact on the financial statements, as there are sound arguments as proof in the appeals filed against them pending at the National Appellate Court (tax years 2003 to 2011) and at different administrative instances (tax years 2012-2015). It should also be noted that, in those cases where it has been considered appropriate, the mechanisms available to avoid international double taxation have been used. Consequently, no provision has been recorded for this concept. At the date of approval of these accounts, the Corporate Income Tax and other taxes audit for periods 2017 to 2019 are ongoing, and subsequent years up to and including 2021, are subject to review.

Likewise, relating the Consolidated Tax Group of which Banco Popular Español, S.A.U. was the parent, during 2019, a certificate of disconformity was drawn up for 2017 corporate income tax, with no impact on profit, and the final assessment was appealed. In relation to this Consolidated Tax Group, the years 2016 and 2017 inclusive are subject to review.

Because of the possible different interpretations which can be made of the tax regulations, the outcome of the tax audits of the rest of years subject to review might give rise to contingent tax liabilities which cannot be objectively quantified. However, the Group and the Bank's tax advisers consider that it is unlikely that such tax liabilities will materialize, and that in any event the tax charge arising therefrom would not materially affect the Bank's financial statements.

c) Reconciliation

The reconciliation between the income tax expense at the applicable tax rate (30%) and the income tax expense recorded (in EUR millions) is shown below:

EUR million

	2021	2020
Profit before taxes	3,864	(2,247)
Corporate tax at the applicable rate of 30%	1,159	(674)
Dividends and capital gains not subject	(1,454)	(1,885)
Impairment of non-deductible shares	(240)	1,776
Deferred tax review effect	—	1,632
Remaining permanent differences and others	467	461
Expense/(Incomes) taxes recorded	**(68)**	**1,310**

d) Tax recognized in equity

Regardless of the income tax incurred in profit and loss accounts, Banco Santander has passed on the net worth the following amounts during 2021 and 2020:

EUR million

	Amounts receivable/ (Amounts payable)	
	2021	2020
Fair value changes of debt instruments measured at fair value with changes in other comprehensive income	156	96
Equity instruments valued at fair value with changes in other comprehensive income	(4)	87
Cash flow hedges	(44)	62
Other valuation adjustments (note 25)	19	23
Total	**127**	**268**

e) Deferred taxes

The balance under the heading 'Deferred tax assets' of the balance sheets includes the debtor balances against the Public Treasury for Advance Tax; in turn, the balance under the heading 'Deferred tax liabilities' includes the liabilities corresponding to the different deferred taxes of Banco Santander.

In Spain Royal Decree-Law 14/2013 of 29 November, confirmed by Law 27/2014 of 27 November, established a regime to allow certain deferred tax assets to continue to count as prudential capital, within the 'Global regulatory framework to strengthen banks and banking systems' (called Agreements Basel III) and under the implemented regulations of those Agreements, i.e. Regulation (EU) No 575/2013 and Directive 2013/36/EU, both of 26 June 2013 (hereinafter CRD IV).

Prudential legislation provides that deferred tax assets that depend on their use of future profits must be deducted from regulatory capital, although taking into account whether they are credits for tax losses and deductions or for temporary differences. It is for the latter category of deferred tax assets and within it those arising from insolvencies, awarded, commitments for pensions and pre-retirements, for which it is established that they do not depend on future profits, since in certain circumstances they can be converted into credits against the Public Treasury, and therefore not deducts from regulatory capital (hereinafter referred to as monetizable deferred tax assets).

During 2015, the regulation on monetizable deferred tax assets was completed by the introduction of a capital supply involving the payment of an amount of 1.5% per annum, in order to maintain the right to monetization, and will be applied to a part of the deferred tax assets that meet the legal requirements to be considered monetizables generated before 2016.

The following are the breakdown of tax assets and liabilities as of December 31, 2021 and 2020:

EUR million

	2021	2020
Tax assets:	**9,622**	**9,282**
Current	1,003	721
Deferred	8,619	8,561
Of which		
Relating to pensions	*3,540**	*3,540**
Relating to allowances for loan losses	*3,023**	*3,023**
Relating to deductions and negative tax bases	*632*	*380*
Tax liabilities:	**1,697**	**1,555**
Of which, deferred tax liabilities	*1,521*	*1,510*

* Banco Popular Español, S.A.U. considered that part of its monetizable assets were converted into credit against the Tax Administration in 2017 Corporate Income Tax return, as the circumstances of the aforementioned regulations were met at the end of that year (EUR 995 million). The Spanish tax authorities have expressly confirmed the nature of these assets as monetizable, but they consider that conditions for conversion are not met at the end of 2017, without prejudice to the conversion in future years. Likewise Consolidated Tax Group in Spain, due to losses incurred in 2020, converted EUR 642 million of monetizable tax assets into credit against the Tax Administration in its Corporate Income Tax return. This tax return is subject to review by the Tax Authorities.

At the end of the fiscal year, deferred taxes, both assets and liabilities, are reviewed in order to verify whether adjustments are necessary to be made in accordance with the results of the analyses carried out.

These analyses take into account all the positive and negative evidence of the recoverability of such assets, including (i) the results generated in previous years, (ii) the projections of results, (iii) the estimate of the reversal of the various temporary differences depending on their nature and (iv) the period and limits established in current legislation for the recovery of the various deferred tax assets, thus concluding on Banco Santander's ability to recover its deferred tax assets.

The results projections used in this analysis are based on the financial budgets approved by both the local bureaux of the respective units and by Banco Santander managers. Grupo Santander budget estimation process is common for all units, including the Bank. The Grupo Santander management prepares its financial budgets based on the following key assumptions.

a. Microeconomic variables of the entities that make up the tax group at each location: consideration is taken of the existing balance sheet structure, the mix of products offered and the commercial strategy at any time defined by the local authorities in this regard based on the competition, regulatory and market environment.

b. Macroeconomic variables: The estimated growth is based on the evolution of the economic environment considering the expected developments in the Gross Domestic Product of each location and the forecasts on behaviour of interest rates, inflation and exchange rates. This data is provided by Grupo Santander's Studies Service, and based on external sources of information.

In addition, Grupo Santander performs retrospective reviews (backtesting) on the variables projected in the past. The differential performance of these variables with respect to the actual market data is considered in the estimated projections for each financial year. Thus, in relation to Spain, the deviations identified by Management in recent years are due to non-recurring events that are not related to the business's operations, such as the impacts for the first application of new applicable regulations, the costs incurred for accelerating restructuring plans and the changing effect of the current macroeconomic environment.

Finally, and given the degree of uncertainty of the assumptions regarding those variables, Grupo Santander conducts a sensitivity analysis of the most significant ones used in the analysis of the recoverability of deferred tax assets, considering reasonable changes in the key assumptions upon which the projections of results of each tax entity or group and the estimate of the reversal of the various temporary differences. In relation to Spain, the sensitivity analysis consisted of adjusting 50 basis points for growth (gross domestic product) and adjusting 50 basis points for inflation. Following this analysis, the maximum recovery period of deferred tax assets recorded at 31 December 2020 is maintained for 15 years.

During 2020, given the uncertainties about the economic impacts derived from the covid-19 health crisis, the Group reassessed the ability to generate future tax profits in relation to the recoverability of deferred tax assets recorded in the main companies that make up the Group. In Spain, the changes in the key hypotheses on which the projections of the results of its tax group were based, derived from the aforementioned impact of covid-19, meant in the case of Banco Santander the recording of an impairment of EUR 1,632 million of deferred tax assets with a balancing entry under the heading 'Income tax' in the profit and loss account.

In addition, the Spanish Tax Group, of which Banco Santander, S.A. is the dominant entity, has not recognized deferred tax assets in respect of tax losses, investment deductions and other incentives amounting to approximately EUR 9,700 million, of which EUR 300 million are subject, among other requirements, to time limits.

f) Regulatory changes

In 2018, for the purpose of regulating the tax effects of the first application of the Bank of Spain's Circular 4/2017, Royal Decree-Law 27/2018 of 28 December established a transitional regime, according to which charges and credits to reserve accounts accounted for in first application, which have tax effects, will be integrated into the Tax base for corporation tax equally in each of the first three tax periods starting from January 1, 2018.

In application of the aforementioned Royal Decree-law, it was included in the tax base of Banco Santander, S.A. corresponding to 2020 a negative adjustment amounting to EUR 99 million, EUR 30 million in installment.

On the other hand, in 2020 the General State Budget Law for 2021 was approved, which, among other tax measures, established the non-deductibility in the Corporation Tax of the management expenses of capital holdings whose dividends or capital gains are exempt. of taxes, setting the amount of these non-deductible expenses at 5% of the dividend or positive income obtained. In 2021, the General State Budget Law for 2022 was approved, which establishes a minimum tax rate of 15% (18% for financial entities) on the tax base in Corporation Tax.

g) Other information

In compliance with the reporting obligation set out in the 2005 Contributing Standards Instrument issued by the Financial Conduct Authority of the United Kingdom, it is stated that shareholders of Banco Santander who are resident in the United Kingdom shall be entitled to apply for a tax credit paid abroad in respect of withholdings to be made by Banco Santander on dividends to be paid to those shareholders if the total dividend income exceeds the amount of exempt dividends of £2,000 for the 2021/2022 financial year. Banco Santander shareholders who reside in the United Kingdom and maintain their participation in Banco Santander through Santander Nominee Service will be directly provided with information on the amount withheld as well as any other information they may need to complete their tax returns in the UK. All other shareholders of Banco Santander who reside in the United Kingdom should contact their bank or securities agency.

Banco Santander, is part of the Large Business Forum and has adhered to the Code of Good Tax Practices in Spain since 2010, actively participating in the cooperative compliance programmes being developed by the tax administration.

25. Other comprehensive income

The balances of 'Other comprehensive income' include the amounts, net of the related tax effect, of the adjustments to assets and liabilities recognised in equity through the statement of recognised income and expense. The amounts arising from subsidiaries are presented, on a line by line basis, in the appropriate items according to their nature.

Respect to items that may be reclassified to profit or loss, the statement of recognised income and expense includes changes in other comprehensive income as follows:

- Revaluation gains (losses): includes the amount of the income, net of the expenses incurred in the year, recognised directly in equity. The amounts recognised in equity in the year remain under this item, even if in the same year they are transferred to the income statement or to the initial carrying amount of the assets or liabilities or are reclassified to another line item.
- Amounts transferred to income statement: includes the amount of the revaluation gains and losses previously recognised in equity, even in the same year, which are recognised in the income statement.
- Amounts transferred to initial carrying amount of hedged items: includes the amount of the revaluation gains and losses previously recognised in equity, even in the same year, which are recognised in the initial carrying amount of assets or liabilities as a result of cash flow hedges.
- Other reclassifications: includes the amount of the transfers made in the year between the various valuation adjustment items.

The amounts of these items are recognized gross, presenting the corresponding tax effect is presented under a separate item.

a) Breakdown of Other accumulated comprehensive income - Items that will not be reclassified in results and Items that can be classified in results

EUR million

	2021	2020
Other accumulated comprehensive income	**(1,802)**	**(1,561)**
Items that will not be reclassified in results	**(1,858)**	**(1,882)**
Actuarial gains and losses on defined benefit pension plans	(1,329)	(1,351)
Non-current assets held for sale	—	—
Other recognized income and expense of investments in subsidiaries, joint ventures and associates	—	—
Rest of valuation adjustments	—	—
Changes in the fair value of equity instruments measured at fair value through other comprehensive income	(468)	(537)
Ineffectiveness of fair value hedges of equity instruments measured at fair value with changes in other comprehensive income	—	—
Changes in the fair value of equity instruments measured at fair value through other comprehensive income (hedged item)	271	154
Changes in the fair value of equity instruments measured at fair value through other comprehensive income (hedging instrument)	(271)	(154)
Changes in the fair value of financial liabilities at fair value through profit or loss attributable to changes in credit risk	(61)	6
Items that can be classified in results	**56**	**321**
Hedges of net investments in foreign operations (effective portion)	—	—
Exchange differences	—	—
Cash flow hedges (effective portion)	(87)	(189)
Changes in the fair value of debt instruments measured at fair value through changes in other comprehensive income	143	510
Hedging instruments (items not designated)	—	—
Non-current assets held for sale	—	—
Share in other income and expenses recognized in investments in joint ventures and associates	—	—

b) Other accumulated comprehensive income- Items not reclassified to profit or loss – Actuarial gains or (-) losses on defined benefit pension plans

'Other comprehensive income – Items not reclassified to profit or loss – Actuarial gains or (-) losses on defined benefit pension plans' include the actuarial gains and losses and the return on plan assets, less the administrative expenses and taxes inherent to the plan, and any change in the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liability (asset).

Its variation is shown in the statement of income and expense.

c) Other accumulated comprehensive income - Items that will not be reclassified in results - Changes in the fair value of equity instruments measured at fair value with changes in other comprehensive income.

Includes the net amount of unrealized fair value changes of equity instruments at fair value with changes in other comprehensive income.

The following is a breakdown of the composition of the balance as of 31 December 2021 and 2020 under 'Other accumulated comprehensive income - Items that will not be reclassified to profit or loss - Changes in the fair value of equity instruments measured at fair value with changes in other global result' (see note 8):

EUR million

	2021				2020			
	Capital gains by valuation	Capital losses by valuation	Net gains/ losses by valuation	Fair value	Capital gains by valuation	Capital losses by valuation	Net gains/ losses by valuation	Fair value
Equity instruments	178	(646)	(468)	1,705	275	(812)	(537)	1,942

d) Other accumulated comprehensive income - Items that may be reclassified to profit or loss - Hedging derivatives – Cash flow hedges (Effective portion)

'Other comprehensive income – Items that may be reclassified to profit or loss - Cash flow hedges' includes the gains or losses attributable to hedging instruments that qualify as effective hedges. These amounts will remain under this heading until they are recognized in the income statement in the periods in which the hedged items affect it (see note 32).

e) Other accumulated comprehensive income - Items that may be reclassified to profit or loss – Changes in the fair value of debt instruments measured at fair value with changes in other comprehensive income

Includes the net amount of unrealized changes in the fair value of assets classified as items than can be reclassified in results 'Changes in the fair value of debt instruments measured at fair value with changes in other comprehensive income' (see note 7).

Below is a breakdown of the balance composition as of December 31, 2021 and 2020 of 'Other accumulated global income - Items that can be reclassified in results - Changes in the fair value of the instruments of debt valued at fair value with changes in other comprehensive income' depending on the type of instrument:

EUR million

	2021				2020			
	Revaluation gains	Revaluation losses	Net revaluation gains/ (losses)	Fair value	Revaluation gains	Revaluation losses	Net revaluation gains/ (losses)	Fair value
Debt instruments	172	(29)	143	9,394	526	(16)	510	15,146

As of 31 December 2021, the handicaps recorded in the 'Other cumulative comprehensive income - Elements that can be reclassified into profit or loss - Changes in the fair value of debt instruments measured at fair value through other comprehensive income' are not significant.

As of December 31, 2021, Banco Santander has not recorded in equity any impairment corresponding to debt securities.

26. Shareholders' equity

The changes in 'Shareholders' equity' are presented in the statement of changes in total equity. Significant information on certain items of 'Shareholders' equity' and the changes therein in 2021 are set forth below.

27. Issued capital

a) Changes

On 3 December 2020, a capital increase of EUR 361 million was made, with a charge to the share premium, through the issue of 722,526,720 shares (4.35% of the share capital).

Therefore, Banco Santander's share capital at 31 December 2020 consisted of EUR 8,670 million, represented by 17,340,641,302 shares of EUR 0.50 of nominal value each and all of them of a unique class and series.

Equally, Banco Santander's share capital at 31 December 2021 consisted of EUR 8,670 million, represented by 17,340,641,302 shares of EUR 0.50 of nominal value each and all of them of a unique class and series. Includes 259,930,273 shares corresponding to the first share repurchase program for which it has been agreed (together with the shares that are finally to be acquired under the second share repurchase program) to submit their redemption to the general shareholders meeting subject to the pertinent regulatory authorizations (see notes 4 and 30).

Banco Santander's shares are listed on the Spanish Stock Market Interconnection System and on the New York, London, Mexico and Warsaw Stock Exchanges, and all of them have the same features and rights. Santander shares are listed on the London Stock Exchange under Crest Depository Interest (CDI), each CDI representing one Bank's share. They are also listed on the New York Stock Exchange under American Depositary Receipts (BDR), each BDR representing one share. During 2019 and 2018 the number of markets where the Bank is listed was reduced; the Bank's shares was delisted from Buenos Aires, Milan, Lisboa and São Paulo's markets.

At 31 December 2021, no shareholder held more than 3% of Banco Santander's total share capital (which is the threshold generally provided under Spanish regulations for a significant holding in a listed company to be disclosed). Even though at 31 December 2021, certain custodians appeared in our shareholder registry as holding more than 3% of our share capital, we understand that those shares were held in custody on behalf of other investors, none of whom exceeded that threshold individually. These custodians were State Street Bank (13.35%), Chase Nominees Limited (9.15%), The Bank of New York Mellon Corporation (5.21%), Citibank New York (3.74%) and EC Nominees Limited (3.34%).

At 31 December 2021, neither Banco Santander's shareholder registry nor the CNMV's registry showed any shareholder residing in a non-cooperative jurisdiction with a shareholding equal to, or greater than, 1% of our share capital (which is the other threshold applicable under Spanish regulations).

b) Other considerations

At 31 December 2021 the number of Banco Santander shares owned by third parties and managed by Group management companies (mainly portfolio, collective investment undertaking and pension fund managers) or jointly managed was 45 million shares, which represented 0.26% of Banco Santander's share capital (39 million shares, representing 0.22% of the share capital in 2020). In addition, the number of Banco Santander's shares owned by third parties and received as security was 231 million shares (equal to 1.33% of the Bank's share capital).

28. Share premium

Share premium includes the amount paid up by the Bank's shareholders in capital issues in excess of the par value.

The Corporate Enterprises Act expressly permits the use of the share premium account balance to increase capital at the entities at which it is recognised and does not establish any specific restrictions as to its use.

The change in the balance of share premium corresponds to the capital increases detailed in note 27.a).

The decrease in 2020 was due to the reduction of EUR 361 million to cover the capital increase on 3 December (see note 27.a).

The decreased produced in 2021 for an amount of EUR 4,034 million has been the consequence of applying the result obtained by Banco Santander during the financial year 2020, consisting of losses of EUR 3,557 million, as reflected in the consolidated statements of changes in total equity, and the charge of the dividend for the fiscal year 2020 for an amount of EUR 477 million (see note 4.a and consolidated statements of changes in total equity).

Also, in 2020 an amount of EUR 72 million was transferred from the Share premium account to the Legal reserve (see note 29.b).

29. Accumulated retained earnings

a) Definitions

The balance of 'Equity - Accumulated gains and Other reserves' includes the net amount of the accumulated results (profits or losses) recognised in previous years through the income statement which in the profit distribution were allocated in equity, the expenses of own equity instrument issues, the differences between the amount for which the treasury shares are sold and their acquisition price, as well as the net amount of the results accumulated in previous years, generated by the result of non-current assets held for sale, recognised through the income statement.

b) Breakdown

The detail of 'Shareholders' equity - reserves' at 31 December 2021 and 2020 is as follows:

EUR million

	2021	2020
Restricted reserves	**2,543**	**2,460**
Legal reserve	1,734	1,734
Own shares	755	672
Revaluation reserve Royal Decree-Law 7/1996	43	43
Reserve for retired capital	11	11
Unrestricted reserves		
Voluntary reserves	6,123	6,128
Total	**8,666**	**8,588**

i. Legal reserve

According to the Consolidated Text of the Corporate Enterprise Act, Spanish entities that obtain profits in the financial year must provide 10% of the net profit for the financial year to the legal reserve. These allocations must be made until the reserve reaches 20% of the share capital. The legal reserve may be used to increase the share capital in the share of its balance exceeding 10% of the share capital already increased.

During the 2021 financial year, Banco Santander has not allocated any amount to Legal Reserve. In 2020, EUR 72 million of Share Premium were allocated to the Legal Reserve (see note 28).

The amount of the Legal Reserve reached 20% of the share capital figure, and that Reserve was fully established on 31 December 2021.

ii. Reserve for equity shares

According to the Consolidated Text of the Corporate Enterprise Act, an unavailable reserve equivalent to the amount for which Banco Santander's shares owned by subsidiaries are recorded. This reservation shall be freely available when the circumstances which have obliged its constitution disappear. In addition, this reserve covers the outstanding balance of loans granted by the Group with Banco Santander's share guarantee and the amount equivalent to the credits granted by the Group companies to third parties for the acquisition of own shares.

iii. Revaluation reserve Royal Decree Law 7/1996, of 7 June

The balance of Revaluation reserve Royal Decree-Law 7/1996 can be used, free of tax, to increase share capital. From 1 January 2007, the balance of this account can be taken to unrestricted reserves, provided that the monetary surplus has been realised. The surplus will be deemed to have been realised in respect of the portion on which depreciation has been taken for accounting purposes or when the revalued assets have been transferred or derecognised.

If the balance of this reserve were used in a manner other than that provided for in Royal Decree law 7/1996, of 7 June, it would be subject to taxation

iv. Voluntary Reserve

During the 2021 fiscal year there has been a decrease in voluntary reserves amounting to EUR 5 million; which correspond to an increase in merger reserves of EUR 957 million, a decrease of EUR 83 million due to the constitution of reserves for treasury shares, a decrease of EUR 431 million due to interest on the PPCC (see note 21), a decrease of EUR 421 million for losses on the sale of equity instruments valued at fair value with a charge to other accumulated comprehensive income and a decrease of EUR 27 million for transfer between equity items and other items.

30. Other equity instruments and own shares

a) Equity instruments issued not capital and other equity instruments

It includes the amount corresponding to compound financial instruments with a nature of net worth, the increase in staff remuneration, and other items not recorded in other items of own funds.

On July 13, 2017, Banco Santander and Banco Popular Español, S.A.U. (hereinafter, Banco Popular) communicated that they had decided to launch a commercial action with the purpose of building loyalty among retail customers of their networks affected by the resolution of Banco Popular (the 'Loyalty Action').

Under the Loyalty Action, customers who met certain conditions and have been affected by Banco Popular's decision could receive, without disbursement by their part, marketable securities issued by Banco Santander for a nominal amount equivalent to the investment in shares or in certain bonds subordinates of Banco Popular (with certain limits) of which they held at the date of Banco Popular's resolution. In order to avail itself of such action, it was necessary for the client to waive legal action against the Group.

The Loyalty Action would be carried out by providing the customer with contingently amortizable perpetual obligations ('Loyalty Bonds') of Banco Santander, S.A. Loyalty Bonds will accrue a cash coupon, discretionary, non-cumulative, payable for completed quarters.

This issuance was made by Banco Santander, S.A. on 8 September 2017 for a nominal amount of EUR 981 million, fully subscribed by Banco Popular Español, S.A.U. As at 31 December 2021, the cost recorded under the heading 'Equity instruments' issued other than capital on Banco Santander balance sheet amounts to EUR 658 million (EUR 627 million as at 31 December 2020).

Loyalty Bonds are perpetual securities; however, they may be fully amortized at the will of Banco Santander, S.A., with prior authorization from the European Central Bank, on any of the dates of payment of the coupon, seven years after its issuance.

b) Own shares

'Shareholders' equity - Own shares' includes the amount of equity instruments held by Banco Santander.

Transactions involving own 'Equity instruments', including their issuance and cancellation, are recognized directly in equity, and no profit or loss may be recognized on these transactions. The costs of any transaction involving own equity instruments are deducted directly from equity, net of any related tax effects.

The Bank's shares owned by the consolidated companies accounted for 1.60% of issued share capital at 31 December 2021 (December 31, 2020 0.164%)

In 2021, the average price per share of the Bank was EUR 3.16 per share and the average transfer price EUR 3.09 per share. Of the shares acquired in the period, 259,930,273 shares (1.499% of the issued share capital) are from the First Share Repurchase Program at a weighted average price of EUR 3.24 (see note 4).

As of year end of 2021, the purchase and sale of shares issued by Banco Santander have not generated any results (no results in 2020 as well).

31. Memorandum items

Memorandum items relate to balances representing rights, obligations and other legal situations that in the future may have an impact on net assets, as well as any other balances needed to reflect all transactions even though they may not impinge on its net assets.

a) Guarantees and contingent commitments granted

Guarantees include transactions for which an entity secures obligations of a third party arising from financial guarantees granted by the entity or other types of contracts. 'Contingent liabilities' include all transactions under which an entity guarantees the obligations of a third party and which result from financial guarantees granted by the entity or from other types of contract. The detail is as follows:

EUR million

	2021	2020
Loans commitment granted	**111,410**	**96,959**
Available in lines of credit	111,246	96,870
Deposits in the future	164	89
Financial guarantees granted	**10,489**	**10,135**
Financial guarantees	179	189
Credit derivatives sold	10,310	9,946
Other commitments granted	**59,421**	**50,686**
Irrevocable documentary credits	3,330	1,947
Other guarantees and guarantees granted	29,971	24,675
Other	26,120	24,064
Of which:		
Subscribed securities pending disbursement	*1*	*1*
Conventional asset acquisition contracts	*6,265*	*4,593*
Other contingent commitments	*19,854*	*19,470*
Total	**181,320**	**157,780**

The breakdown at December 31, 2021 of off-balance sheet exposures and allowance fund (see note 23) by impairment phase under Bank of Spain Circular 4/2017 are EUR 175,871 million and EUR 48 million in phase 1, EUR 4,403 million and EUR 60 million in phase 2 and EUR 1,046 million and EUR 82 million in phase 3, respectively. In addition the breakdown at December 31, 2020 of exposures and the allowance fund were EUR 155,706 million and EUR 69 million in phase 1, EUR 1,630 million and EUR 45 million in phase 2 and EUR 444 million and EUR 43 million in phase 3, respectively.

A significant part of these amounts will mature without any payment obligation material for the Bank; therefore, the aggregate balance of these commitments cannot be considered as a real future need for financing or liquidity to be granted to third parties by Banco Santander.

Income from guarantee instruments is recognized under 'Fee and commission income' in the income statements and is calculated by applying the rate established in the related contract to the nominal amount of the guarantee.

i. Loan commitments granted

Firm commitments to provide credit under pre-established conditions and terms, except for those that meet the definition of derivatives because they may be settled in cash or through the delivery or issuance of another financial instrument. They include those available in lines of credit and forward deposits.

ii. Financial guarantees granted

Include financial guarantee contracts such as financial guarantees, credit derivatives sold, derivative risks contracted on behalf of third parties and others.

iii. Other commitments granted

Other contingent liabilities include all commitments that could give rise to the recognition of financial assets not included in the above items, such as technical guarantees and guarantees for the import and export of goods and services.

b) Other information

i. Assets advanced as collateral

In addition to collateral assets, there are assets owned by Banco Santander which guarantee both transactions carried out by the Bank or by third parties and various contingent liabilities and liabilities over which the assignee has the right, by contract or custom, to re-transfer and pledge them.

The carrying value of Banco Santander's financial assets delivered as collateral for such contingent and assimilated liabilities or liabilities is the following:

EUR million

	2021	2020
Financial assets held for trading	22,440	8,540
Of which	—	
Public debt Public Sector Agencies	*3,785*	*314*
Fix rent instruments	*9,284*	*3,113*
Equity instruments	*9,371*	*5,113*
Non-trading financial assets mandatorily at fair value through profit or loss	154	329
Financial assets designated at fair value through profit or loss	—	3,642
Financial assets at fair value through other comprehensive income	2,348	2,293
Financial assets at amortized cost	1,513	2,607
Total	**26,455**	**17,411**

32. Hedging derivatives

Banco Santander, within its financial risk management strategy, and in order to reduce asymmetries in the accounting treatment of its operations, enters into hedging derivatives on interest, exchange rate, credit risk or variation of stock prices, depending on the nature of the risk covered.

Based on its objective, Banco Santander classifies its hedges in the following categories:

- Cash flow hedges: cover the exposure to the variation of the cash flows associated with an asset, liability or a highly probable forecast transaction. This cover the variable-rate issues in foreign currencies, fixed-rate issues in non-local currency, variable-rate interbank financing and variable-rate assets (bonds, commercial loans, mortgages, etc.).
- Fair value hedges: cover the exposure to the variation in the fair value of assets or liabilities, attributable to an identified and hedged risk. This covers the interest risk of assets or liabilities (bonds, loans, bills, issues, deposits, etc.) with coupons or fixed interest rates, interests in entities, issues in foreign currencies and deposits or other fixed rate liabilities.
- Hedging of net investments abroad: cover the exchange rate risk of the investments in subsidiaries domiciled in a country with a different currency from the functional one of the Bank.

Due to the replacement of the current rates by the alternative rates defined in the note 1 of this report, in the section Bank of Spain Circular 6/2021 on reference interest rates (IBOR Reform Phase I and II)',the nominal amount of hedging instruments corresponding to the hedging relationships directly affected by the uncertainties related to the IBOR reforms is shown below. The percentage of the nominal amount of derivatives affected with a maturity date after the transition date of the reform represents 6.85% of the total hedging derivatives:

EUR million

	2021
	USD LIBOR
Total hedging instruments affected	**12,311**
Fair value hedges	11,870
Interest rate risk	*11,870*
Cash flow hedges	*441*
Interest rate risk	*441*
Post-transition date agreement	**8,909**
Fair value hedges	8,909
Interest rate risk	*8,909*
Cash flow hedges	—
Interest rate risk	—

As for the hedged items directly affected by the uncertainties related to the IBOR reforms, their nominal amount is shown below, which represents 0.00% of the total notional amount hedged:

EUR million

	2021
	USD LIBOR
Total hedging instruments affected	**441**
Fair value hedges	—
Interest rate risk	
Cash flow hedges	441
Interest rate risk	*441*
Post-transition date agreement	**—**
Fair value hedges	—
Interest rate risk	—
Cash flow hedges	—
Interest rate risk	—

The details of the coverage derivatives of Banco Santander, S.A. according to the type of coverage, the risk they cover and the product, can be found in the following table:

EUR million

	31 December 2021				
	Notional Value	Carrying amount		Changes in fair value used for calculating hedge ineffectiveness	Balance sheet items
		Assets	Liabilities		
Fair Value Hedges	**55,470**	**1,379**	**(1,141)**	**(618)**	
Interest rate risk	36,099	1,143	(581)	(610)	
Of which:					
Interest Rate Swap	*35,745*	*1,136*	*(580)*	*(608)*	*Hedging derivatives*
Exchange rate risk	13,073	1	(416)	22	
Of which:					
Fx forward	*13,073*	*1*	*(416)*	*22*	*Hedging derivatives*
Interest rate and exchange risk	6,125	235	(142)	(31)	
Of which:					
Interest Rate Swap	*1,650*	*12*	*(9)*	*(7)*	*Hedging derivatives*
Currency Swap	*4,475*	*223*	*(133)*	*(24)*	*Hedging derivatives*
Credit Risk	173	—	(2)	1	
Of which:					
CDS	*173*	—	*(2)*	*1*	*Hedging derivatives*
Cash flow Hedges	**51,218**	**74**	**(328)**	**146**	
Interest rate risk	47,721	12	(111)	145	
Of which:					
Interest Rate Swap	*45,441*	*12*	*(33)*	*(36)*	*Hedging derivatives*
Exchange rate risk	85	—	—	—	
Of which:					
Fx forward	*85*	—	—	—	*Hedging derivatives*
Interest rate and exchange risk	3,412	62	(217)	1	
Of which:					
Currency exchange	*3,348*	*61*	*(215)*	*3*	*Hedging derivatives*
Net Investments hedges abroad	**23,357**	**195**	**(607)**	**—**	
Exchange rate risk	23,357	195	(607)	—	
Of which:					
Fx forward	*23,357*	*195*	*(607)*	—	*Hedging derivatives*
Total	**130,045**	**1,648**	**(2,076)**	**(472)**	

EUR million

	31 December 2020				
	Notional Value	Carrying amount		Changes in fair value used for calculating hedge ineffectiveness	Balance sheet line items
		Assets	Liabilities		
Fair value hedges	**49,371**	**2,357**	**(988)**	**366**	
Interest rate risk	36,371	1,875	(723)	336	
Interes Rate Swap	*35,983*	*1,855*	*(711)*	*336*	*Hedging derivatives*
Call money Swap	*7*	*—*	*—*	*—*	*Hedging derivatives*
Swaption	*51*	*11*	*(11)*	*—*	*Hedging derivatives*
Floor	*330*	*9*	*(1)*	*—*	*Hedging derivatives*
Exchange rate risk	7,990	209	(34)	(1)	
Fx forward	*7,990*	*209*	*(34)*	*(1)*	*Hedging derivatives*
Interest rate and exchange rate risk	4,803	273	(228)	27	
Interest Rate Swap	*426*	*9*	*(1)*	*1*	*Hedging derivatives*
Currency Swap	*4,377*	*264*	*(227)*	*26*	*Hedging derivatives*
Credit risk	207	—	(3)	4	
CDS	*207*	*—*	*(3)*	*4*	*Hedging derivatives*
Cash flow hedges	**40,140**	**92**	**(405)**	**(206)**	
Interest rate risk	35,443	39	(271)	(204)	
Interest rate swap	*30,000*	*39*	*(12)*	*39*	*Hedging derivatives*
Futures	*5,443*	*—*	*(259)*	*(243)*	*Hedging derivatives*
Interest rate and exchange rate risk	4,697	53	(134)	(2)	
Currency swap	*4,697*	*53*	*(134)*	*(2)*	*Hedging derivatives*
Net investment hedges abroad	**20,211**	**688**	**(387)**	**—**	
Exchange rate risk	20,211	688	(387)	—	
Fx forward	*20,211*	*688*	*(387)*	*—*	*Hedging derivatives*
Total	**109,722**	**3,137**	**(1,780)**	**160**	

Banco Santander covers the risks of its balance sheet in a variety of ways. On the one hand, documented as fair value hedges, it covers the risk of both interest rate, exchange rate and credit of fixed-income portfolios (REPOs are included in this typology) and are therefore exposed to changes in fair value thereof due to changes in market conditions in based on the various risks covered, which has an impact on Banco Santander's income statement. To mitigate these risks, the Bank contracts hedging instruments (Derivatives), basically Interest rate Swaps, Cross Currency Swaps, Cap&Floors, Forex Forward and Credit Default Swaps.

On the other hand, the risk of both interest and exchange of loans granted to corporate clients at a fixed rate is generally covered. These hedges are made using Interest Rate Swaps, Cross Currency Swaps and exchange rate derivatives (Forex Swaps and Forex Forward).

In addition, the Bank manages the interest and exchange risk of debt issues in its various categories (mortgage, perpetual, subordinate and senior debt issuances) and in different currencies, denominated at fixed rate, and therefore subject to changes in fair value. These issues are covered by Interest Rate Swaps and Cross Currency Swaps or the combination of both through differentiated fair value hedging strategies for interest rate risk, and cash flows to cover exchange-rate risk.

The methodology used by Banco Santander, to measure the effectiveness of fair value hedge is based on comparing the market values of hedged items, based on the objective risk of hedging, and hedging instruments in order to analyse that changes in that fair value of hedging the items covered by hedging are offset by the market value of hedging instruments, mitigating hedged risk and minimizing volatility in the income statement. Prospectively, the same analysis is performed, measuring theoretical market values in the face of parallel variations of market curves at a positive base point.

There is a structured loan macro-coverage covering the interest rate risk of fixed-rate loans (mortgage, personal or other collateral) granted to commercial or corporate legal entities and medium/long-term Wealth clients. This coverage is instrumented as a faire value macro coverage being the main coverage instruments, Interest Rate Swap and Cap&Floors. In the event of total or partial early cancellation or amortization, the client is obliged to pay/receive the cost/income of the cancellation of the interest rate risk coverage that Banco Santander manages.

With regard to cash flow hedges, the objective is to be covered by the exposure of flows from changes in interest rate and exchange rates.

For retrospective purposes, the 'Hypothetical Derivate' methodology is used to measure efficacy. Through this methodology, the hedged risk is modelled as a derivative — not real — instrument created exclusively for the purpose of measuring the effectiveness of the hedging, and which must meet that its main characteristics match the critical terms of the hedged item for the entire period for which the ratio of coverage. This hypothetical derivative does not incorporate characteristics that are unique to the hedging instrument. In addition, it should be mentioned that, for the purpose of the effectiveness calculation, any risk component not associated with the target risk covered and actually documented at the beginning of the risk is excluded. The market value of the hypothetical derivative replicating the hedged item is compared with the market value of the hedging instrument, verifying that the hedged risk is effectively mitigated and that the impact on the income statement due to potential inefficiencies is residual.

Changes in the market values of the hedging instrument and the hedged item (represented by the hypothetical derivative) are prospectively measured for parallel movements of a positive base point in the market curves concerned.

There is also another macro-hedging, this time of cash flows, which aims to actively manage the risk-free interest rate risk (excluding credit risk) of a portion of the variable rate assets of Banco Santander, through the contracting of interest rate derivatives for which the bank exchanges interest flows at variable rate with others at a fixed rate agreed upon at the time of contract of transactions. Items affected by Macrocoverage have been designated as those in which their cash flows are exposed to interest rate risk, in particular mortgages of Banco Santander´s network at variable rate referenced to Euribor 12 months or Euribor Mortgage, with annual rate renewal, classified as healthy risk and which do not present a contractual floor (or otherwise, the floor is not activated). The hedged position affects the Macrocoverage of Cash Flows at the present time is EUR 7.000 million.

Regarding net foreign investments hedges, basically, they are allocated in Banco Santander and Santander Consumer Finance Group. The Group assumes, as a priority objective in risk management, to minimize – up to a determined limit set up by the responsible for the financial management of the Group- the impact on the calculation of the capital ratio of their permanent investments included within the consolidation perimeter of the Group, and whose shares are legally named in a different currency than the holding has. For this purpose, financial instruments (generally derivatives) on exchange rates are hired, that allow mitigating the impact on the capital ratio of changes in the forward exchange rate. The Group hedges the risk, mainly, for the following currencies: BRL, CLP, MXN, CAD, COP, GBP, CHF, USD and PLN.

The instruments used to hedge the risk of these investments are Forex Swaps, Forex Forward and Spot currency purchases/sales.

In the case of this type of coverage, ineffectiveness scenarios are considered to be low probability, since the hedging instrument is designated considering the position determined and the spot rate at which it is located.

Additionally, the profile information of maturities and the price/average rate for Banco Santander is shown:

EUR million

	31 December 2021					
	Up to one month	One to three months	Three months to one year	One year to five years	More than five years	Total
Fair value hedges	**633**	**4,584**	**13,475**	**25,468**	**11,310**	**55,470**
Interest rate risk						
Interest rate instruments						
Nominal	*14*	*1,822*	*3,038*	*21,507*	*10,031*	*36,412*
Average fixed interest rate (%) GBP	*—*	*—*	*—*	*2.14*	*1.75*	
Average fixed interest rate (%) EUR	*3.86*	*0.99*	*(0.03)*	*1.21*	*1.53*	
Average fixed interest rate (%) CHF	*—*	*—*	*—*	*0.83*	*0.40*	
Average fixed interest rate (%) JPY	*—*	*—*	*—*	*0.46*	*—*	
Average fixed interest rate (%) RON	*—*	*—*	*—*	*4.21*	*3.20*	
Average fixed interest rate (%) USD	*4.75*	*1.45*	*3.46*	*2.74*	*3.37*	
Exchange rate risk						
Exchange rate instruments						
Nominal	*503*	*1,634*	*10,350*	*586*	*—*	*13,073*
GBP / EUR average exchange rate	*—*	*0.88*	*0.86*	*0.88*	*—*	
USD / EUR average exchange rate	*1.19*	*1.17*	*1.18*	*—*	*—*	
COP / USD average exchange rate	*—*	*—*	*—*	*—*	*—*	
PEN / USD average exchange rate	*—*	*4.00*	*—*	*—*	*—*	
AUD / EUR average exchange rate	*—*	*—*	*—*	*—*	*—*	
SAR / EUR average exchange rate	*—*	*—*	*—*	*—*	*—*	
CNY / EUR average exchange rate	*7.86*	*7.72*	*7.41*	*—*	*—*	
JPY / EUR average exchange rate	*132.69*	*130.74*	*—*	*—*	*—*	
Interest rate and exchange risk						
Instruments of exchange rate and interest						
Nominal	*116*	*1,109*	*53*	*3,255*	*1,279*	*5,812*
Average fixed interest rate (%) AUD/EUR	*—*	*—*	*—*	*4.00*	*4.66*	
Average fixed interest rate (%) EUR/USD	*—*	*—*	*—*	*(0.14)*	*—*	
Average fixed interest rate (%) CZK/EUR	*—*	*—*	*—*	*0.86*	*—*	
Average fixed interest rate (%) EUR/COP	*—*	*—*	*—*	*—*	*—*	
Average fixed interest rate (%) RON/EUR	*—*	*—*	*—*	*4.85*	*—*	
Average fixed interest rate (%) HKD/EUR	*—*	*—*	*—*	*2.58*	*—*	
Average fixed interest rate (%) JPY/EUR	*—*	*—*	*—*	*0.73*	*1.14*	
Average fixed interest rate (%) NOK/EUR	*—*	*—*	*—*	*—*	*3.61*	
Average fixed interest rate (%) CHF/EUR	*—*	*—*	*—*	*0.76*	*1.24*	
Average fixed interest rate (%) USD/CLP	*—*	*—*	*—*	*3.45*	*—*	
Average fixed interest rate (%) USD/COP	*—*	*5.14*	*9.47*	*6.79*	*7.15*	
AUD/EUR average exchange rate	*—*	*—*	*—*	*1.50*	*1.53*	
NZD/EUR average exchange rate	*—*	*—*	*—*	*—*	*1.67*	
CZK/EUR average exchange rate	*—*	*—*	*—*	*25.51*	*—*	
EUR/GBP average exchange rate	*—*	*1.18*	*—*	*—*	*—*	
EUR/COP average exchange rate	*—*	*—*	*—*	*—*	*—*	
EUR/USD average exchange rate	*—*	*—*	*—*	*0.89*	*—*	
HKD/EUR average exchange rate	*—*	*—*	*—*	*8.78*	*—*	
JPY/EUR average exchange rate	*—*	*—*	*—*	*132.97*	*126.60*	
MXN/EUR average exchange rate	*—*	*—*	*14.70*	*—*	*—*	

EUR million

	31 December 2021					
	Up to one month	One to three months	Three months to one year	One year to five years	More than five years	Total
NOK/EUR average exchange rate	—	—	—	—	*9.61*	
RON/EUR average exchange rate	—	—	—	*4.82*	*4.93*	
CHF/EUR average exchange rate	—	—	—	*1.09*	*1.11*	
USD/CLP average exchange rate	—	—	—	—	—	
USD/COP average exchange rate	—	—	—	—	—	
USD/MXN average exchange rate	—	—	—	*0.05*	—	
Credit risk						
Credit Risk Instruments						
Nominal	—	*19*	*34*	*120*	—	*173*
Cash flow hedges	**4,279**	**9**	**6,360**	**40,162**	**408**	**51,218**
Interest rate and exchange rate risk						
Interest rate and exchange instruments						
Nominal	—	*9*	*1,169*	*1,848*	*408*	*3,434*
Average fixed interest rate (%) AUD/EUR	—	—	—	*0.30*	—	
Average fixed interest rate (%) EUR/PEN	—	—	*3.44*	—	—	
Average fixed interest rate (%) EUR/AUD	—	*1.63*	—	—	*1.56*	
EUR / PEN average exchange rate	—	—	*0.21*	—	—	
EUR / USD average exchange rate	—	—	—	*0.88*	—	
AUD / EUR average exchange rate	—	—	—	*1.60*	*1.56*	
RON / EUR average exchange rate	—	—	—	*4.89*	—	
JPY / EUR average exchange rate	—	—	—	*120.57*	—	
CHF / EUR average exchange rate	—	—	—	—	*1.10*	
EUR / GBF average exchange rate	—	—	*1.10*	*1.11*	—	
NOK / EUR average exchange rate	—	—	—	—	*10.24*	
CZK / EUR average exchange rate	—	—	—	*26.13*	—	
EUR / AUD average exchange rate	—	*0.62*	—	—	—	
Interest rate risk						
Interest Rate Swaps						
Nominal	*4,279*	—	*5,191*	*38,314*	—	*47,784*
Average fixed interest rate (%) EUR	—	—	*(0.47)*	*(0.26)*	—	
Average fixed interest rate (%) USD	—	—	*1.77*	—	—	
Average fixed interest rate (%) AUD	—	—	—	*1.65*	—	
Bond Forward Instruments						
Nominal						
Net investment hedges abroad	**560**	**1,397**	**11,280**	**10,120**	**—**	**23,357**
Exchange rate risk						
Exchange rate instruments						
Nominal	*560*	*1,397*	*11,280*	*10,120*	—	*23,357*
BRL / EUR average exchange rate	*6.66*	*6.76*	*6.84*	—	—	
CLP / EUR average exchange rate	*943.35*	*929.69*	*949.61*	—	—	
COP / EUR average exchange rate	—	—	*4,538,971*	—	—	
GBP / EUR average exchange rate	*0.85*	*0.86*	*0.85*	*0.88*	—	
MXN / EUR average exchange rate	*25.54*	*25.33*	*25.19*	—	—	
PLN / EUR average exchange rate	*4.59*	*4.58*	*4.63*	—	—	
Total	**5,472**	**5,990**	**31,115**	**75,750**	**11,718**	**130,045**

EUR million

	31 December 2020					
	Up to one month	One to three months	Three months to one year	One year to five years	More than five years	Total
Fair value hedges	**2,906**	**4,848**	**5,999**	**20,242**	**15,377**	**49,372**
Interest rate risk						
Interest rate instruments						
Nominal	*2,073*	*409*	*2,165*	*17,430*	*14,294*	*36,371*
Average fixed interest rate (%) GBP	*—*	*—*	*—*	*1.38*	*4.07*	
Average fixed interest rate (%) EUR	*0.65*	*0.55*	*0.39*	*0.82*	*1.93*	
Average fixed interest rate (%) CHF	*—*	*—*	*—*	*0.80*	*0.40*	
Average fixed interest rate (%) JPY	*—*	*—*	*—*	*0.46*	*—*	
Average fixed interest rate (%) RON	*—*	*—*	*—*	*3.61*	*—*	
Average fixed interest rate (%) USD	*0.70*	*0.57*	*2.03*	*3.00*	*3.56*	
Exchange rate risk						
Exchange rate instruments						
Nominal	*833*	*4,149*	*3,008*	*—*	*—*	*7,990*
GBP / EUR average exchange rate	*—*	*0.90*	*0.92*	*—*	*—*	
USD / EUR average exchange rate	*1.16*	*1.17*	*1.18*	*—*	*—*	
COP / USD average exchange rate	*3,628.14*	*3,603.59*	*—*	*—*	*—*	
PEN / USD average exchange rate	*—*	*3.61*	*—*	*—*	*—*	
AUD / EUR average exchange rate	*—*	*1.61*	*—*	*—*	*—*	
SAR / EUR average exchange rate	*4.48*	*4.51*	*—*	*—*	*—*	
CNY / EUR average exchange rate	*8.11*	*8.10*	*8.00*	*—*	*—*	
JPY / EUR average exchange rate	*—*	*124.61*	*—*	*—*	*—*	
Interest rate and exchange risk						
Instruments of exchange rate and interest						
Nominal	*—*	*282*	*818*	*2,621*	*1,083*	*4,804*
Average fixed interest rate (%) AUD/EUR	*—*	*—*	*—*	*4.00*	*4.66*	
Average fixed interest rate (%) COP/USD	*—*	*—*	*6.00*	*—*	*—*	
Average fixed interest rate (%) CZK/EUR	*—*	*—*	*—*	*0.86*	*—*	
Average fixed interest rate (%) EUR/COP	*—*	*—*	*4.38*	*—*	*—*	
Average fixed interest rate (%) RON/EUR	*—*	*—*	*—*	*4.85*	*—*	
Average fixed interest rate (%) HKD/EUR	*—*	*—*	*—*	*2.58*	*—*	
Average fixed interest rate (%) JPY/EUR	*—*	*—*	*2.20*	*0.57*	*1.28*	
Average fixed interest rate (%) NOK/EUR	*—*	*—*	*—*	*—*	*3.61*	
Average fixed interest rate (%) CHF/EUR	*—*	*—*	*—*	*—*	*1.24*	
Average fixed interest rate (%) USD/CLP	*—*	*—*	*0.93*	*—*	*—*	
Average fixed interest rate (%) USD/COP	*—*	*—*	*8.03*	*6.66*	*7.23*	
AUD/EUR average exchange rate	*—*	*—*	*—*	*1.50*	*1.51*	
COP/USD average exchange rate	*—*	*—*	*3,437.20*	*—*	*—*	
CZK/EUR average exchange rate	*—*	*—*	*—*	*25.54*	*—*	
EUR/GBP average exchange rate	*—*	*1.11*	*—*	*—*	*—*	
EUR/COP average exchange rate	*—*	*—*	*—*	*—*	*—*	
EUR/USD average exchange rate	*—*	*—*	*—*	*0.89*	*—*	
HKD/EUR average exchange rate	*—*	*—*	*—*	*8.78*	*—*	
JPY/EUR average exchange rate	*—*	*—*	*113.30*	*133.84*	*125.88*	
MXN/EUR average exchange rate	*—*	*—*	*—*	*14.70*	*—*	

EUR million

	31 December 2020					
	Up to one month	One to three months	Three months to one year	One year to five years	More than five years	Total
NOK/EUR average exchange rate	—	—	—	—	*9.61*	
RON/EUR average exchange rate	—	—	—	*4.73*	—	
CHF/EUR average exchange rate	—	—	—	*1.09*	*1.11*	
USD/CLP average exchange rate	—	—	—	—	—	
USD/COP average exchange rate	—	—	—	—	—	
USD/MXN average exchange rate	—	—	*0.05*	—	—	
Credit risk						
Credit Risk Instruments						
Nominal	—	*8*	*8*	*191*	—	*207*
Cash flow hedges	**3,164**	**5,000**	**24,247**	**7,521**	**208**	**40,140**
Interest rate and exchange rate risk						
Interest rate and exchange instruments						
Nominal	—	—	*1,247*	*3,242*	*208*	*4,697*
EUR / GBP average exchange rate	—	—	*1.08*	*1.10*	—	
EUR / USD average exchange rate	—	—	—	*0.88*	—	
AUD / EUR average exchange rate	—	—	—	*1.62*	—	
RON / EUR average exchange rate	—	—	—	*4.81*	—	
JPY / EUR average exchange rate	—	—	—	*120.57*	—	
CHF / EUR average exchange rate	—	—	—	—	*1.10*	
Interest rate risk						
Interest Rate Swaps						
Nominal	*3,164*	*5,000*	*23,000*	*4,279*	—	*35,443*
Average fixed interest rate (%) EUR	—	*(0.26)*	*(0.25)*	*(0.24)*	—	
Bond Forward Instruments						
Nominal	—	—	—	—	—	—
Net investment hedges abroad	**2,229**	**4,554**	**11,570**	**1,858**	**—**	**20,211**
Exchange rate risk						
Exchange rate instruments						
Nominal	*2,229*	*4,554*	*11,570*	*1,858*	—	*20,211*
BRL / EUR average exchange rate	*5.27*	*5.31*	*6.33*	—	—	
CLP / EUR average exchange rate	*869.63*	*861.55*	*864.34*	*932.22*	—	
COP / EUR average exchange rate	—	—	*4,471.31*	—	—	
GBP / EUR average exchange rate	*0.91*	*0.92*	*0.91*	—	—	
MAD / EUR average exchange rate	*23.12*	*25.46*	*26.79*	—	—	
MXN / EUR average exchange rate	*4.43*	*4.42*	*4.52*	—	—	
Total	**8,299**	**14,402**	**41,816**	**29,621**	**15,585**	**109,723**

Regarding the hedged items, in the following table we have the detail of the type of coverage, the risk that is covered and what products are being covered as of December 31, 2021 and 2020 (mainly they are loaned deposits, financial and corporate bonds and corporate repos):

EUR million

	31 December 2021						
	Amount in books of the item covered		Cumulative amount of fair value adjustments on the covered line		Change in the fair value of the item covered for inefficiency assessment	Cash flow hedge reserve / foreign currency conversion	
	Assets	Liabilities	Assets	Liabilities		Coverage continues	Discontinuous coverage
Fair value hedges	**22,469**	**27,060**	**(232)**	**575**	**590**	**—**	**—**
Interest rate risk	8,769	24,188	65	551	613	—	—
Exchange rate risk	11,972	—	(282)	—	(48)	—	—
Interest rate and exchange rate risk	1,549	2,872	(17)	24	27	—	—
Credit risk	179	—	2	—	(2)	—	—
Cash flow hedges	**—**	**—**	**—**	**—**	**101**	**(109)**	**(16)**
Interest rate risk	—	—	—	—	101	(101)	(16)
Interest rate and exchange rate risk	—	—	—	—	—	(8)	—
Net investment hedges abroad	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Exchange rate risk	—	—	—	—	—	—	—
Total	**22,469**	**27,060**	**(232)**	**575**	**691**	**(109)**	**(16)**

EUR million

	31 December 2020						
	Amount in books of the item covered		Cumulative amount of fair value adjustments on the covered line		Change in the fair value of the item covered for inefficiency assessment	Cash flow hedge reserve / foreign currency conversion	
	Assets	Liabilities	Assets	Liabilities		Coverage continues	Discontinuous coverage
Fair value hedges	**23,964**	**20,775**	**321**	**1,440**	**(356)**	**—**	**—**
Interest rate risk	13,939	18,278	264	1,360	(328)	—	—
Exchange rate risk	8,030	—	40	—	1	—	—
Interest rate and exchange rate risk	1,775	2,497	14	80	(27)	—	—
Credit risk	220	—	3	—	(2)	—	—
Cash flow hedges	**—**	**—**	**—**	**—**	**231**	**(274)**	**3**
Interest rate risk	—		—	—	231	(266)	3
Interest rate and exchange rate risk	—	—	—	—	—	(8)	—
Net investment hedges abroad	**20,211**	**—**	**—**	**—**	**—**	**—**	**—**
Exchange rate risk	20,211	—	—	—	—	—	—
Total	**44,175**	**20,775**	**321**	**1,440**	**(125)**	**(274)**	**3**

The cumulative amount of adjustments of the fair value hedging instruments that remain in the balance for covered items that are no longer adjusted by profit and loss of coverage as of 31 December 2021 is EUR 115 million (December 31, 2020 is EUR 150 million).

The following table contains information regarding the effectiveness of the hedging relationships designated by Banco Santander, as well as the impacts on profit or loss and other comprehensive income as of 31 December 2021 and 2020:

EUR million

	31 December 2021				
	Earnings / (losses) recognized in Other accumulated global income	Coverage inefficiency recognized in the income statement	Line of the income statement that includes ineffective coverage	Reclassified amount of reserves to the income statement due to:	
				Covered transaction that affects the income statement	Line of the income statement that includes reclassified amounts
Fair value hedges	**—**	**(28)**		**—**	
Interest rate risk	—	4	Gains or losses of financial assets/liabilities	—	N/A
Exchange rate risk	—	(27)	Gains or losses of financial assets/liabilities	—	N/A
Interest and Exchange rate risk	—	(5)	Gains or losses of financial assets/liabilities	—	N/A
Credit risk	—	—	N/A	—	N/A
Cash flow hedges	**146**	**—**		**(7)**	
Interest rate risk	145	—	Gains or losses of financial assets/liabilities	(32)	Net interest income/ Gains or losses of financial assets/ liabilities
Interest rate and exchange rate risk	1	—	Gains or losses of financial assets/liabilities	25	Net interest income/ Gains or losses of financial assets/ liabilities
Total	**146**	**(28)**		**(7)**	

EUR million

	31 December 2020				
	Earnings / (losses) recognized in Other accumulated global income	Coverage inefficiency recognized in the income statement	Line of the income statement that includes ineffective coverage	Reclassified amount of reserves to the income statement due to:	
				Covered transaction that affects the income statement	Line of the income statement that includes reclassified amounts
Fair value hedges	**—**	**10**		**—**	
Interest rate risk	—	4	Gains or losses of financial assets/liabilities	—	N/A
Exchange rate risk	—	—	N/A	—	N/A
Interest and Exchange rate risk	—	4	Gains or losses of financial assets/liabilities	—	N/A
Credit risk	—	2	Gains or losses of financial assets/liabilities	—	N/A
Cash flow hedges	**(206)**	**—**		**33**	
Interest rate risk	(204)	—	Gains or losses of financial assets/liabilities	(10)	Net interest income/ Gains or losses of financial assets/ liabilities
Interest rate and exchange rate risk	(2)	—	Gains or losses of financial assets/liabilities	43	Net interest income/ Gains or losses of financial assets/ liabilities
Total	**(206)**	**10**		**33**	

The following table shows a reconciliation of each component of equity and an analysis of other comprehensive income in relation to hedge accounting as of December 31, 2021 and 2020:

EUR million

	2021	2020
Balance at the end of the previous year	(189)	(45)
Amount recognized in Other accumulated global income		
Cash flow hedges	146	(206)
Interest rate risk and interest rate and exchange rate risk	146	(206)
Changes in equity by discharge at P&L	*(6)*	*33*
Remains of equity movements	*152*	*(239)*
Taxes	(44)	62
Balance at year end	**(87)**	**(189)**

33. Off-balance-sheet funds under management

As of 31 December 2021, Banco Santander held off-balance-sheet funds under management, namely investment funds and assets under management, amounting to EUR 88,123 million (31 December 2020, EUR 81,964 million). Also, as of 31 December 2021, the funds marketed but not held under management amounted to EUR 25,172 million (31 December 2020, EUR 20,503 million).

34. Interest income

Interest and similar income in the accompanying income statements comprises the interest accruing in the year on all financial assets with an implicit or explicit return, calculated by applying the effective interest method, irrespective of measurement at fair value, and the rectifications of income as a result of hedge accounting, Interest is recognized gross, without deducting any tax withheld originally.

The detail of the main items of interest and similar income earned in 2021 and 2020 is as follows:

EUR million

	2021	2020
Debt instruments	**723**	**777**
Central Banks	3	2
Public sector	190	210
Credit entities	316	342
Other financial companies	178	169
Non-financial companies	36	54
Loans and advances	**4,811**	**5,095**
Central Banks	25	41
Public sector	122	162
Credit entities	156	406
Other financial companies	580	467
Non-financial companies	2,634	2,607
Households	1,294	1,412
Other assets	**77**	**85**
Of which, insurance contracts linked to pensions (note 23.c)	*12*	*6*
Deposits	**727**	**520**
Central Banks	618	375
Public sector	12	2
Credit entities	64	105
Other financial companies	22	30
Non-financial companies	11	8
Households	—	—
Hedging derivatives - Interest rate risk	**38**	**34**
Other financial liabilities	**19**	**12**
Debt securities issued	**10**	**5**
Total	**6,405**	**6,528**

Most of the interest and similar income was generated by Banco Santander's financial assets that are measured either at amortized cost or at fair value through Other comprehensive income.

35. Interest expense

Interest expense and similar charges in the accompanying income statements includes the interest accruing in the year on all financial liabilities with an implicit or explicit return, including remuneration in kind, calculated by applying the effective interest method, irrespective of measurement at fair value; the rectifications of cost as a result of hedge accounting; and the interest cost attributable to provisions recorded for pensions.

The detail of the main items of interest expense and similar charges accrued in 2021 and 2020 is as follows:

EUR million

	2021	2020
Derivatives - Trading	**41**	**—**
Of which: interest income from derivatives in economic hedges	*41*	*—*
Debt securities Issued	**1,432**	**1,507**
Debt securities	**66**	**97**
Central Banks	—	—
Public sector	46	49
Credit entities	13	40
Other financial companies	6	8
Non-financial companies	1	—
Loans and advances	**479**	**361**
Central Banks	239	101
Public sector	1	9
Credit entities	162	198
Other financial companies	72	48
Non-financial companies	5	5
Households	—	—
Deposits	**689**	**1,006**
Central Banks	12	111
Public sector	156	145
Credit entities	220	351
Other financial companies	239	279
Non-financial companies	54	94
Households	8	26
Other financial liabilities	**197**	**190**
Hedging derivatives - Interest rate risk	**(154)**	**(35)**
Pensions and other obligations of defined post-employment benefits (note 23)	**35**	**34**
Others	**—**	**—**
Total	**2,785**	**3,160**

Most of the interest expense and similar charges was generated by Banco Santander's financial liabilities that are measured at amortized cost.

36. Dividend income

'Dividend income' includes the dividends and payments on equity instruments out of profits generated by investees after the acquisition of the equity interest.

The detail of income from equity instruments is as follows:

EUR million

	2021	2020
Financial assets held for trading	355	264
Non-trading financial assets mandatorily at fair value through profit or loss	7	—
Financial assets at fair value through other comprehensive income	55	62
Investments in subsidiaries, jointly controlled entities and associates	5,072	5,316
Group entities	*4,765*	*5,221*
Associates	*307*	*95*
Total	**5,489**	**5,642**

Investments in subsidiaries, jointly controlled entities and associates

The detail of the main items of interest expense and similar charges accrued in 2021 and 2020 is as follows:

EUR million

	2021	2020
Detail of the companies:		
SANTANDER CONSUMER FINANCE, S.A.	1,876	—
SANTANDER UK GROUP HOLDINGS PLC	1,229	88
SANTANDER HOLDING INTERNATIONAL, S.A.	500	1,270
SANTANDER HOLDING USA, Inc.	423	112
ZURICH SANTANDER INSURANCE AMÉRICA, S.L.	230	80
GRUPO FINANCIERO SANTANDER MÉXICO, S.A. de C.V.	153	—
SANTANDER CONSUMER FINANCE, S.A. (AT1)	73	65
SANTANDER UK GROUP HOLDINGS PLC (AT1)	72	72
SANTANDER INVESTMENT, S.A.	70	30
CNP SANTANDER INSURANCE LIFE DESIGNATED ACTIVITY COMPANY	60	—
TEATINOS SIGLO XXI INVERSIONES S.A.	49	733
SANTANDER CHILE HOLDING S.A.	41	16
BANCO SANTANDER MÉXICO, S.A., INSTITUCIÓN DE BANCA MÚLTIPLE, GRUPO FINANCIERO SANTANDER MÉXICO	33	—
BANCO SANTANDER URUGUAY, S.A.	33	37
SANTANDER BANK POLSKA S.A.	33	—
SAM INVESTMENT HOLDINGS, S.L.	32	72
SANTANDER TOTTA, SGPGS, S.A.	32	61
SANTANDER TOTTA, SGPGS, S.A. (AT1)	28	—
SOCUR S.A.	18	17
SANTANDER GLOBAL TECHNOLOGY, S.L.	14	20
SANTANDER TOWARZYSTWO FUNDUSZY INWESTYCYJNYCH S.A.	13	20
BANCO SANTANDER (BRASIL) S.A.	1	59
STERREBEECK B.V.	—	1,260
SANTUSA HOLDING, S.L.	—	1,019
SANTANDER FACTORING Y CONFIRMING, S.A., E.F.C	—	200
SANTANDER GLOBAL OPERATIONS, S.A.	—	17
SAM UK INVESTMENT HOLDINGS LIMITED	—	1
Other companies	59	67
Total	**5,072**	**5,316**

37. Commission income

Fee and commission income comprise the amount of all fees and commissions accruing in favour of Banco Santander in the year, except those that form an integral part of the effective interest rate on financial instruments.

The detail of fee and commission income in the accompanying income statements for 2021 and 2020 is as follows:

EUR million

	2021	2020
Collection and payment services:		
Current Accounts	374	300
Credit and debit cards	155	194
Transfers and other payment orders	91	84
Other commission income in connection with payment services	67	71
	687	**649**
Marketing of non-banking financial products:		
Collective Investment	512	465
Insurance	281	232
Other	1	—
	794	**697**
Securities services:		
Securities underwriting and placement	125	138
Transfer orders	18	12
Other	72	90
	215	240
Clearing and settlement	**74**	**78**
Asset management	**88**	**78**
Custody	**75**	**67**
Structured finance	**266**	**229**
Loan granted commitments granted	**283**	**217**
Financial granted guarantees granted	**223**	**222**
Other:		
Foreign currency exchange	100	88
Other concepts	314	246
	414	**334**
Total	**3,119**	**2,811**

38. Commission expense

Fee and commission expense show the amount of all fees and commissions paid or payable by Banco Santander in the year, except those that form an integral part of the effective interest rate on financial instruments.

The detail of fee and commission expense in the accompanying income statements for 2021 and 2020 is as follows:

EUR million

	2021	2020
Clearing and settlement	71	73
Loan commitments received	—	—
Financial guarantees received	100	113
Custody	—	—
Other *	370	308
Total	**541**	**494**

* Other Includes mainly commissions paid for financial and mediation services, as well as credit cards.

39. Gains or losses on financial assets and liabilities

The following information is presented below regarding the gains or losses on financial assets or liabilities:

a) Breakdown

The detail, by classification of the related instrument, of Gains/losses on financial assets and liabilities in the accompanying income statements for 2021 and 2020 is as follows:

EUR million

	2021	2020
Gains or losses on financial assets and liabilities not measured at fair value through profit or loss, net	318	578
Financial assets at amortized cost	19	10
Other financial assets and liabilities	299	568
Of which, debt instruments	*286*	*565*
Of which, equity instruments	—	—
Gains or losses on financial assets and liabilities held for trading, net*	175	(29)
Gains or losses on non-trading financial assets and liabilities mandatory at fair value through profit or loss	(45)	(290)
Gains or losses on financial assets and liabilities measured at fair value through profit or loss, net*	38	4
Gains or losses from hedge accounting, net	(28)	10
Total	**458**	**273**

* Includes the net income obtained from transactions with debt securities, capital instruments, derivatives and short positions included in this portfolio when the Banco Santander jointly manages its risk in those instruments.

b) Financial assets and liabilities at fair value through profit or loss

The detail of the amount of the asset balances is as follows:

EUR million

	2021	2020
Loans and receivables	29,239	35,222
Central Banks	1,118	482
Credit institutions	10,425	9,891
Customers	17,696	24,849
Debt instruments*	15,054	18,914
Equity instruments	15,527	10,063
Derivatives	42,023	53,362
Total	**101,843**	**117,561**

* Include EUR 10,307 million related to Spanish and foreign government debt securities at 31 December 2021 (31 December 2020, EUR 13,842 million).

The foregoing table shows the maximum credit risk exposure of these assets at 31 December 2021 and 2020, respectively, Banco Santander mitigates and reduces this exposure as follows.

With respect to derivatives, Banco Santander has entered into framework agreements with a large number of credit institutions and customers for the netting-off of asset positions and the provision of collateral for non-payment.

Loans and receivable' to credit institutions and loans and receivable to 'customers' included reverse repos amounting to EUR 28,219 million at 31 December 2021 (31 December 2020: EUR 31,070 million).

In addition, assets amounting to EUR 1,134 million have a mortgage guarantee at 31 December 2021 (31 December 2020: EUR 1,408 million).

At 31 December 2021 the amount of the change in the year in the fair value of financial assets at fair value through profit or loss attributable to variations in their credit risk (spread) was not material.

The detail of the amount of the liability balances is as follows:

EUR million

	2021	2020
Deposits	19,796	16,890
Central Banks	651	1,469
Credit Institutions	6,785	4,496
Customers	12,360	10,925
Short positions	9,244	10,338
Derivatives	40,672	50,676
Total	**69,712**	**77,904**

At 31 December 2021, the amount of the change in the fair value of financial liabilities at fair value through profit or loss attributable to changes in their credit risk during the year is not material.

40. Exchange differences, net

This chapter basically includes the results obtained in the purchase and sale of currencies, the differences that arise when converting monetary items in foreign currency to functional currency and those from non-monetary assets in foreign currency at the time of disposal.

The detail of 'Exchange differences (net)' in the accompanying income statements for 2021 and 2020 is as follows:

EUR million

	2021	2020
Exchange differences, net	**(205)**	**372**

Banco Santander manages the currencies to which it is exposed together with the arrangement of derivative instruments and, accordingly, the changes in this line item should be analyzed together with those recognized under Gains/losses on financial assets and liabilities (see note 39).

41. Other operating income and other operating expenses

The detail of 'Other operating income' in the accompanying income statements for 2021 and 2020 is as follows:

EUR million

	2021	2020
Exploitation of real estate investments and operating leases	256	241
Others	185	163
Total	**441**	**404**

The detail of 'Other operating expenses' in the accompanying income statements for 2021 and 2020 is as follows:

EUR million

	2021	2020
Contribution to Deposit Guarantee Fund (note 1.h)	(225)	(239)
Contribution to Resolution Fund* (note 1.h)	(307)	(262)
Other operating expenses	(362)	(284)
Total	**(894)**	**(785)**

*Includes the expense incurred by contribution to the National Resolution Fund and to the Single Resolution Fund.

42. Staff costs

a) Breakdown

The detail of 'Staff costs' in 2021 and 2020 is as follows:

EUR million

	2021			2020		
	Of which, in Spain	Of which, foreign branches	Total	Of which, in Spain	Of which, foreign branches	Total
Wages and salaries	1,728	323	2,051	1,639	241	1,880
Social security costs	343	33	376	381	27	408
Additions to provisions for defined benefit pension plans (note 23)	5	—	5	11	—	11
Contributions to defined contribution pension funds	67	10	77	72	8	80
Equity-instrument-based remuneration	—	—	—	—	—	—
Other staff costs	169	29	198	191	16	207
Total	**2,312**	**395**	**2,707**	**2,294**	**292**	**2,586**

b) Headcount

The average number of employees at the Bank, by professional category, is as follows:

Average number of employees		
	2021	2020
Executive and Senior management	19	21
Other line personnel	23,343	26,527
Staff at branches abroad	1,150	955
Total	**24,512**	**27,503**

The number of employees, as of December 31, 2021 and December 31, 2020, is 23,311 and 27,337, respectively.

The functional breakdown, by gender, at 31 December 2021 is as follows:

	Breakdown by gender			
	Executives		Other line personnel	
	Men	Women	Men	Women
Breakdown by gender	76 %	24 %	50 %	50 %

The labour relations between employees and the various Group companies and, therefore, the Bank are governed by the related collective agreements or similar regulations.

The number of employees with disabilities greater than or equal to 33%, distributed by professional categories at December 31, 2021 and 2020, is as follows:

	2021	2020
Senior management	—	—
Other management	27	30
Other staff	280	287
Total	**307**	**317**

The average number of employees of Banco Santander with a disability greater than or equal to 33%, during the year 2021 was 288 (319 at the end of the year 2020).

c) Share-based payments

The main share-based payments granted by the Group in force at 31 December, 2021, 2020 and 2019 are described below.

i. Banco Santander

The variable remuneration policy for the Bank's executive directors and certain executive personnel of the Bank and of other Group companies includes Bank share-based payments, the implementation of which requires, in conformity with the law and the Bank's Bylaws, specific resolutions to be adopted by the general meeting.

Were it necessary or advisable for legal, regulatory or other similar reasons, the delivery mechanisms described below may be adapted in specific cases without altering the maximum number of shares linked to the plan or the essential conditions to which the delivery thereof is subject.

These adaptations may involve replacing the delivery of shares with the delivery of cash amounts of an equal value.

The plans that include share-based payments are as follows: (i) Deferred and Conditional Variable Remuneration Plan; (ii) Deferred Multiyear Objectives Variable Remuneration Plan; (iii) Digital Transformation Award. The characteristics of the plans are set forth below:

Deferred variable remuneration systems	Description and plan beneficiaries	Conditions	Calculation Base
(i) Deferred and conditional variable remuneration plan (2015, 2016, 2017, 2018, 2019, 2020 and 2021)	The purpose of these cycles is to defer a portion of the variable remuneration of the beneficiaries over a period of three years for the sixth cycles, and over three or five years for the fifth, seventh, eighth, ninth, tenth and eleventh cycles, for it to be paid, where appropriate, in cash and in Santander shares; the other portion of the variable remuneration is also to be paid in cash and Santander shares, upon commencement of the cycles, in accordance with the rules set forth below. **Beneficiaries:** • Executive directors and certain executives (including senior management) and employees who assume risk, who perform control functions or receive an overall remuneration which puts them on the same remuneration level as senior executives and employees who assume risks (fifth cycle) • In the case of the sixth, seventh, eighth, ninth, tenth and eleventh cycle, the beneficiaries are Material Risk Takers (Identified staff) that are not beneficiaries of the Deferred Multiyear Objectives Variable Remuneration Plan.	For the fifth and sixth cycles (2015 to 2016), the accrual of deferred compensation is conditioned, in addition to the requirement that the beneficiary remains in the Group's employ, with the exceptions included in the plan regulations upon none of the following circumstances existing during the period prior to each of the deliveries, pursuant to the provisions set forth in each case in the plan regulations: i. Poor financial performance of the Group. ii. breach by the beneficiary of internal regulations, including, in particular, those relating to risks. iii. material restatement of the Group's consolidated financial statements, except when it is required pursuant to a change in accounting standards. iv. Significant changes in the Group's economic capital or risk profile. In the case of the seventh, eight, ninth, tenth and eleventh cycles (2017 to 2021), the accrual of deferred compensation is conditioned, in addition to the permanence of the beneficiary in the Group, with the exceptions contained in the plan's regulations, to no assumptions in which there is a poor performance of the entity as a whole or of a specific division or area of the entity or of the exposures generated by the personnel, and at least the following factors must be considered: v. significant failures in risk management committed by the entity , or by a business unit or risk control unit. vi. the increase suffered by the entity or by a business unit of its capital needs, not foreseen at the time of generation of the exposures. vii. Regulatory sanctions or judicial sentences for events that could be attributable to the unit or the personnel responsible for those. Also, the breach of internal codes of conduct of the entity. viii. Irregular behaviours, whether individual or collective, considering in particular the negative effects derived from the marketing of inappropriate products and the responsibilities of the persons or bodies that made those decisions.	Fifth cycles (2015): • Executive directors and members of the Identified Staff with total variable remuneration higher than 2.6 million euros: 40% paid immediately and 60% deferred over3 years (fourth cycle) or 5 years (fifth cycle). • Division managers, country heads, other executives of the Group with a similar profile and members of the Identified Staff with total variable remuneration between 1.7 million euros (1.8 million in fourth cycle) and 2.6 million euros: 50% paid immediately and 50% deferred over 3 years(fourth cycle) or 5 years (fifth cycle) • Other beneficiaries: 60% paid immediately and 40% deferred over 3 years. Sixth cycle (2016): • 60% of bonus will be paid immediately and 40% deferred over a three years period. Seventh, eight, ninth, tenth and eleventh cycle (2017, 2018, 2019, 2020 and 2021): • Beneficiaries of these plans with target total variable remuneration higher or equal to 2.7 million euros: 40% paid immediately and 60% deferred over 5 years • Beneficiaries of these plans with target total variable remuneration between 1.7 million euros and 2.7 million euros: 50% paid immediately and 50%paid over 5 years • Other beneficiaries of these plans: 60% paid immediately and 40% deferred over 3 years.

Deferred variable remuneration systems	Description and plan beneficiaries	Conditions	Calculation Base
(ii)Deferred Multiyear Objectives Variable Remuneration Plan (2016, 2017, 2018, 2019, 2020 and 2021)	The aim is simplifying the remuneration structure, improving the ex ante risk adjustment and increasing the impact of the long-term objectives on the Group's most relevant roles. The purpose of these cycles is to defer a portion of the variable remuneration of the beneficiaries over a period of three or five years, for it to be paid, where appropriate, in cash and in Santander shares; the other portion of the variable remuneration is also to be paid in cash and Santander shares, upon commencement of the cycles, in accordance with the rules set forth below. The accrual of the last third of the deferral (in the case of 3 years deferral) of the last three fifths (in the case of 5 years deferral) is also subject to long-term objectives. **Beneficiaries** Executive directors, senior managers and certain executives of the Group's first lines of responsibility.	In 2016 the accrual is conditioned, in addition to the permanence of the beneficiary in the Group, with the exceptions contained in the plan's regulations that none of The following circumstances during the period prior to each of the deliveries in the terms set forth in each case in the plan's regulations: i. Poor performance of the Group. ii. breach by the beneficiary of the internal regulations, including in particular that relating to risks. iii. material restatement of the Group's consolidated financial statements, except when appropriate under a change in accounting regulations. iv. Significant changes in the Group's economic capital or risk profile. In 2017, 2018, 2019, 2020 and 2021 the accrual is conditioned, in addition to the beneficiary permanence in the Group, with the exceptions contained in the plan's regulations, to the non-occurrence of instances of poor financial performance from the entity as a whole or of a specific division or area thereof or of the exposures generated by the personnel, at least the following factors must be considered: v. Significant failures in risk management committed by the entity, or by a business unit or risk control unit. vi. the increase suffered by the entity or by a business unit of its capital needs, not foreseen at the time of generation of the exposures. vii. Regulatory sanctions or court rulings for events that could be attributable to the unit or the personnel responsible for those. Also, the breach of internal codes of conduct of the entity. viii. Irregular behaviours, whether individual or collective, considering in particular negative effects derived from the marketing of inappropriate products and responsibilities of persons or bodies that made those decisions. Paid half in cash and half in shares. The maximum number of shares to be delivered is calculated by taking into account the weighted average daily volume of weighted average prices for the fifteen trading sessions prior to the previous Friday (excluding) on the date on which the board decides the bonus for the Executive directors of the Bank.	First cycle (2016): • Executive directors and members of the Identified Staff with total variable remuneration higher than or equal to 2.7 million euros: 40% paid immediately and 60% deferred over a 5 years period. • Senior managers, country heads of countries representing at least 1% of the Group´s capital and other members of the identified staff whose total variable remuneration is between 1.7 million and 2.7 million euros: 50% paid immediately and 50% deferred over a 5 years period. • Other beneficiaries: 60% paid immediately and 40% deferred over a 3 years period. The second, third, fourth, fifth and sixth cycles (2017, 2018, 2019,2020 and 2021 respectively) are under the aforementioned deferral rules, except that the variable remuneration considered is the target for each executive and not the actual award. In 2016 the metrics for the deferred portion subject to long-term objectives (last third or last three fifths, respectively, for the cases of three years and five years deferrals) are: • Earnings per share (EPS) growth in 2018 over 2015. • Relative Total Shareholder Return (TSR) in the 2016-2018 period measured against a group of credit institutions. • Compliance with the fully-loaded common equity tier 1 ("CET1") ratio target for financial year 2018. • Compliance with Santander Group's underlying return on risk-weighted assets ("RoRWA") growth target for financial year 2018 compared to financial year 2015. In the second, third, fourth fifth and sixth cycle (2017, 2018, 2019, 2020 and 2021) the metrics for the deferred portion subject to long-term objectives (last third or last three fifths, respectively, for the cases of three years and five years deferrals) are: • EPS growth in 2019, 2020, 2021, 2022 and 2023 (over 2016, 2017, 2018, 2019 and 2020, for each respective cycle) • Relative Total Shareholder Return (TSR) measured against a group of 17 credit institutions (second and third cycles) in the periods 2017-2019 and 2018-2019, respectively, and against a group of 9 entities (fourth, fifth and sixth cycle) for the 2019-2021, 2020-2022 and 2010-2023 period. • Compliance with the fully-loaded common equity tier 1 ("CET1") ratio target for financial years 2019, 2020, 2021,2022 and 2023, respectively.

Deferred variable remuneration systems	Description and plan beneficiaries	Conditions	Calculation Base
(iii) Digital Transformation Award (2019, 2020 and 2021)	The 2019, 2020 and 2021 Digital Transformation Incentive (the "Digital Incentive") is a variable remuneration system that includes the delivery of Santander shares and share options. The aim of the Digital Incentive is to attract and retain the critical skill sets to support and accelerate the digital transformation of the Group. By means of this program, the Group offers a remuneration element which is competitive with the remuneration systems offered by other market operators who also compete for digital talent. The number of beneficiaries is limited to a maximum of 250 employees and the total amount of the incentive is limited to 30 million euros.	The funding of this incentive is subject to meeting important milestones that are aligned with the Group´s digital roadmap and have been approved by the board of directors, taking into account the digitalization strategy of the Group, with the aim of becoming the best open, responsible global financial services platform. Performance of incentive shall be measured based on achievement of the following milestones: 1. Launch of a Global Trade Services (GTS) platform. 2. Launch of a Global Merchant Services (GMS) platform. 3. Migration of our fully digital bank, OpenBank, to a "next generation" platform and launch in 3 markets. 4. Extension of SuperDigital in Brazil to at least one other country. 5. Launch of our international payments app based on blockchain Pago FX to non-Santander customers. The milestones for the 2020 Digital Transformation Award were: (i) rolling out the global merchant services (GMS) platform in 3 new geographies, enhancing the platform functionality and achieving volume targets for transactions and participating merchants; (ii) doing the commercial rollout of the global trade services (GTS) platform in 8 new geographies, enhancing platform functionality, and achieving volume targets for on-boarded clients and monthly active users; (iii) launching OpenBank in a new market and migrating the retail banking infrastructure to "new-mode" bank; (iv) launch the global platform SuperDigital in at least 4 countries, driving target active user growth; (v) deploying machine learning across pre-defined markets for 4 priority use cases, rolling out Conversion Rate Optimization (Digital marketing) for at least 40 sales programs, delivering profit targets, and driving reduction of agent handled calls in contact centers; (vi) successfully implementating initiatives related to on-board and identity services, common API (application programming interface) layer, payment hubs, mobile app for SMEs and virtual assistant services; and (vii) launching the PagoFX global platform in at least 4 countries. The milestones for 2021 are: (i)in relation to Pago Nxt Consumer payment platform: implementation of Superdigital platform in seven countries, acquisition of over 1.5 million active customer base and accelerating growth through B2B (business to business) and B2B2C (business to business to customer) partnerships, acquiring more than 50% of the new customers through these channels, which are more cost-effective; (ii)in relation to Digital Consumer Bank: launching online API for checkout lending in the European Union and completion of controllable items for Openbank launch in USA; (iii)in relation to One Santander strategy: implementation in Europe of One Common Mobile Experience and, specifically, implementation of Europe ONE app for individual customers in at least three of the four countries by December 2021; and be among the three-top rated entities in terms of Mobile NetPromoter Score (Mobile NPS) in at least two of the four countries by December 2021; (iv) In relation to cloud adoption: host 75% of migratable virtual machines on cloud technology (either public cloud or OHE) by December 2021. For these purposes, mainframes, physical servers and servers with non-x86 operating systems will be considered non-migratable.	The Digital Incentive is structured 50% in Santander shares and 50% in options over Santander shares, taking into account the fair value of the option at the moment in which they are granted. For Material Risk Takers subject to five years deferrals, the Digital Incentive (shares and options over shares) shall be delivered in thirds, on the third, fourth and fifth anniversary from their granting. For Material Risk Takers subject to three years deferrals and employees not subject to deferrals, delivery shall be done on the third anniversary from their granting. Any delivery of shares, either directly or via exercise of options overs shares, will be subject generally to the Group's general *malus* & *clawback* provisions as described in the Group's remuneration policy and to the continuity of the beneficiary within the Santander Group. In this regard, the board may define specific rules for non-Identified Staff. Vested share options can be exercised until maturity, with all options lapsing after ten years (for granting the 2019 incentive) and eight years (for granting the 2020 and 2021 incentive). The total achievement for 2021 Digital Incentive was 77.5% (85% en 2020 and 83% en 2019).

ii. Fair value

The fair value of the performance share plans was calculated as follows:

– Deferred variable compensation plan linked to multi-year objectives 2019, 2020 and 2021:

The Group calculates at the grant date the fair value of the plan based on the valuation report of an independent expert, Willis Towers Watson. According to the design of the plan for 2019, 2020 and 2021 and the levels of achievement of similar plans in comparable entities, the expert concludes that the reasonable range for estimating the initial achievement ratio is around 60%-80%. It has been considered that the fair value is 70% of the maximum.

43. Other general administrative expenses

a) Breakdown

The detail of Other general administrative expenses in the accompanying income statements for 2021 and 2020 is as follows:

EUR million

	2021	2020
Technology and systems	705	666
Fixtures and supplies	207	258
Other administrative expenses	619	630
Technical reports	180	194
Advertising	88	101
Per diems and travel expenses	16	19
Surveillance and cash courier services	37	42
Communications	9	31
Taxes other than income tax	79	58
Insurance premiums	26	17
Total	**1,966**	**2,016**

b) Technical reports and other

Technical reports includes the fees paid by the various Group companies (detailed in the accompanying appendices) for the services provided by their respective auditors, the detail being as follows:

EUR million

	2021*	2020*
Audit fees	103.7	99.4
Audit-related fees	6.0	6.0
Tax fees	0.7	0.8
All other fees	2.4	1.2
Total	**112.8**	**107.4**

* Of those corresponding to Banco Santander, SA, EUR 30.5 million, EUR 2.3 million, EUR 0 million and EUR 0.5 million, respectively, as of December 31, 2021 (EUR 27.7 million, EUR 2.0 million, EUR 0 million and EUR 0.4 million, respectively, as of December 31, 2020); and Branches of Banco Santander, SA, EUR 2.5 million, EUR 0.1 million, EUR 0 million and EUR 0 million, respectively, as of December 31, 2021 (EUR 2.3 million of 'Audit fees' as of December 31, 2020).

The 'Audit fees' heading includes mainly, audit fees for the Banco Santander, S.A. individual and consolidated financial statements, of the companies forming part of the Group, the integrated audits prepared for the annual report filling in the Form 20-F required by the U.S. Securities and Exchange Commission (SEC) for those entities currently required to do so, the internal control audit (SOx) for those required entities, the limited review of the financial statements and the regulatory reports required by the auditor corresponding to the different locations of Grupo Santander.

The main concepts included in 'Audit-related fees' correspond to aspects such as the issuance of Comfort letters, or other reviews required by different regulations in relation to aspects such as, for example, Securitization.

The services commissioned from the Group's auditors meet the independence requirements stipulated by the Audit Law, the US SEC rules and the Public Company Accounting Oversight Board (PCAOB), applicable to the Group, and they did not involve in any case the performance of any work that is incompatible with the audit function.

Lastly, the Group commissioned services from audit firms other than PwC amounting to EUR 263.8 million in 2021 (EUR 172.4 million in 2020).

The Audit fees and Audit-related fees caption includes the fees corresponding to the audit for the year, regardless of the date on which the audit was completed. In the event of subsequent adjustments, which are not significant in any case, and for purposes of comparison, they are presented in this note in the year to which the audit relates. The rest of the services are presented according to their approval by the Audit Committee.

c) Number of branches

The number of offices at 31 December 2021 and 2020 is as follows:

Number of branches

	Group	
	2021	2020
Spain	1,998	2,989
Group	7,881	8,247
Total	**9,879**	**11,236**

Number of branches

	Of which, Banco Santander	
	2021	2020
Spain	1,916	2,905
International	9	9
Total	**1,925**	**2,914**

44. Impairment or reversal of the impairment of investments in joint ventures and associates

The detail of 'Impairment losses on other assets (net)' in the accompanying income statements for 2021 and 2020 is as follows:

EUR million

	2021	2020
Investments in subsidiaries, joint ventures or associates (note 13)	800	(5,921)
Total	**800**	**(5,921)**

45. Gains or losses on non-financial assets and investments, net

The detail of 'Gains/(losses) on disposal of assets not classified as non-current assets held for sale' in the accompanying income statements for 2021 and 2020 is as follows:

EUR million

	2021	2020
On disposal of tangible assets	4	7
On disposal of investments in subsidiaries, jointly controlled entities and associates	(4)	1,135
Of which (note 13. b. ii)		
Banco Santander Brasil (sale to company de Grupo Santander)	—	*1,127*
Total	**—**	**1,142**

46. Gains or losses on non-current assets held for sale not classified as discontinued operations

The detail of 'Gains/(losses) on non-current assets held for sale not classified as discontinued operations' in the accompanying income statements for 2021 and 2020 is as follows:

EUR million

	2021	2020
Impairment of non-current assets held for sale (note 12)	(70)	(68)
Gain / (loss) on disposal*	20	(9)
Total	**(50)**	**(77)**

* Year 2020: includes the result of extraordinary sales of real estate portfolio.

47. Related parties

The parties related to Banco Santander are deemed to include, in addition to its subsidiaries, associates and jointly controlled entities, Banco Santander's key management personnel (the members of its board of directors and the executive vice presidents, together with their close family members) and the entities over which the key management personnel may exercise significant influence or control.

Following is a detail of the transactions performed by Banco Santander with its related parties at 31 December 2021 and 2020, distinguishing between group entities, joint venture entities and associated entities, members of Banco Santander's board of directors, Banco Santander's executive vice presidents, and other related parties, Related party transactions were made on terms equivalent to those that prevail in arm's-length transactions or, when this was not the case, the related compensation in kind was recognized.

EUR million

	2021			
	Subsidiaries, associates and jointly controlled entities	Members of the board of directors*	Executive vice presidents*	Other related parties*
Assets	**150,489**	**—**	**14**	**20**
Equity instruments	88,997	—	—	—
Debt instruments	14,352	—	—	—
Loans and advances	47,140	—	14	20
From which: impaired financial assets	*270*	—	—	—
Liabilities	**24,498**	**8**	**11**	**193**
Deposits credit institution and clients	24,277	8	11	193
Marketable debt securities	221	—	—	—
Income statement	**6,551**	**—**	**—**	**1**
Interest and similar income	715	—	—	1
Interest expense and similar charges	(80)	—	—	—
Interest from equity instruments	5,072	—	—	—
Gains / (Losses) on financial instruments and other	781	—	—	—
Fee and commission income	86	—	—	—
Fee and commission expense	(23)	—	—	—
Other	**471,034**	**1**	**1**	**62**
Contingent liabilities	6,447	—	—	3
Contingent commitments	5,371	1	1	13
Financial instruments - derivatives	459,216	—	—	46

* Includes transactions carried out with both Banco Santander and with other entities of Grupo Santander.

EUR million

	2020			
	Subsidiaries, associates and jointly controlled entities	Members of the board of directors*	Executive vice presidents*	Other related parties*
Assets	**144,956**	**—**	**24**	**90**
Equity instruments	85,329	—	—	—
Debt instruments	10,803	—	—	—
Loans and advances	48,824	—	24	90
From which: impaired financial assets	*138*	—	—	—
Liabilities	**19,740**	**4**	**16**	**158**
Deposits credit institution and clients	19,123	4	16	158
Marketable debt securities	617	—	—	—
Income statement	**6,555**	**—**	**—**	**3**
Interest and similar income	671	—	—	2
Interest expense and similar charges	(62)	—	—	—
Interest from equity instruments	5,318	—	—	—
Gains / (Losses) on financial instruments and other	7	—	—	—
Fee and commission income	770	—	—	1
Fee and commission expense	(149)	—	—	—
Other	**347,736**	**1**	**1**	**45**
Contingent liabilities	5,521	—	—	3
Contingent commitments	9,070	1	1	13
Financial instruments - derivatives	333,145	—	—	29

* Includes transactions carried out with both Banco Santander and with other entities of Grupo Santander.

Additionally, the above-mentioned breakdown shows pension insurance contracts with Grupo Santander insurance companies amounting to EUR 232 million on December 31 of 2021 (EUR 249 million on December 31 of 2020).

48. Other disclosures

a) Residual maturity periods

The detail, by maturity, of the balances of certain items in the balance sheets as of 31 December 2021 and 2020 is as follows:

EUR million

	31 December 2021						
	On demand	Within 1 month	1 to 3 months	3 to 12 months	1 to 5 years	More than 5 years	Total
Assets:							
Cash, cash balances at central banks and other demand deposits	91,736	—	—	—	—	—	91,736
Financial assets at fair value with changes in other comprehensive income							
Representative values of debt	—	653	600	278	2,278	5,585	9,394
Financial assets at amortised cost							
Representative values of debt	—	236	360	451	6,225	9,936	17,208
Loans and advances							
Central banks	—	25	—	1	—	—	26
Credit institutions	212	15,859	2,048	6,949	7,056	2,960	35,084
Customer	5,701	37,915	17,853	32,304	70,133	122,829	286,735
	97,649	**54,688**	**20,861**	**39,983**	**85,692**	**141,310**	**440,183**
Liabilities:							
Financial liabilities at amortised cost							
Deposits							
Central banks	64	1,215	850	144	62,376	—	64,649
Credit institutions	25,263	1,880	2,052	606	3,469	1,992	35,262
Customer	270,745	4,023	5,251	8,867	5,256	2,101	296,243
Debt securities issued	—	5,323	9,028	8,580	33,145	48,018	104,094
Other financial liabilities	3,370	980	109	3,784	893	888	10,024
	299,442	**13,421**	**17,290**	**21,981**	**105,139**	**52,999**	**510,272**
Difference (assets less liabilities)	**(201,793)**	**41,267**	**3,571**	**18,002**	**(19,447)**	**88,311**	**(70,089)**

EUR million

	2020						
	On demand	Within 1 month	1 to 3 months	3 to 12 months	1 to 5 years	More than 5 years	Total
Assets:							
Cash, cash balances at central banks and other demand deposits	67,561	—	—	—	—	—	67,561
Financial assets at fair value with changes in other comprehensive income							
Representative values of debt	—	50	1,466	234	1,723	11,673	15,146
Financial assets at amortized cost							
Representative values of debt	—	107	122	276	2,366	8,542	11,413
Loans and advances							
Central banks	—	20	—	1	—	—	21
Credit institutions	12,082	2,489	4,233	8,998	5,539	818	34,159
Customer	19,238	10,345	28,981	22,142	79,552	105,169	265,427
	98,881	**13,011**	**34,802**	**31,651**	**89,180**	**126,202**	**393,727**
Liabilities:							
Financial liabilities at amortized cost							
Deposits							
Central banks	42	—	3,368	404	56,558	—	60,372
Credit institutions	25,495	4,863	2,055	2,434	4,930	948	40,725
Customer	247,219	6,740	5,677	9,513	5,611	980	275,740
Debt securities issued	1,401	2,380	4,791	5,865	32,120	41,345	87,902
Other financial liabilities	123	3,453	3,935	472	778	1,119	9,880
	274,280	**17,436**	**19,826**	**18,688**	**99,997**	**44,392**	**474,619**
Difference (assets less liabilities)	**(175,399)**	**(4,425)**	**14,976**	**12,963**	**(10,817)**	**81,810**	**(80,892)**

b) Equivalent euro value of assets and liabilities

The detail of the main foreign currency balances in the balance sheets as of 31 December 2021 and 2020, based on the nature of the related items, is as follows:

Countervalue in EUR million

	2021	2020
Assets	**183,507**	**162,058**
Cash, cash balances at central banks and other deposits on demand	13,775	5,168
Financial assets held for trading	32,947	29,422
Non-trading financial assets mandatorily at fair value through profit or loss	1,279	768
Financial assets designated at fair value through profit or loss	293	11,107
Financial assets at fair value through other comprehensive income	4,785	5,419
Financial assets at amortized cost	90,011	70,802
Hedging derivatives	668	1,116
Changes in the fair value of hedged items in portfolio hedges of interest rate risk	—	—
Investments	39,492	37,215
Tangible assets	16	21
Intangible assets	4	4
Tax assets	99	28
Other assets	138	988
Non-current assets held-for-sale	—	—
Liabilities	**114,567**	**100,734**
Financial liabilities held for trading	23,869	26,178
Financial liabilities designated at fair value through profit or loss	5,888	6,143
Financial liabilities at amortized cost	83,923	67,101
Hedging derivatives	391	362
Changes in the fair value of hedged items in portfolio hedges of interest risk rate	—	—
Provisions	120	88
Tax liabilities	21	—
Refundable equity on demand	—	—
Other liabilities	355	862
Liabilities associated with non-current assets held-for-sale	—	—

c) Fair value of financial assets and liabilities not measured at fair value

Financial assets are measured at fair value in the accompanying balance sheets, except for loans and receivables under a business model whose objective is to collect the flows of principal and interest , equity instruments whose market value cannot be estimated reliably and derivatives that have these instruments as their underlying and are settled by delivery thereof.

Similarly, financial liabilities except for financial liabilities held for trading, those measured at fair value and derivatives having equity instruments whose market value cannot be estimated reliably as their underlying- are measured at amortized cost in the accompanying balance sheets.

The following is a comparison between the value of Grupo Santander's financial instruments valued using other criteria rather than fair value and their corresponding fair value at year-end:

Financial assets and liabilities measured at other than fair value

The fair value of financial instruments measured at amortized cost as of 31 December 2021 was as follows:

a. The fair value of debt securities is 4.98% higher than the carrying amount.

b. The fair value of the loans and advances is 0.36% lower than the carrying amount.

c. The fair value of deposits is 0.19% lower than the carrying amount.

d. The fair value of marketable debt securities is 3.15% greater than the carrying amount.

Set forth below are the main valuation methods and inputs used in the estimates made at 31 December 2021 to determine the fair values of the financial assets and liabilities recognized at cost detailed above:

- Loans and receivables: The fair value has been estimated using the present cost method, the estimation has considered factors such as the expected maturity of the portfolio, market interest rates, spreads of new concession of operations, or market spreads – If these were available.
- Held to maturity portfolio: The fair value has been determined based on market prices for those instruments.
- Financial liabilities at amortized cost:
  a. The fair value of deposits at Central Banks has been assimilated to their carrying amount because they are mainly short-term balances.
  b. Credit Institutions: Fair value has been obtained using the present value technique by applying interest rates and market spreads.
  c. Customer deposits: Fair value has been estimated using the present value technique. The estimation has considered factors such as the expected maturity of the operations and the current financing cost of Grupo Santander in similar operations.
  d. Marketable debt securities: Fair value has been determined based on market prices for these instruments, when available, or using the present value technique, by applying interest rates and market spreads.

Additionally, the fair value of Cash, Cash Balances at central banks and other deposits on demand has been assimilated to its carrying amount, mainly because of short-term balances.

49. Risk management

a) Risk principles and culture

Banco and Grupo Santander's risk principles below are compulsory. They comply with regulatory requirements and are inspired by best market practices:

1. All employees are risk managers who must understand the risks associated with their functions and not assume risks with an impact that exceeds the Group's risk appetite or is unknown.
2. Involvement of senior managers, with consistent risk management and control through their conduct, actions and communications, as well as oversight of the risk culture and make sure Grupo Santander maintain the risk profile within the defined risk appetite.
3. Independent risk management and control functions, according to the three lines of defence model of Grupo Santander.
4. A forward-looking, comprehensive approach to risk management and control for all businesses and risk types.
5. Complete and timely information to identify, assess, manage and disclose risks to the appropriate level.

Banco Santander's holistic control structure stands on these principles and includes strategic tools and processes set out in the risk appetite statement, such as annual planning and budget planning, scenario analysis, the risk reporting structure and risk identification and assessment.

1. Risk factors

Grupo and Banco Santander's risks categorization ensures effective risk management, control and reporting. The risk framework distinguishes these risk types:

- Credit risk relates to financial loss arising from the default or credit quality deterioration of a customer or counterparty, to which Santander has directly provided credit or assumed a contractual obligation.
- Market risk results from changes in interest rates, exchange rates, equities, commodities and other market factors, and from their effect on profit or capital. It includes the structural risk relates to market movements or balance sheets behaviour will change the value or profit generation of assets or liabilities in the banking book.
- Liquidity risk occurs if liquid financial resources are insufficient or too costly to obtain in order to meet liabilities when they fall due.

- Capital risk is the risk that arises from the possibility of having an inadequate quantity or quality of capital to meet internal business objectives, regulatory requirements or market expectations in the area of structural risk.

Grupo and Banco Santander also take into account, on an ongoing basis in its management of the risk function, operational, regulatory compliance, model, reputational and strategic risks.

Besides, environmental and climate-related risk drivers are considered as factors that could impact the existing risks in the medium-to-long-term.

These elements include, on the one hand, those derived from the physical effects of climate change, generated by one-off events as well as by chronic changes in the environment and, on the other hand, those derived from the process of transition to a development model with lower emissions, including legislative, technological or behaviour of economic agents changes.

The analysis of climate change scenarios has continued to advance during 2021 in the Group to try to cover the different casuistry related to the risks of transition to a low-carbon economy and/or the effects derived from the physical risk of possible climatic events in certain geographies where the Group operates.

Grupo Santander continues to make progress in the credit granting process following the EBA guidelines as well as in the development of a more restrictive financing policy, taking special account of the most sensitive sectors/activities, which includes ceasing to provide financial services to medium term to electricity generation customers with more than 10% of revenues dependent on coal and eliminate exposure to coal mining production in the world.

Grupo Santander has scheduled a series of actions to continue integrating climatic and environmental factors in the credit admission process, through i) their incorporation in the assessment processes of local credit committees, ii) their inclusion in the assignment of corporate ratings in the wholesale market (with a future expansion to retail banking) and in the process of setting prices through the entities' own ratings and the specific pricing that already exists for specific products with discount rates based on the fulfillment of various conditions , and iii) the inclusion of energy certificates in the valuation of collaterals.

Additionally, Grupo Santander has increased focus on the impact of climate risk in relation to market, structural and liquidity risk, which arise from the possibility that changes in climate may adversely affect the value of a financial instrument, a portfolio or the Group as a whole. This risk may have an impact both on financial instruments value or portfolios and on Santander's liquidity. Grupo Santander measures this risk through stress scenarios for both market and liquidity risk, which arises from the possibility that climate change may adversely affect the value of a financial instrument, a portfolio or the Group as a whole

2. Risk governance

Grupo and Banco Santander robust risk and compliance governance structure allows us to conduct effective oversight in line with our risk appetite. It stands on three lines of defence, a structure of committees and strong Group-subsidiary relations, guided by our risk culture, Risk Pro.

2.1 Lines of defence

Grupo and Banco Santander's model of three lines of defence effectively manages and controls risks:

First line: formed by businesses and functions that take or originate exposure to risk, it recognizes, measures, controls, monitors and reports on risks according to internal risk management regulation. Risk origination must be consistent with the approved risk appetite and related limits.

- Second line: formed by the Risk and Compliance and Conduct functions, it independently oversees and challenges the first line's risk management. Its duties include ensuring that risks are managed according to the risk appetite defined by senior management and strengthening our risk culture throughout Grupo and Banco Santander.
- Third line: the Internal Audit function, which is independent to ensure the board of directors and senior managers with high-quality and efficient internal controls, governance and risk management systems, helping to safeguard our value, solvency and reputation.

The Risk, Compliance & Conduct and Internal Audit functions are separate and independent. Each has direct access to the board of directors and its committees.

2.2 Risk committee structure

The board of directors is ultimately responsible for risk and compliance management and control. It revises and approves the bank's risk frameworks and appetite, while promoting a strong risk culture across the Group and the Bank. The board relies on its risk supervision, regulation and compliance committee for risk control and on the group's executive committee for risk approval.

The Group chief risk officer (Group CRO), who decides risk strategy and promotes proper risk culture, is in charge of overseeing all risks and challenging and advising business lines on risk management.

The Group chief compliance officer (Group CCO), who decides compliance and conduct strategy, is in charge of controlling the risks within their purview and must provide the Group CRO with a complete overview on the situation of risks being monitored.

Both the Group CRO and the Group CCO have direct access and report to the risk supervision, regulation and compliance committee and the board of directors.

The executive risk, risk control and compliance and conduct committees are executive committees and have been delegated powers by the board.

Furthermore, risk functions have forums and regular meetings to manage and control the risks within their purview. Executive committees also delegate some duties to subordinate forums.

Their responsibilities include:

- Reporting to the Group CRO, the Group CCO, the risk control committee and the compliance and conduct committee on risk management according to risk appetite;
- monitoring and ensuring proper management of each risk factor; and
- overseeing measures to comply with supervisors and auditors' expectations.

Besides, Grupo and Banco Santander, in order to establish an adequate control environment for the management of each risk factors, the Risk and Compliance and Conduct functions have effective internal regulation to create the right environment to manage and control all risks.

Grupo and Banco Santander can also dictate new governance measures for special situations. During the Brexit crisis transition process, it set up separate steering committees and working groups with Santander UK. Also, to cope with the covid-19 crisis, it created special situation forums, in which close coordination with subsidiaries, local contingency plan activation and scenario analysis enhanced allocated resources and governance.

2.3 The Group's relationship with subsidiaries

In all subsidiaries, the risk and compliance management and control model is consistent with the frameworks approved by Grupo Santander's board of directors, which they adhere to through their own boards and can only adapt according to local law and regulation. In its duty to carry out aggregate risk oversight, Grupo Santander validates and challenges subsidiaries' internal regulation and transactions, which results in a common risk management model across the Group.

In 2021, Grupo Santander continued to strengthen the regional subsidiary relations model, based on regions, to find synergies for common operations and platforms building on the global and regional scale; to streamline processes; and to tighten control mechanisms so Grupo Santander's business can grow, allocate capital more efficiently and offer the best service to customers.

In this sense, each local CRO interact regularly with their regional head of risk, the Group CRO and the Group CCO in periodic regional or country control meetings. Local and global Risk and Compliance functions also hold follow-up meetings to address special matters. The Group CRO and the Group CCO and regional heads of risk are involved in appointing, setting of objectives, reviewing and compensating their local counterparts to ensure proper risk management.

Grupo Santander enhances its relations with subsidiaries and its advanced risk management model through:

- Close collaboration between countries in the same region to carry out common initiatives efficiently.
- structural change, subsidiary benchmarks and a strategic vision for the function to implement advanced risk management infrastructures and practices.
- the exchange of best practices to strengthen processes and drive innovation in order to achieve a quantitative impact.
- identification of talent in risk and compliance teams, promoting international mobility through a global risk talent programme and tightening succession plans.

3. Management processes and tools

Grupo and Banco Santander have these effective risk management processes and tools:

3.1 Risk appetite and structure of limits

Risk appetite is the volume and type of risks Grupo and Banco Santander deem prudent for the business strategy, even in unforeseen circumstances. It considers adverse scenarios that could have a negative impact on capital, liquidity and profitability.

The board sets the Group and Bank's risk appetite statement (RAS) every year. Grupo Santander subsidiaries' boards also set their own risk appetites annually. Each of those risk appetites translates into risk management limits and policies based on risk type, portfolio and segment.

3.1.1. Business model and risk appetite fundamentals

Grupo and Banco Santander's risk appetite is consistent with the risk culture and business model built on customer focus, scale and diversification. At the core of Grupo Santander's risk appetite are:

- A medium-low and predictable target risk profile that is centred on retail and commercial banking, internationally diversified operations and strong market share;
- Stable, recurrent earnings and shareholder remuneration, sustained by a sound base of capital, liquidity and sources of funding;

- Independent subsidiaries that manage their own capital and liquidity, with risk profiles that do not compromise Grupo Santander's solvency;
- An independent risk function with involvement by senior management to embed a strong risk culture and drive a sustainable return on capital;
- A global and holistic vision through a meticulous control and monitoring of risks, businesses and markets
- A focus on products Grupo and Banco Santander know well;
- A conduct model that protects Grupo and Banco Santander`s customers; and
- A remuneration policy that aligns employees and executives' interests with risk appetite and long-term results.

3.1.2. Corporate risk appetite principles

The principles that inform Grupo and Banco Santander's risk appetite are:

- The board and senior management's responsibility for risk appetite;
- An enterprise-wide view of risk, back-testing and challenge of risk profile based on quantitative metrics and qualitative indicators;
- A forward-looking view based on plausible assumptions and adverse/stress scenarios to reflect the desired risk profile in the short and medium term;
- Strategic and business plans embedded in daily management by policies and limits;
- Common standards that align each subsidiary's appetite with the Group's; and
- Regular reviews, best practice and regulatory requirements, with mechanisms in place to keep the risk profile stable and mitigate non-compliance.

3.1.3. Structure of limits, monitoring and control

Risk appetite is expressed in qualitative terms and limits, structured on these five core elements.

1	Earnings volatility The maximum loss Grupo Santander can tolerate in an acute -but- plausible stress scenario.
2	Solvency Minimum capital position Grupo Santander can tolerate in a stress scenario. Maximum leverage Grupo Santander can tolerate in a stress scenario.
3	Liquidity Minimum structural liquidity position. Minimum liquidity horizon Grupo Santander can tolerate in peak stress scenario. Minimum liquidity coverage position.
4	Concentration Concentration in single names, industries and portfolios. Concentration in non-investment grade counterparties. Concentration in large exposures.
5	Non-financial risks Maximum operational risk losses. Maximum risk profile. Non-financial risk indicators: Financial crime compliance (FCC) Cyber and security risk Model risk Reputational risk

b) Credit risk

1. Introduction to the credit risk treatment

Credit risk refers to a potential financial loss from the default or credit quality deterioration of a customer or other third party with whom Grupo and Banco Santander have a contractual obligation. It is our most important risk, both in terms of exposure and capital consumption. It also includes counterparty risk, country risk and sovereign risk.

Credit risk management

Grupo and Banco Santander identify, analyse, control and decide on credit risk based on holistic view of the credit risk cycle, which includes the transaction, the customer and the portfolio.

Credit risk identification is key to managing and controlling Grupo and Banco Santander's portfolios effectively. Grupo and Banco Santander classify external and internal risks in each business and adopt corrective and mitigating measures when needed through these processes:

1.1. Planning

Grupo and Banco Santander´s planning helps to set business targets and define specific action plans within our risk appetite framework.

Strategic commercial plans (SCP) are a management and control tool the business and risk areas prepare for Grupo Santander's credit portfolios. They determine commercial strategies, risk policies, resources and infrastructure, ensuring a holistic view of the portfolios. They provide managers with an updated view of credit portfolio quality to measure credit risk, run internal controls over the defined strategy coupled with regular monitoring, detect significant deviations in risk and potential impacts, and take corrective actions when necessary. They also align with Grupo Santander's risk appetite and its subsidiaries' capital targets, and are approved and monitored by senior managers at each subsidiary before being reviewed and validated by Group.

1.2. Risk assessment and credit rating process

To analyse customers' ability to meet contractual obligations, Grupo Santander uses valuation and parameter estimation models in each of the segments. Grupo Santander's credit quality valuation models are based on credit rating drivers, which Grupo Santander monitors to calibrate and adjust the decisions and ratings they assign. Depending on each segment, drivers can be:

- Rating: from mathematical algorithms that have a quantitative model based on balance sheet ratios or macroeconomic variables, and a qualitative module supplemented by the credit analyst's expert judgement. It is used for SCIB, corporate, institutional and SME segments (with individualised treatment).
- Scoring: an automatic system to evaluate credit applications that assigns an individual score to customers for subsequent decision-making, generally in the retail and smaller SME segments.

Grupo and Banco Santander's parameter estimation models follow econometric models built on the Group and the Bank's portfolios' historical defaults and losses. Grupo and Banco Santander uses them to calculate economic and regulatory capital as well as Bank of Spain circular 4/2017provisions for each portfolio.

Grupo and Banco Santander regularly monitoring and evaluate models' appropriateness, predictive capacity, performance, granularity, compliance with policies and other related factors. Grupo and Banco Santander reviews ratings with the latest available financial and economic information. Grupo and Banco Santander has also increased the reviews for customers who are under closer observation or have automatic warnings in the risk management systems.

1.3. Credit risk mitigation techniques

We approve risks generally on the basis of borrowers' ability to pay in fulfilment of financial obligations, notwithstanding any additional collateral or personal guarantees we can require from them. To determine this, we analyse funds or net cash flows from their businesses or income with no guarantors or the assets pledged as collateral. We always consider guarantors and collateral when deciding to approve a loan as a secondary means of recourse if the first channel fails.

In general, a guarantee is as a reinforcement measure added to a credit transaction to mitigate a loss due to a failure to meet a payment obligation.

Grupo and Banco Santander have credit risk mitigation techniques for various types of customer and products. Some are for specific transactions (e.g., property) while others apply to a series of transactions (e.g., derivatives netting and collateral). Grupo and Banco Santander can be grouped into personal guarantees, guarantees in the form of credit derivatives or collateral.

1.4. Definition of limits, pre-classifications and pre-approvals

Grupo and Banco Santander use SCPs to manage credit portfolios, defining limits for each of them and for new originations, in line with the Group´s credit risk appetite and its target risk profile. Transposing the risk appetite to portfolio management strengthens controls over our credit portfolios.

Grupo and Banco Santander's limits, pre-classifications and pre-approvals processes determine the risk we can assume with each customer. Limits are approved by the executive risk committee (or delegated committees) and should reflect a transaction's expected risk-return

Grupo and Banco Santander apply various limits models to each segment:

- Large corporate groups: are subject to a pre-classification model based on a system for measuring and monitoring economic capital. Pre-classification models express the level of risk the Group and the Bank are willing to assume in transactions with customers/groups in terms of capital at risk, nominal cap and maximum tenors. To manage limits with financial entities, Grupo Santander uses Credit Equivalent Risk (CER), which includes actual and expected risks with customers according to risk appetite and credit policies.
- Corporates and institutions: that meet certain requirements (strong relationships, rating, etc.): Grupo and Banco Santander use simpler pre-classification model with an internal limit. It establishes a reference point in a customer's level of risk based on repayment capacity, overall indebtedness and a pool of banks.

  Transactions with large corporates, corporates and institutions above certain limits or with special characteristics could require approval from a senior credit analyst or a committee.
- For individual customers and SMEs with low turnover, Grupo Santander manages large volumes of credit transactions with automatic decision models to classify customers and transactions.

1.5. Scenario analysis

Grupo and Banco Santander´s scenario analyses determine the potential risks in its credit portfolios and provide a better understanding of our portfolios' performance under various macroeconomic conditions.

They allow us to anticipate management strategies that will avoid future deviations from defined plans and targets. They simulate the impact of alternative scenarios in portfolios' credit parameters (PD, LGD) and expected credit losses. We compare findings with portfolios' credit profile indicators to find the right measures for managers to take. Credit risk management of portfolios and SCPs incorporate scenario analyses.

1.6. Monitoring

Regularly monitoring business performance and comparing it to pre-defined plans is key to our management of risk.

Grupo and Banco Santander's holistic monitoring of customers helps detect impacts on risk performance and credit quality early.

Grupo and Banco Santander assign customers a classification with a pre-defined course of action and ad hoc measures to correct any deviations.

Monitoring, which considers transaction forecasts and characteristics, in addition to changes in classification, is performed by local and global risk teams and is based on customer segmentation:

- For SCIB, monitoring is initially a function of business managers and risk analysts which provide an up-to-date view of customers' credit quality to predict a potential customer's deterioration.
- For commercial banking, institutions and SMEs assigned a credit analyst, Grupo and Banco Santander track customers requiring closer monitoring and review their ratings based on relevant indicators.
- Monitoring of individual customers, businesses and smaller SMEs follows a system of automatic alerts to detect shifts in portfolios' performance.

Monitoring uses the Santander Customer Assessment Note (SCAN) tool. Grupo and Banco Santander fully rolled it out in our subsidiaries in 2019. It helps set individual monitoring levels and frequencies, policies, and actions for customers based on credit quality and particular circumstances.

In addition to monitoring customer credit quality, Grupo and Banco Santander define control procedures to analyse portfolios and performance, as well as any deviations from planning or approved alert levels.

1.7. Recovery and collections management

The Collections & Recoveries area carries out recoveries, which are important to risk management. It defines a global, enterprise-wide management strategy with guidelines and general lines of action, based on the economic environment. business model and other local recovery conditions. Recovery management follows regulatory requirements set out in the EBA Guidelines on the management of non-performing and forborne exposures. In addition, Grupo and Banco Santander apply specific policies on recovery management that include the principles of the different strategies.

The Collections & Recoveries areas directly manage customers. As sustained value creation is based on effective and efficient collections, digital channels that develop new customer relations are gaining importance. Grupo and Banco Santander's diverse customer base requires segmentation to manage recoveries appropriately. The highly technological and digital processes Grupo and Banco Santander follow help us attend to large groups of customers with similar profiles and products. Grupo and Banco Santander's personalized management, however, focus on customer profiles that require a special manager and approach.

Grupo and Banco Santander split recovery management into four phases: arrears, credit impaired loans, write-offs and foreclosed assets. Grupo and Banco Santander may use mechanisms to rapidly reduce assets like sales of foreclosed assets or credit impaired loans pool sales. Grupo and Banco Santander constantly seek alternatives to legal action in order to collect debt.

Grupo and Banco Santander include debt instruments as written-off loans (even if they are not past-due) if an individual analysis of the solvency of a transaction and the borrower leads us to believe recovery is remote due to a notorious and unrecoverable impairment. Though this may lead to full or partial cancellation and de-recognition of the gross carrying amount of debt, it does not mean we interrupt negotiations and legal proceedings to recover debt. In countries with high exposure to real estate risk, we have efficient sales management instruments that help maximize recovery and optimize balance sheet stocks.

2. Main aggregates and variations

Following are the main aggregates relating to credit risk from our activities with customers:

Main credit risk performance metrics from activity with customers*

December data

	Credit risk with customers ** (EUR million)		Credit impaired loans (EUR million)		NPL ratio (%)	
	2021	2020	2021	2020	2021	2020
Europe	**636,123**	**606,997**	**19,822**	**20,272**	**3.12**	**3.34**
Spain	221,100	221,341	12,758	13,796	5.77	6.23
UK**	262,869	252,255	3,766	3,138	1.43	1.24
Portugal	41,941	40,693	1,442	1,584	3.44	3.89
Poland	33,497	31,578	1,210	1,496	3.61	4.74
North America	**149,792**	**131,626**	**3,632**	**2,938**	**2.42**	**2.23**
US	112,808	99,135	2,624	2,025	2.33	2.04
Mexico	36,984	32,476	1,009	913	2.73	2.81
South America	**141,874**	**129,590**	**6,387**	**5,688**	**4.50**	**4.39**
Brazil	85,702	74,712	4,182	3,429	4.88	4.59
Chile	41,479	42,826	1,838	2,051	4.43	4.79
Argentina	5,481	4,418	198	93	3.61	2.11
Digital Consumer Bank	**117,049**	**116,381**	**2,490**	**2,525**	**2.13**	**2.17**
Corporate Centre	**6,277**	**4,862**	**903**	**344**	**14.38**	**7.08**
Total Group	**1,051,115**	**989,456**	**33,234**	**31,767**	**3.16**	**3.21**

*Management perimeter according to the reported segments
** Includes gross lending to customers, guarantees and documentary credits

Key figures by geographic region are described below at 31 December 2021:

- Europe: the NPL ratio fell 22 bps to 3.12% from 2020 due to a significant reduction in credit impaired loans in Spain and Poland, offsetting the increase observed in the UK.
- North America: the NPL ratio increased 19 bps to 2.42% from 2020, mainly due to increases at SC USA. NPL stock rose 24% year-on-year.
- South America: the NPL ratio rose 11 bps to 4.50%. comparing to 2020, due to the increase observed in Argentina (+150 bps) and Brazil (+29 bps), offsetting the decrease in Chile (-36 bps).
- Digital Consumer Bank: The NPL ratio decreased 4 bp to 2.13% comparing to 2020, despite the decrease in automobile financing.

Information on the estimation of impairment losses

Estimation of expected credit losses:

The covid-19 health crisis, since its beginning in 2020, was unexpected, unpredictable and severe, but it is estimated to be of a temporary nature. Grupo and Banco Santander's priority in these circumstances has been to look after the health of its employees, customers and shareholders, but also to help reduce the economic impact of the pandemic. This includes trying to offer the best solutions to help customers.

Conceptually, the phases in managing the effects of covid-19 have been:

- Identification of customers or groups affected or potentially affected by the pandemic.
- Early relief of temporary financial difficulties caused by covid-19 through measures promoted by governments, central banks, and financial institutions.
- Monitoring the evolution of customers, to ensure that they continue to be provided with the best solution for their situation, and also to guarantee that their potential impairment is correctly reflected in the risk management and accounting. This point is particularly relevant at the expiry of any moratorium or liquidity support measures to which customers may have availed themselves.
- Monitoring is accompanied by recovery management activities when necessary.

These conceptual phases do not occur sequentially but overlap in time. Additionally, the continuous interaction and coordination between the different local units of the Group proved to be a fundamental asset in the management of this crisis. The experience obtained in the fight against the health crisis and its financial consequences in our different geographies, and the different speeds at which it has been developing in each of them, allow us to share the best practices identified and to implement in an agile and efficient manner those strategies and concrete actions that have been most successful, always adapted to the local reality of each market.

Estimation of expected loss

In the context described above on the measures taken in relation to covid-19, many regulators and supervisors highlighted the uncertainties surrounding the economic impacts of the health crisis. This is also evident in the frequent updates of macroeconomic forecasts, with different perspectives and views on the depth and duration of the crisis. Thus, the general recommendation (including IASB, ESMA, EBA and ECB) was not to mechanistically apply the usual techniques for calculating expected losses under Bank of Spain Circular 4/2017, in order to avoid that this variability of economic conditions would translate into volatility in results, with its potential pro-cyclical effects on the economy.

Thus, Group and Banco Santander analyses losses under IFRS 9 and Bank of Spain Circular 4/2017 on the basis of three types of elements:

1. Continuous monitoring of customers

Monitoring the credit quality of customers could have been more complex in the current circumstances. For such monitoring, and in addition to the application of internal customer monitoring policies, all available information should be used. The availability of information and its relevance is different in the various portfolios of the different countries in which the Group and the Bank operate but it may include, but is not limited to the following:

- The payment of interest in the case of principal-only shortfalls.
- The payment of other operations of the same client in the institution (not subject to moratorium).
- Information on payment of loans in other entities (through credit bureaus).
- Customer financial information: average balances in current accounts, availability/use of limits, etc.
- Available behavioural elements (variables that feed the behavioural scores, etc.).
- Information gathered from customer contacts (surveys, calls, questionnaires, etc.). This may include: customers who have taken up furlough programs, direct government aid, etc.

2. Forward-looking vision

As it was reflected by the IASB, macroeconomic uncertainty makes the usual application of IFRS 9 expected loss calculation models difficult but did not exempt the incorporation of the prospective feature of the standard. To this end, the European Central Bank recommended the use of a stable, long-term view (long-run) of the macroeconomic forecasts, which takes into account in the assessment the multiple support measures explained above.

During 2021, this uncertainty has been reduced as vaccination progressed, hospitalisation rates gradually declined, allowing, in some cases, for the reduction of restriction measures. In parallel, support measures expired while maintaining the good performance of the portfolios.

This implies that once the economic scenarios have been stabilising and converging to their potential growth, these new economic scenarios have been gradually updated in the models by returning to the standard forward-looking calculation.

3. Additional elements

Additional elements will be required when necessary because they have not been captured under the two previous elements. This has included, among others, the analysis of sectors most affected by the pandemic if their impacts are not sufficiently captured by the macroeconomic scenarios. Also collective analysis techniques, when the potential impairment in a group of clients cannot be identified individually.

With the elements indicated above, Grupo and Banco Santander have evaluated the evolution of the credit quality of its customers, for the purposes of their classification in Grupo and Banco Santander financial statements.

In terms of classification, in 2021 Grupo and Banco Santander have maintained the criteria and thresholds for classification applied prior to the start of the pandemic, eliminating regulatory criteria of the effect of moratorium classification as they have expired, as well as the collective analyses associated with these groups of loans.

Regarding moratorium measures, a rigorous identification and periodic monitoring of the credit quality of the clients and their payment behaviour have been carried out and, through a specific individual or collective evaluation, the timely detection of the Significant Increase in Credit Risk (SICR).

As part of governance processes, Grupo Santander issued guideline documents to all subsidiaries to ensure consistent standards and governance in managing the new treatment and particular impacts on pandemic-related provisions. The guidelines included instructions on how to calculate the macroeconomic impact of the crisis using overlay and potential collective assessments

that considered impairment caused by covid-19. Those documents also include a monitoring guide to ensure the appropriateness of special insolvency fund adjustments for covid-19-related situations and anticipate any other necessary adjustment

Regarding moratoria measures, a rigorous identification and regular monitoring of customer credit quality and payment behavior have been performed and through specific individual or collective assessment, the timely detection of SICR have been assured.

Details of the exposure by stage can be found in notes 6, 7 and 10, as well as in this note of these annual accounts.

Grupo and Banco Santander estimate the impairment losses by calculating the expected loss at 12 months or for the entire life of the transaction, based on the stage in which each financial asset is classified in accordance with IFRS 9 and Bank of Spain Circular 4/2017, respectively.

Then, considering the most relevant units of the Group (United Kingdom, Spain, United States, Brazil, also Chile, Mexico, Portugal, Poland, Argentina and Santander Consumer Finance), which represent approximately 96% of the total Group's provisions. The table below shows the impairment losses associated with each stage as of 31 December 2021 and 2020. In addition, depending on the transactions credit quality, the exposure is divided into three categories according to Standard & Poor's rating scale:

Exposure and impairment losses by stage

EUR million

	2021			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	565,443	13,798	—	579,241
From BB- to CCC	237,525	56,170	—	293,695
Default	—	—	30,711	30,711
Total exposure **	**802,968**	**69,968**	**30,711**	**903,647**
Impairment losses***	**4,149**	**5,103**	**12,873**	**22,125**

Exposure and impairment losses by stage

EUR million

	2020			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	489,518	9,124	—	498,642
From BB- to CCC	276,516	55,838	—	332,354
Default	—	—	30,436	30,436
Total exposure **	**766,034**	**64,962**	**30,436**	**861,432**
Impairment losses***	**4,458**	**5,461**	**13,503**	**23,422**

* Detail of credit quality ratings calculated for Group management purposes.

** Total exposure includes loan balances (drawn amounts) and off balance (letters of credit + guarantees) and excludes REPOs, FV portfolio, trading portfolio and undrawn commitments.

*** Includes provisions for undrawn authorized lines (loan commitments)

The remaining units that form the totality of the Group exposure, contributed EUR 102,631 million in stage 1; EUR 1,870 million in stage 2, and EUR 2,522 million in stage 3 (in 2020 EUR 98,121 million in stage 1; EUR 3,613 million in stage 2, and EUR 1,322 millionn stage 3, and impairment losses of EUR 408 million in stage 1; EUR 322 million for stage 2, and EUR 841 million in stage 3 (in 2020, EUR 180 million, EUR 393 million and EUR 277 million).

The remaining exposure, including all financial instruments not included before, amounts to EUR 349,228 million (EUR 478,093 million in 2020), and it includes all undrawn authorized lines (loan commitments).

As of 31 December 2021, the Group had EUR 420 million net of provisions (EUR 497 million at 31 December 2020) of purchased credit-impaired assets, which relate mainly to the business combinations carried out by the Group.

Regarding the evolution of credit risk provisions, Grupo and Banco Santander, in collaboration with the main geographical areas, monitors them by carrying out sensitivity analyses considering changes in macroeconomic scenarios and main variables that have an impact on the financial assets distribution in the different stages and calculating credit risk provisions.

Additionally, based on consistent macroeconomic scenarios, Grupo and Banco Santander also perform stress tests and sensitivity analysis in a regular basis, such as ICAAP, strategic plans, budgets and recovery and resolution plans. In this sense, a prospective view of the sensitivity of each of the Group's loan portfolio is created in relation to the possible deviation from the base scenario, considering both the macroeconomic developments in different scenarios and the three year evolution of the business. These tests include potentially adverse and favourable scenarios.

The transactions classification into the different Bank of Spain Circular 4/2017 stages is carried out in accordance with the regulation through the risk management policies, which are consistent with the risk management policies defined by the Group. In order to determine the classification in stage 2, the Group assesses whether there has been a significant increase in credit risk (SICR) since the initial recognition of the transactions, considering a series of common principles throughout the Group that guarantee that all financial instruments are subject to this assessment, which considers the particularities of each portfolio and type of product on the basis of various quantitative and qualitative indicators. Furthermore, transactions are subject to the expert judgement of the analysts, who set the thresholds under an effective integration in management. All is implemented according to the approved governance.

The criteria thresholds used by the Group and the Bank are based on a series of principles, and develop a set of techniques. The principles are as follows:

- Universality: all financial instruments subject to a credit rating must be assessed for their possible SICR.
- Proportionality: the definition of the SICR must take into account the particularities of each portfolio.
- Materiality: its implementation must be also consistent with the relevance of each portfolio so as not to incur in unnecessary costs or efforts.
- Holistic vision: the approach selected must be a combination of the most relevant credit risk aspects (e.g. quantitative and qualitative).
- Bank of Spain Circular 4/2017: the approach must take into consideration Bank of Spain Circular 4/2017 (aligned with IFRS 9) characteristics, focusing on a comparison with credit risk at initial recognition, as well as considering forward-looking information.
- Risk management integration: the criteria must be consistent with those metrics considered in the day-to-day risk management.
- Documentation: Appropriate documentation must be prepared.

The techniques are summarised below:

- Stability of stage 2: in the absence of significant changes in the portfolios credit quality, the volume of assets in stage 2 should maintain a certain stability as a whole.
- Economic reasonableness: at transaction level, stage 2 is expected to be a transitional rating for exposures that could eventually move to a deteriorating credit status at some point or stage 3, as well as for exposures that have suffered credit deterioration and whose credit quality is improving.
- Predictive power: it is expected that the SICR definition avoids, as far as possible, direct migrations from stage 1 to stage 3 without having been previously classified in stage 2.
- Time in stage 2: it is expected that the exposures do not remain categorized as stage 2 for an excessive time.

The application of the aforementioned techniques, conclude in the setting of one or several thresholds for each portfolio in each geography. Likewise, these thresholds are subject to a regular review by means of calibration tests, which may entail updating the thresholds types or their values.

Covid-19 credit risk evolution and customer support programmes

In the context of the general response of the Group and the Bank to the covid-19 pandemic, and specifically with the purpose to help the customers from the credit perspective and foster their economic resilience during the crisis, Grupo Santander implemented several actions in addition to those listed above, the following:

- The severity of the pandemic's effects was significantly different depending on the economic sector. Consequently, the Group and the Bank launched a process to identify those that could be more affected in order to focus credit risk management on them.
- Due to the covid-19 crisis, great focus was placed on collections & recoveries readiness across Grupo and Banco Santander to deal with the impact expected on its portfolios once the support measures granted have expired.

Since the start of the pandemic in 2020, at the end of December 2021, Grupo Santander granted a total of EUR 93,112 million in payment moratoria, equivalent to 9.68% of the loan portfolio.

From the total moratoria, 99.8% had expired at 31 December 2021, from which 74.6% were classified in stage 1, 18.7% in stage 2 and 6.7% in stage 3. At December 2020, 79.1% of total moratoria has expired, from which 82.4% classified in stage 1, 14.5% in stage 2 and 3.1% in stage 3.

At the end of December 2021, total lending under government liquidity programmes amounted to EUR 39,879 million. By geography, Spain represent 68% of total exposure granted to these types of programmes, with an average coverage of ICO guarantees of 77%. UK constitutes the 13% of total exposure with an average coverage of 98%.

Quantification of additional provisions for covid-19

In relation to the measures in the insolvency funds, the Group and the Bank set up additional provisions during

2020 based on a collective analysis of vulnerable sectors, and segments affected by the crisis derived from the covid-19 pandemic, as well as an estimate of the additional impairment of the loan and advance portfolio caused by the economic effects of the pandemic, realistically reflecting the structural deterioration of the economy at the date of construction of the estimate. This estimate was made on the basis of the information available at that date, which was affected by the high degree of uncertainty at the time of the estimate, and was aligned with the projections generated by the ECB. This macroeconomic scenario included a balance between short- and long-term forecasts, without being a 'through the cycle' scenario. The convergence of these scenarios with pre-crisis paths was expected to occur in the first quarter of 2022 for most macroeconomic indicators (except for house prices, which were expected to converge in the first quarter of 2023).

Grupo and Banco Santander have continuously and regularly monitored the following aspects during 2021 and 2020: (1) the evolution of the pandemic and the macroeconomic outlook, (2) forecasts from institutions and central banks, and (3) the evolution of portfolios in each of the countries where Grupo Santander is present.

Based on that monitoring, the Group updates and evaluates the adequacy of the macroeconomic scenarios in accordance with the established governance, when reliable and supportable information is available. At the end of 2021, we updated the most recent scenarios to calculate of Bank of Spain Circular 4/2017 and IFRS 9, respectively, provisions by recalibrating and revising the forward-looking information and risk model parameters. Following that process, during 2021 the model update included the macroeconomic scenarios. Out of the EUR 3,105 million at the end of December 2020, EUR 1,235 million overlay remain in additional provisions, motivated by several countries' government relief measures, in particular income support measures in the US, payment holiday extensions for longer periods in Portugal, and from continued volatility in the UK.

3. Details of the management units of Banco Santander, S.A.

Following is the risk information relating to the geography of Grupo España, as well as the Santander Corporate & Investment Banking (SCIB) portfolio, both in terms of exposure and risk allowances.

This information includes sensitivity analysis, consisting on simulations of +/-100 bp in the main macroeconomic variables. A set of specific and complete scenarios is used in each geography, where different shocks that affect both the reference variable as well as the rest of the parameters is simulated. These shocks may be originated by productivity, tax, wages or exchange and interest rates factors. Sensitivity is measured as the average variation on expected loss corresponding to the aforementioned scenarios. Following a conservative approach, the negative movements take into account one additional standard deviation in order to reflect the potential higher variability of losses.

3.1 Santander Spain

Portfolio overview

Santander España's credit risk, excluding intra-group financing operations and foreign branches, amounts to EUR 221,100 million (21% of Grupo Santander's total). It is appropriately diversified among products and customer segments.

Amid economic and credit recovery, as macroeconomic figures improved after the end of the covid-19 lockdowns in 2020, consumer loans (especially mortgages) grew significantly, as the corporate and SME lending remained below 2020 numbers, as we maintained positions with customers in liquidity support programmes (i.e. ICO lines of credit) without having to seek new financing.

Total credit risk decreased -0.1% from December 2020. The ICO loans in Corporate and SME lending amounted to a significant EUR 27,294 (around half of them were extended according to the current regulation).

The credit portfolio's NPL ratio was 5.77%, 46 bp lower than in December 2020. This better overall portfolio performance was driven by customer support programmes; the regularization of several restructured positions; and portfolio sales.

The additional provisions raised to mitigate the potential impacts from the exceptional circumstances of the covid-19 pandemic, increased the NPL coverage ratio to 52% (+5 bp vs. December 2020). On the other hand, the non-performing portfolio declined mainly from loans with the highest expected losses.

The cost of credit reflects the rise in Covid-19 provisions, with slight improvement at the end of 2021 compared to December 2020.

Information on the estimation of impairment losses

The detail of Santander Spain exposure and impairment losses associated with each of the stages at 31 December, 2021 and 2020 is shown below. In addition, the exposure is divided in three tranches of the Standard & Poor's rating scale, according to their current credit quality:

Exposure and impairment losses per stage

EUR million

	2021			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	153,120	908	—	154,028
From BB- to CCC	33,233	14,740	—	47,973
Default	—	—	12,761	12,761
**Total exposure ** **	**186,353**	**15,648**	**12,761**	**214,762**
Impairment losses* **	**422**	**580**	**5,005**	**6,007**

Exposure and impairment losses per stage

EUR million

	2020			
Credit quality *	Stage 1	Stage 2	Stage 3	Total
From AAA to BB	146,992	1,517	—	148,509
From BB- to CCC	40,630	11,541	—	52,171
Default	—	—	13,762	13,762
**Total exposure ** **	**187,622**	**13,058**	**13,762**	**214,442**
Impairment losses* **	**479**	**732**	**5,277**	**6,488**

* Detail of credit quality ratings calculated for Group management purposes.
** Total exposure includes loan balances (drawn amounts) and off-balance (letters of credit + guarantees) and excludes REPOs, FV portfolio, trading portdolio and undrawn commitments
*** Includes provisions for undrawn authorized lines (loan commitments).

The real estate unit in Spain (UAI) was consolidated within Santander Spain in 2019, (this process was completed in 2020). Consequently, in 2021 and 2020 the perimeter is aligned.

From the information detailed above, Banco Santander, S.A. reaches a total gross exposure of EUR 328,748 million in the heading of financial assets at amortized cost (see note 6 and 10) and EUR 111,410 million in loan commitments granted for off-balance sheet exposures (see note 31) Impairment losses amount to EUR 6,903 and EUR 190 million, respectively. (The amount of losses due to impairment of off-balance sheet exposures includes the coverage of financial guarantees and other commitments granted in addition to the aforementioned loan commitments).

The Government support measures taken in Spain in 2020 as response to the covid-19 pandemic have gradually expired and at the end of December 2021 Santander Spain had granted, since the start of the pandemic in 2020, a total amount of EUR 9,819 million moratoriums, equivalent to 4.87% of the loan portfolio.

Of the total moratoriums, 99.6% had expired at 31 December 2021, from which 75.6% was in stage 1, 14.9% in stage 2 and 9.5% in stage 3. At the end of 2020, of the total moratoria, 26.4% had expired, of which 77.2% were in stage 1, 15% in stage 2 and 7.8% in stage 3.

For the estimation of the expected losses, the prospective information is taken into account. Specifically, Santander Spain considers three macroeconomic scenarios, which are updated periodically. The projected evolution for a period of five years of the main macroeconomic indicators used by Santander Spain for estimating expected losses as of 2021, is presented below:

	2022-2026		
Variables	Pessimistic scenario	Base scenario	Optimistic scenario
Interest rate	0.6 %	(0.2)%	(0.2)%
Unemployment rate	18.3 %	13.0 %	11.2 %
Housing price change	1.6 %	2.6 %	3.2 %
GDP growth	1.1 %	2.9 %	3.7 %

Each macroeconomic scenarios is associated with a given weight. As for its allocation, Santander Spain associates the Base scenario with the highest weight, while associating the lower weights to the most extreme scenarios:

	2021	2020
Pessimistic scenario	30 %	30 %
Base scenario	40 %	40 %
Optimistic scenario 1	30 %	30 %

The sensitivity analysis of the main portfolios expected loss to variations of +/-100 bp for the macroeconomic variables used in the construction of the scenarios is as follows:

	Change in Provision		
	Mortgages	Corporates	Others
GDP Growth			
-100 bp	11.9 %	5.4 %	4.9 %
100 bp	(4.9)%	(2.9)%	(2.7)%
Housing price change			
-100 bp	4.1 %	3.2 %	3.3 %
100 bp	(2.5)%	(1.7)%	(1.4)%

With regards to the stage 2 classification determination, the quantitative criteria applied in Santander Spain are based on identifying whether an increase in the PD for the expected lifetime of the transaction when compared to the one at its origination is greater than an absolute threshold. The threshold established is different for each portfolio based on the transactions characteristics, considering that a transaction is above this threshold when the PD for the life of the transaction increases by a certain quantity over the initial recognized PD. The values of these thresholds depend on their calibration, carried out periodically as indicated in the preceding paragraphs, which currently ranges from 25% to 1%, depending on the type of product and estimated sensitivity.

In the case of non-retail portfolios, Santander Spain uses the transaction's rating as a reference for its PD, taking into account its rating at the time of origination and its current rating, setting absolute thresholds for the different rating bands that depend on each portfolio characteristics. A SICR implies changes in the rating value between 0.1 and 4, depending on the portfolio and the estimated sensitivity (from lower to higher credit quality, the rating range goes from 1 to 9.3).

In addition, for each portfolio, a series of specific qualitative criteria are defined indicating that the exposure experienced a significant increase in credit risk, regardless of the evolution of its PD since the time of initial recognition. Santander Spain, among other criteria, considers that an operation presents a significant increase in credit risk when positions have been past due for more than 30 days. These criteria depend on the risk management practices of each portfolio.

Residential mortgage portfolio

Residential mortgages in Spain, including Santander Consumer Finance business, amounted to EUR 62,324 million in 2021 (EUR 59,605 million in 2020), 99.33% of which have a mortgage guarantee (99.35% in 2020).

EUR million

	2021			
	Santander Group Spain		Of Which, Banco Santander, S.A.	
	Gross amount	Of which: impaired	Gross amount	Of which: Non-performing
Home purchase loans to families	62,324	1,860	60,947	1,798
Without mortgage guarantee	*419*	*115*	*418*	*115*
With mortgage guarantee	*61,905*	*1,745*	*60,529*	*1,683*

EUR million

	2020			
	Santander Group Spain		Of Which, Banco Santander, S.A.	
	Gross amount	Of which: impaired	Gross amount	Of which: Non-performing
Home purchase loans to families	59,605	1,850	58,079	1,784
Without mortgage guarantee	*387*	*75*	*387*	*75*
With mortgage guarantee	*59,218*	*1,775*	*57,692*	*1,709*

The mortgage portfolio for the acquisition of homes in Spain is characterised by its medium-low risk profile, which limits expectations of any potential additional impairment:

- Principal is repaid on all mortgages from the start.
- Early repayment is common so the average life of the transaction is well below that of the contract.
- High quality of collateral, concentrated almost exclusively in financing for first homes.
- The average affordability rate stood at 27% (27% in 2020).
- The 89.41% of the portfolio has a LTV below 80% calculated as total risk/latest available house appraisal.

Breakdown of the credit with mortgage guarantee to households for house acquisition, according to the percentage that the total risk represents on the amount of the latest available valuation (loan to value):

EUR million

	2021					
	Loan to value ratio					
	Less than or equal to 40%	More than 40% and less than 60%	More than 60% and less than 80%	More than 80% and less than or equal to 100%	More than 100%	Total
Santander Group						
Gross amount	16,479	19,391	19,479	4,376	2,180	61,905
Of which, impaired	*187*	*240*	*349*	*313*	*656*	*1,745*
Of which, Banco Santander, S.A.						
Gross amount	16,151	19,019	19,236	4,186	1,937	60,529
Of which, impaired	*183*	*230*	*339*	*303*	*628*	*1,683*

Businesses portfolio

Credit risk with SME and corporates amounted to EUR 117,544 million, 3.1% lower than in December 2020, mainly due to the fall in the portfolio of SMEs. This is Santander Spain's main lending segment, accounting for 51% of the total. Most of the portfolio corresponds to customers with an assigned credit analyst to monitor their loans throughout the risk cycle.

The portfolio is broadly diversified and not concentrated by sector of activity. 2021 was a year of stability in the portfolio figures after the significant growth in 2020 due to the liquidity support programmes (ICO), which after the initial grace period have begun to be amortised.

The portfolio's NPL ratio stood at 7.50% in December 2021. Even though total risk decreased, the NPL ratio increased by 8 bp compared to December 2020, due to lower portfolio volume, while the stock of credit impaired loans slightly reduced.

Real estate activity

The Real Estate Unit in Spain (UAI) was consolidated within Santander Spain in 2019 (this process was completed in 2020). The part of the portfolio resulting from the past financial crisis and the new business that is identified as viable should be differentiated. In both cases, Santander has specialized teams that are in charge of their management and risk areas that cover the entire life cycle of these operations.

In recent years the Group and the Bank's strategy has been geared towards reducing these assets. The changes in gross property development loans to customers were as follows:

EUR million

	2021	2020
Balance at beginning of year	2,871	2,939
Foreclosed assets	(1)	(6)
Reductions*	(230)	(24)
Written-off assets	(15)	(38)
Balance at end of year	**2,625**	**2,871**

* Includes portfolio sales, cash recoveries and third-party subrogations and new production.

The NPL ratio of this portfolio ended the year at 6.13% (compared with 6.13% at December 2020 due to the decrease of non-performing assets in the troubled loan portfolio and, in particular, to the sharp reduction in lending in this segment. The table below shows the distribution of the portfolio. The coverage ratio of the real estate doubtful exposure in Spain stands at 30.08% (32.95% in 2020).

EUR million

	2021					
	Santander Group			Of which, Banco Santander, S.A.		
	Gross amount	Excess of gross exposure over maximum recoverable amount	Specific allowance	Gross amount	Excess of gross exposure over maximum recoverable amount	Specific allowance
Financing for construction and property development (including land) (business in Spain)	2,625	380	53	2,641	380	-53
Of which impaired	*133*	*22*	*40*	*133*	*22*	*(40)*
Memorandum items written-off assets	650	—	—	(650)		

Memorandum items: Data from the public balance sheet

EUR million

	2021	
	Carrying amount	
	Santander Group	Of which, Banco Santander, S.A.
Total loans and advances to customers excluding the Public sector (business in Spain) (Book value)	239,328	238,861
Total consolidated assets (Total business) (Book value)	*1,595,835*	*657,950*
Impairment losses and credit risk allowances. Coverage for unimpaired assets (business in Spain)	1,472	1,279

At year-end, the distribution of this portfolio was as follows:

EUR million

	2021	
	Loans: Gross amount	
	Santander Group	Of which, Banco Santander, S.A.
1. Without mortgage guarantee	180	180
2. With mortgage guarantee	2,445	2,461
2.1 Completed buildings	1,412	1,428
2.1.1 Residential	876	892
2.1.2 Other	536	536
2.2 Buildings and other constructions under construction	969	968
2.2.1 Residential	907	906
2.2.2 Other	62	62
2.3 Land	64	65
2.3.1 Developed consolidated land	46	46
2.3.2 Other land	18	19
Total	**2,625**	**2,641**

Policies and strategies in place for the management of these risks

The policies in force for the management of this portfolio are periodically reviewed and approved on a regular basis by Santander's senior management

As has already been disclosed in this section, the Group and the Bank's anticipatory management of these risks enabled it to significantly reduce its exposure, and it has a granular, geographically diversified portfolio in which the financing of second residences accounts for a very small proportion of the total.

Mortgage lending on non-urban land represents a low percentage of mortgage exposure to land, while the remainder relates to land already classified as urban or approved for development.

The significant reduction of exposure in the case of residential financing projects in which the construction work has already been completed was based on various actions. As well as the specialised marketing channels already in existence, campaigns were carried out with the support of specific teams of managers for this function who, in the case of the Santander network, were directly supervised by the recoveries business area. These campaigns, which involved the direct management of the projects with property developers and purchasers, reducing sale prices and adapting the lending conditions to the buyers' needs, enabled loans already in force to be subrogated. These subrogations enable the Group and the Bank to diversify its risk in a business segment that displays a clearly lower non-performing loans ratio.

In the case of construction-phase projects that are experiencing difficulties of any kind, the policy adopted is to ensure completion of the construction work so as to obtain completed buildings that can be sold in the market. To achieve this aim, the projects are analysed on a case-by-case basis in order to adopt the most effective series of measures for each case (structured payments to suppliers to ensure completion of the work, specific schedules for drawing down amounts, etc.).

For the new post-crisis real estate business production, the admission processes are managed by specialized teams that work in direct coordination with the commercial teams, with clearly defined policies and criteria:

- Property developers with a robust solvency profile and a proven track record in the market.
- Medium-high level projects, conducting to contracted demand and significant cities.
- Strict criteria regarding the specific parameters of the transactions: exclusive financing for the construction cost, high percentages of accredited sales, principal residence financing, etc.
- Support of financing of government-subsidised housing, with accredited sales percentages.
- Restricted financing of land purchases dealt with exceptional nature.

In addition to the permanent control performed by its risk monitoring teams, the Group has a specialist technical unit that monitors and controls this portfolio with regard to the stage of completion of construction work, planning compliance and sales control, and validates and controls progress billing payments. The Group has created a set of specific tools for this function. All mortgage distributions, amounts drawn down of any kind, changes made to the grace periods, etc. are authorised on a centralised basis.

Foreclosed properties

At 31 December 2021, the net balance of these assets amounted to EUR 3,591 million gross amount: of EUR 7,364 million; recognised allowance: of EUR 3,773 million, of which EUR 2,729 million related to impairment after the foreclosure date. At 31 December 2020, the net balance of these assets amounted to EUR 3,962 million (gross amount: EUR 7,937 million; recognised allowance: EUR 3,975 million, of which EUR 2,834 million related to impairment after the foreclosure date). At 31 December, 2019, the net balance of these assets amounted to EUR 4,190 million (gross amount: EUR 8,226 million; recognised allowance: EUR 4,036 million, of which EUR 2,812 million related to impairment after the foreclosure date).

The following table shows the detail of the assets foreclosed by the businesses in Spain at the end of 2021:

EUR million

	2021			
	Gross carrying amount	Valuation adjustments	Of which impairment losses on assets since time of foreclosure	Carrying amount
Property assets arising from financing provided to construction and property development companies	6,313	3,376	2,455	2,937
Of which:				
Completed buildings	*1,900*	*799*	*627*	*1,101*
Residential	*470*	*181*	*143*	*289*
Other	*1,430*	*618*	*484*	*812*
Buildings under construction	*112*	*57*	*42*	*55*
Residential	*56*	*26*	*17*	*30*
Other	*56*	*31*	*25*	*25*
Land	*4,301*	*2,520*	*1,786*	*1,781*
Developed land	*1,506*	*805*	*496*	*701*
Other land	*2,795*	*1,715*	*1,290*	*1,080*
Property assets from home purchase mortgage loans to households	838	310	211	528
Other foreclosed property assets	213	87	63	126
Total property assets	**7,364**	**3,773**	**2,729**	**3,591**

The same information in the previous table reference to Banco Santander, S.A. is presented below:

EUR million

	2021			
	Gross carrying amount	Valuation adjustments	Of which impairment losses on assets since time of foreclosure	Carrying amount
Property assets arising from financing provided to construction and property development companies	974	373	290	601
Of which:				
Completed buildings	*917*	*356*	*275*	*561*
Residential	*186*	*64*	*49*	*122*
Other	*731*	*292*	*226*	*439*
Buildings under construction	*—*	*—*	*—*	*—*
Residential	*—*	*—*	*—*	*—*
Other	*—*	*—*	*—*	*—*
Land	*57*	*17*	*15*	*40*
Developed land	*47*	*15*	*13*	*32*
Other land	*10*	*2*	*2*	*8*
Property assets from home purchase mortgage loans to households	773	279	190	494
Other foreclosed property assets	171	68	51	103
Total property assets	**1,918**	**720**	**531**	**1,198**

In addition, the Group has shareholdings in entities holding foreclosed assets amounting to EUR 701 million (mainly Project Quasar Investment 2017, S.L. with EUR 655 million), and equity instruments foreclosed or received in payment of debts amounting to EUR 16 million.

In recent years, the Group and the Bank have considered foreclosure to be a more efficient method for resolving cases of default than legal proceedings. The Group and the Bank initially recognise foreclosed assets at the lower of the carrying amount of the debt (net of provisions) and the fair value of the foreclosed asset (less estimated costs to sell).Subsequent to initial recognition, the assets are measured at the lower of fair value (less costs to sell) and the amount initially recognised.

The fair value of this type of assets is determined by the Group and the Bank's directors based on evidence obtained from qualified valuers or evidence of recent transactions.

The management of real estate assets on the balance sheet is carried out through companies specializing in the sale of real estate that is complemented by the structure of the commercial network. The sale is realised with at prices in accordance with the market situation and the offer of wholesale buyers.

The gross movement in foreclosed properties were as follows (EUR billion):

	2021	2020
Gross additions	0.4	0.5
Disposals	(1.1)	(0.9)
Difference	(0.7)	(0.4)

4. Other credit risk aspects

4.1. Credit risk by activity in the financial markets

This section covers credit risk generated in treasury activities with customers, mainly with credit institutions. Transactions are undertaken through money market financial products with different financial institutions and through counterparty risk products, which serve the Group's customer needs.

According to regulation (EU) n.º 575/2013, counterparty credit risk, which includes derivative instruments, transactions with a repurchase obligation, stock and commodities lending, transactions with deferred repayment and financing of guarantees, arises from the likelihood that a counterparty will default before the final settlement of the transaction's cash flows.

There are two methodologies for measuring this exposure: (i) mark-to-market (MtM) methodology (replacement value of derivatives) plus potential future exposure (add-on); and the Montecarlo simulation to calculate exposures for some countries and products. We also calculate capital at risk and unexpected loss, which is the difference between the economic capital, net of guarantees and recoveries, and expected loss.

After market close, the exposures are recalculated by adjusting transactions to their new time frame, adapting potential future exposure and applying mitigation measures (netting, collateral, etc.) to control exposures directly against the limits approved by senior management. Grupo Santander runs risk control with an integrated system in real time that enables us to know the exposure limit with any counterparty, product and maturity and in any of Santander's subsidiaries at any time.

4.2. Concentration risk

Concentration risk control is a vital part of our management. the Group and the Bank continuously monitor ,the degree of concentration of its credit risk portfolios using various criteria: geographic areas and countries, economic sectors and groups of customers.

The board, via the risk appetite framework, determines the maximum levels of concentration.

In line with these maximum levels and limits, the executive risk committee establishes the risk policies and reviews the appropriate exposure levels for the effective management of the degree of concentration in Santander's credit risk portfolios.

Grupo and Banco Santander must adhere to the regulation on large risks contained in the CRR, according to which the exposure contracted by an entity with a customer or group of associated customers will be considered a large exposure when its value is equal to or greater than 10% of eligible capital.

In addition, in order to limit large exposures, no entity may assume exposures exceeding 25% of its eligible capital with a single customer or group of associated customers, having factored in the credit risk mitigation effect contained in the regulation.

At the end of December, after applying risk mitigation techniques, no group reaches the above-mentioned thresholds.

Regulatory credit exposure with the 20 largest groups within the scope of large risks represented 5% of the outstanding credit risk with customers (lending to customers plus off-balance sheet risks) as of December 2021.The detail, by activity and geographical area of the Group's risk concentration at 31 December 2021 is as follows:

EUR million

	2021				
	Total	Spain	Other EU countries	America	Rest of the world
Central banks and Credit institutions	327,984	93,520	59,499	81,647	93,318
Public sector	149,623	35,258	26,276	82,194	5,895
Of which:					
Central government	*124,807*	*23,188*	*24,525*	*71,639*	*5,455*
Other central government	*24,816*	*12,070*	*1,751*	*10,555*	*440*
Other financial institutions (financial business activity)	120,294	14,228	40,344	35,818	29,904
Non-financial companies and individual entrepeneurs (non-financial business activity) (broken down by purpose)	415,297	121,795	86,183	141,139	66,180
Of which:					
Construction and property development	*21,523*	*3,607*	*3,392*	*7,309*	*7,215*
Civil engineering construction	*5,857*	*2,397*	*2,442*	*847*	*171*
Large companies	*248,955*	*58,030*	*49,343*	*94,496*	*47,086*
SMEs and individual entrepreneurs	*138,962*	*57,761*	*31,006*	*38,487*	*11,708*
Households – other (broken down by purpose)	543,804	88,763	95,458	122,809	236,774
Of which:					
Residential	*353,752*	*63,487*	*35,978*	*40,265*	*214,022*
Consumer loans	*169,897*	*18,078*	*56,879*	*75,837*	*19,103*
Other purposes	*20,155*	*7,198*	*2,601*	*6,707*	*3,649*
Total	**1,557,002**	**353,564**	**307,760**	**463,607**	**432,071**

* For the purposes of this table, the definition of risk includes the following items in the public balance sheet: 'Loans and advances to credit institutions', 'Loans and advances to Central Banks', 'Loans and advances to Customers', 'Debt Instruments', 'Equity Instruments', 'Trading Derivatives', 'Hedging derivatives', 'Investments and financial guarantees given'.

The same information in the previous table referring to Banco Santander, S.A. it is presented below:

EUR million

	2021*				
	Total	Spain	Other EU countries	America	Rest of the world
Central banks and Credit institutions	207,265	110,832	37,237	28,840	30,356
Public sector	29,774	23,332	1,002	2,588	2,852
Of which:					
Central government	*17,743*	*11,441*	*921*	*2,538*	*2,843*
Other central government	*12,031*	*11,891*	*81*	*50*	*9*
Other financial institutions (financial business activity)	158,780	51,116	41,610	39,030	27,024
Non-financial companies and individual entrepreneurs (Non-financial business activity) (broken down by purpose)	207,999	116,044	29,472	25,519	36,964
Of which:					
Construction and property development	*2,418*	*2,401*	*16*	*—*	*1*
Civil engineering construction	*3,683*	*2,094*	*909*	*510*	*170*
Large companies	*142,835*	*56,969*	*27,044*	*23,525*	*35,297*
SMEs and individual entrepreneurs	*59,063*	*54,580*	*1,503*	*1,484*	*1,496*
Households – other (broken down by purpose)	77,853	76,439	352	362	700
Of which:					
Residential	*61,963*	*60,830*	*293*	*227*	*613*
Consumer loans	*8,607*	*8,550*	*5*	*16*	*36*
Other purposes	*7,283*	*7,059*	*54*	*119*	*51*
Total	**681,671**	**377,763**	**109,673**	**96,339**	**97,896**

* For the purposes of this table, the definition of risk includes the following items in the public balance sheet: Loans and advances to credit institutions, Loans and advances to Central Banks, Loans and advances to Customers, Debt Instruments, Equity Instruments, trading Derivatives, Hedging derivatives, Investments and financial guarantees given.

4.3. Sovereign risk and exposure to other public sector entities

Sovereign risk occurs in transactions with a central bank. It includes the regulatory cash reserve, issuer risk with the Treasury (public debt portfolio) and risk from transactions with government institutions whose funding only come from the state's budgetary revenue and not commercial operations.

The historic criteria of the Group can differ from regular EBA stress test standards. Though the EBA does include national, regional and local government institutions, it does not include deposits with central banks, exposures with insurance companies, indirect exposures via guarantees and other instruments.

Grupo Santander´s local sovereign exposure, in currencies other than the official currency of the country of issuance, is not significant (EUR 10,013 million, 2.6% of total sovereign risk) according to our management criteria. Furthermore, exposure to non-local sovereign issuers involving cross-border risk is even less significant (EUR 7,011 million, 1.8% of total sovereign risk).

Sovereign exposure in Latin America is mostly in local currency, and is recognised in the local accounts and concentrated in short- term maturities.

Over the past few years, total exposure to sovereign risk has remained in line with regulatory requirements and our strategy to manage this portfolio.

The shifts observed in the different countries exposure is due to our liquidity management strategy and the hedging of interest and exchange rates risks. Santander's exposure spreads among countries with varied macroeconomic outlooks and dissimilar scenarios in terms of growth, interest and exchange rates.

Our investment strategy for sovereign risk considers country's credit quality to set the maximum exposure limits*:

	2021	2020
AAA	15 %	18 %
AA	32 %	25 %
A	26 %	25 %
BBB	11 %	14 %
Less than BBB	16 %	18 %

*Internal ratings are applied

The exposure in the table below is disclosed following the latest amendments of the regulatory reporting framework carried out by the EBA, which entered into force in 2021:

	2021					2020
	Portfolio					
Country	Financial assets designated at fair value through profit or loss	Financial assets at fair value through other comprehensive income	Financial assets at amortized cost	Non-trading financial assets mandatorily at fair value through profit or loss	Total net direct exposure	Total net direct exposure
Spain	2,574	2,805	14,178	—	19,557	24,245
Portugal	(20)	2,287	4,277	—	6,544	8,730
Italy	(73)	634	323	—	884	4,015
Greece	—	—	—	—	—	—
Ireland	—	—	9	—	9	—
Rest Eurozone	(233)	1,231	2,631	—	3,629	4,054
UK	(538)	676	228	—	366	(97)
Poland	(15)	10,819	489	—	11,293	10,947
Rest of Europe	—	77	1,291	—	1,368	1,070
US	1,050	13,803	7,616	—	22,469	15,548
Brazil	8,733	16,432	3,394	—	28,559	27,717
Mexico	2,150	10,253	1,106	—	13,509	21,029
Chile	56	1,134	4,881	—	6,071	6,955
Rest of America	94	651	680	—	1,425	958
Rest of the World	2	1,524	1,811	—	3,337	4,752
TOTAL	**13,780**	**62,326**	**42,914**	**—**	**119,020**	**129,923**

5. Forborne loan portfolio

Grupo and Banco Santander's internal forbearance policy acts as a reference for Group's subsidiaries and the Bank's units. It shares the principles of regulations and supervisory expectations. It includes the requirements of the EBA guidelines on management of non performing and forborne exposures.

It defines forbearance as the modification of the payment conditions of a transaction to allow a customer experiencing financial difficulties (current or foreseeable) to fulfil their payment obligations. If forbearance is not allowed, there would be reasonable certainty that the customer would not be able to meet their financial obligations.

In addition, this policy also sets down rigorous criteria for evaluating, classifying and monitoring forbearances to ensure the strictest possible care and diligence in recovering due amounts. Thus, it dictates that we must adapt payment obligations to customers' current circumstances. Our forbearance policy also defines classification criteria to ensure we recognize risks appropriately. They must remain classified as non-performing or in watch-list for a prudential period for reasonable certainty of repayment.

Forbearances may never be used to delay the immediate recognition of losses or hinder the appropriate recognition of risk of default.

A consolidated level, the total volume of forborne portfolio, at the end of December 2021, stood at EUR 36,042 million. After years of decreases due to the positive macroeconomic situation of the group's main geographies, the forborne stock remained practically flat in 2020. The portfolio increased by 24% in 2021, as a result of greater volume of forbearance carried out to attend to the needs of customers facing financial difficulties. In terms of credit quality, 43% of the loans is classified as doubtful, with a coverage ratio of 41%.

The following terms are used with the meanings specified below:

- Refinancing transaction: transaction that is granted or used, for reasons relating to current or foreseeable financial difficulties of the borrower, to repay one or more of the transactions granted to it, or through which the payments on such transactions are brought fully or partially up to date, in order to enable the borrowers of the cancelled or refinanced transactions to repay their debt (principal and interest) because they are unable, or might foreseeably become unable, to comply with the conditions there of in due time and form.
- Restructured transaction: transaction with respect to which, for economic or legal reasons relating to current or foreseeable financial difficulties of the borrower, the financial terms and conditions are modified in order to facilitate the payment of the debt (principal and interest) because the borrower is unable, or might foreseeably become unable, to comply with the aforementioned terms and conditions in due time and form, even if such modification is envisaged in the agreement.

Current refinancing and restructuring balances

Amounts in EUR million, except number of transactions that are in units

	2021													
	Total							Of which, non-performing/Doubtful						
	Without real guarantee		With real guarantee					Without real guarantee		With real guarantee				
					Maximum amount of the actual collateral that can be considered							Maximum amount of the actual collateral that can be considered		
	Number of transactions	Gross amount	Number of transactions	Gross amount	Real estate guarantee	Rest of real guarantees	Impairment of accumulated value or accumulated losses in fair value due to credit risk	Number of transactions	Gross amount	Number of transactions	Gross amount	Real estate guarantee	Rest of real guarantees	Impairment of accumulated value or accumulated losses in fair value due to credit risk
Credit entities	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Public sector	32	18	15	7	2	—	4	7	1	14	5	2	—	4
Other financial institutions and: individual shareholder	1,002	93	720	200	102	79	30	421	51	528	67	54	7	27
Non-financial institutions and individual shareholder	248,375	11,548	47,865	8,915	5,517	1,206	4,367	116,009	4,377	32,263	5,261	3,308	424	3,891
Of which financing for constructions and property development	*8,576*	*113*	*1,321*	*550*	*390*	*40*	*176*	*4,638*	*63*	*849*	*301*	*172*	*34*	*148*
Other warehouses	3,650,507	4,491	451,930	10,771	6,063	3,615	3,860	1,839,629	1,879	162,177	3,898	2,641	434	2,382
Total	**3,899,916**	**16,150**	**500,530**	**19,893**	**11,684**	**4,900**	**8,261**	**1,956,066**	**6,308**	**194,982**	**9,231**	**6,005**	**865**	**6,304**
Financing classified as non-current assets and disposable groups of items that have been classified as held for sale	—	—	—	—	—	—	—	—	—	—	—	—	—	—

The same information in the previous table referring to Banco Santander, S.A. it is presented below:

Amounts in EUR million, except number of transactions that are in units

	2021													
	Total							Of which, non-performing/Doubtful						
	Without real guarantee		With real guarantee					Without real guarantee		With real guarantee				
	Number of transactions	Gross amount	Number of transactions	Gross amount	Maximum amount of the actual collateral that can be considered: Real estate guarantee	Maximum amount of the actual collateral that can be considered: Rest of real guarantees	Impairment of accumulated value or accumulated losses in fair value due to credit risk	Number of transactions	Gross amount	Number of transactions	Gross amount	Maximum amount of the actual collateral that can be considered: Real estate guarantee	Maximum amount of the actual collateral that can be considered: Rest of real guarantees	Impairment of accumulated value or accumulated losses in fair value due to credit risk
Credit entities	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Public sector	24	17	8	4	2	—	1	3	1	7	2	2	—	1
Other financial companies and sole proprietorships (financial business activity)	411	72	150	156	67	72	26	149	36	109	31	26	1	24
Non-financial corporations and sole proprietorships (non-financial business activity)	93,041	8,546	23,508	6,197	4,110	758	2,613	31,926	2,828	18,940	3,810	2,689	227	2,397
Of which, financing for construction and real estate development (including land)	*42*	*3*	*340*	*192*	*159*	*22*	*38*	*39*	*2*	*223*	*110*	*77*	*22*	*34*
Other warehouses	30,917	501	41,846	3,259	2,797	29	811	12,757	269	29,960	2,083	1,714	6	745
Total	**124,393**	**9,136**	**65,512**	**9,616**	**6,976**	**859**	**3,451**	**44,835**	**3,134**	**49,016**	**5,926**	**4,431**	**234**	**3,167**
Financing classified as non-current assets and disposable groups of items that have been classified as held for sale	—	—	—	—	—	—	—	—	—	—	—	—	—	—

In 2021, the amortised cost of financial assets at a consolidated level, whose contractual cash flows were modified during the year when the corresponding loss adjustment was valued at an amount equal to the expected credit losses over the life of the asset amounted to EUR 2,480 million without these modifications having a material impact on the income statement. Also, during 2021, the total of financial assets that have been modified since the initial recognition, and whose correction for expected loss has gone from being valued during the entire life of the asset to the following twelve months, amounts to EUR 1,868 million.

In 2021, the amortised cost of financial assets owned by the Bank whose contractual cash flows were modified during the year when the corresponding loss adjustment was valued at an amount equal to the expected credit losses over the life of the asset amounted to EUR 1,396 million, without these modifications having a material impact on the income statement. Also, during 2021, the total of financial assets owned by the Bank that have been modified since the initial recognition, and whose correction for expected loss has gone from being valued during the entire life of the asset to the following twelve months, amounts to EUR 711 million.

The transactions presented in the foregoing tables were classified at 31 December 2021 by nature, as follows:

- Non-performing: Operations that rest on an inadequate payment scheme will be classified within the non-performing category, regardless they include contract clauses that delay the repayment of the operation throughout regular payments or present amounts written off the balance sheet for being considered irrecoverable.
- Performing: Operations not classifiable as non-performing will be classified within this category. Operations will also be classified as normal if they have been reclassified from the non-performing category for complying with the specific criteria detailed below:

  a) A period of a year must have passed from the refinancing or restructuring date.

  b) The owner must have paid for the accrued amounts of the capital and interests, thus reducing the rearranged capital amount, from the date when the restructuring of refinancing operation was formalised.

  c) The owner must not have any other operation with amounts past due by more than 90 days on the date of the reclassification to the normal risk category.

Attending to the credit attention 57% of the forborne loan transactions are classified as other than non-performing. Particularly noteworthy are the level of existing guarantees (46% of transactions are secured by collateral) and the coverage provided by specific allowances (representing 23% of the total forborne loan portfolio and 41% of the non-performing portfolio).

c) Market risk, structural and liquidity risk

1. Activities subject to market risk and types of market risk

Activities exposed to market risk encompass transactions where risk is assumed as a consequence of potential changes in interest rates, inflation rates, exchange rates, stock prices, credit spreads, commodity prices, volatility and other market factors; the liquidity risk from our products and markets, and the balance-sheet liquidity risk. Therefore, they include trading risks and structural risks.

- Interest rate risk arises from movements in interest rates that reduce the value of a financial instrument, a portfolio or the Group or the Bank. It can affect loans, deposits, debt securities, most assets and liabilities held for trading, and derivatives.
- Inflation rate risk arises from movements in inflation that can reduce the value of a financial instrument, a portfolio or the Group or the Bank. It can affect loans, debt securities and derivatives (e.g. inflation swaps and futures) whose profitability is linked to inflation.
- Exchange rate risk is the possibility of loss because the currency of a long or open position will depreciate against the base currency. It can affect debt in subsidiaries whose local currency is not the euro, as well as loans denominated in a foreign currency.
  - Equity risk is the possibility of loss from open positions in securities if their market price or expected future dividends fall. It affects shares, stock market indices, convertible bonds and derivatives with shares as the underlying asset (put, call, equity swaps, etc.)
- Credit spread risk is the possibility of loss from open positions in fixed-income securities or credit derivatives if their yield curve, or the recovery rate of their issuer or type change. A spread is the yield difference between financial instruments against a benchmark (e.g. the internal rate of return (IRR) of government bonds and interbank interest rates).
- Commodity price risk is the possibility of loss from movements in commodity prices. Grupo and Banco Santander's commodity exposure is minor and stems mainly from commodity derivatives.

- Volatility risk is the possibility of loss caused by movements in interest rates, exchange rates, the stock market, credit spreads and other risk factors affecting portfolio value. It is inherent to all financial instruments whose value considers volatility (especially options contracts).

Derivative contracts (such as options, futures, forwards and swaps) can mitigate market risks partially or fully.

Additionally, other more complex hedging market risks are considered, such as correlation risk, market liquidity risk, prepayment or cancellation risk, and underwriting risk.

Balance sheet liquidity risk (unlike market liquidity risk) is the possibility of loss caused by forced disposal of assets or cash flow imbalance if the bank meets its payment obligations late or at excessive cost. It can cause losses by forced asset sales or impacts on margins due to the mismatch between expected cash inflows and outflows.

Pension and actuarial risks (explained at the end of this section) also depend on market variables.

Grupo and Banco Santander aim to comply with the *Basel Committee's Fundamental Review of the Trading Book* (FRTB) and the EBA's Guidelines on the management of interest rate risk arising from non-trading book activities. The purpose of several projects Grupo Santander runs is to provide risk control managers and teams with the best market risk management tools under the right governance framework for the models Grupo Santander uses for metric reporting; and to comply with regulation on the risks mentioned above.

2. Trading market risk management

Setting market risk limits in a dynamic process according to the risk appetite in the annual limits plan prepared by senior management and extended to all subsidiaries.

The standard methodology for risk management and control in trading, measures the maximum expected loss with a specific level of confidence and time frame. The standard for historical simulation is a confidence level of 99% over one day. We apply statistical adjustments efficiently to incorporate recent developments affecting our levels of risk. Our time frame is two years or at least 520 days from the reference date of the VaR calculation.

The balance sheet items in the Group's consolidated position that are subject to market risk are shown below, distinguishing those positions for which the main risk metric is VaR from those for which risk monitoring is carried out using other metrics:

EUR million

	Balance sheet amount	Main market risk metric		Main risk factor for 'Other' balance
		VaR	Other	
Assets subject to market risk				
Cash, cash balances at central banks and other deposits on demand	210,689		210,689	Interest rate
Financial assets held for trading	116,953	116,953		
Non-trading financial assets mandatorily at fair value through profit or loss	5,536	4,042	1,494	Interest rate, spread
Financial assets designated at fair value through profit or loss	15,957	5,489	10,468	Interest rate, spread
Financial assets designated at fair value through other comprehensive income	108,038	2,453	105,585	Interest rate, spread
Financial assets at amortized cost	1,037,898		1,037,898	Interest rate, spread
Hedging derivatives	4,761		4,761	Interest rate, exchange rate
Changes in the fair value of hedged items in portfolio hedges of interest risk	410		410	Interest rate
Other assets	95,593			
Total assets	**1,595,835**			
Liabilities subject to market risk				
Financial liabilities held for trading	79,469	79,469		
Financial liabilities designated at fair value through profit or loss	32,733	390	32,343	Interest rate, spread
Financial liabilities at amortized cost	1,349,169		1,349,169	Interest rate, spread
Hedging derivatives	5,463		5,463	Interest rate, exchange rate
Changes in the fair value of hedged items in portfolio hedges of interest rate risk	248		248	Interest rate
Other liabilities	31,700			
Total liabilities	**1,498,782**			
Equity	**97,053**			

The following table displays the latest and average VaR values at 99% by risk factor over the last three years. It also shows the minimum and maximum VaR values in 2021 and 97.5% at the end of December 2021:

VaR statistics and expected shortfall by risk factor[A]

EUR million. VaR at 99% and ES at 97.5% with one day time horizon

	2021					2020	
	VaR (99%)				ES (97.5%)	VaR	
	Min	Average	Max	Latest	Latest	Average	Latest
Total Trading	**6.8**	**10.5**	**15.9**	**12.3**	**11.9**	**12.5**	**8.3**
Diversification effect	(6.3)	(12.9)	(26.6)	(13.4)	(15.0)	(13.0)	(11.8)
Interest rate	6.0	9.6	15.3	9.1	9.4	9.2	5.4
Equities	2.2	3.5	7.7	5.1	5.1	4.4	3.1
Exchange rate	1.9	4.2	8.0	5.7	5.6	5.9	6.0
Credit spread	2.6	4.8	8.0	5.1	6.0	5.5	4.5
Commodities	0.4	1.3	3.5	0.7	0.8	0.5	1.1
Total Europe	**6.1**	**9.3**	**16.1**	**9.9**	**9.7**	**10.5**	**8.0**
Diversification effect	(5.2)	(9.3)	(16.9)	(12.6)	(13.1)	(10.7)	(8.9)
Interest rate	5.3	7.7	11.7	7.1	6.7	7.9	6.5
Equities	1.8	3.3	8.3	5.8	5.2	4.3	3.0
Exchange rate	1.6	2.8	5.0	4.5	4.9	3.5	2.9
Credit spread	2.6	4.8	8.0	5.1	6.0	5.5	4.5
Commodities	—	—	—	—	—	—	—
Total North America	**1.6**	**2.5**	**7.4**	**2.7**	**2.8**	**6.6**	**2.9**
Diversification effect	0.2	(0.7)	(2.9)	(0.6)	(0.5)	(2.2)	(1.0)
Interest rate	1.3	2.5	7.0	2.7	2.7	3.4	3.3
Equities	—	0.1	1.5	—	—	0.3	0.1
Exchange rate	0.1	0.6	1.8	0.6	0.6	5.1	0.5
Total South America	**3.3**	**5.9**	**10.5**	**6.3**	**6.4**	**5.6**	**4.5**
Diversification effect	(1.2)	(4.9)	(16.0)	(5.1)	(3.8)	(3.8)	(5.4)
Interest rate	3.0	5.5	12.2	5.8	6.3	5.2	4.1
Equities	0.4	1.2	3.2	1.1	1.0	1.0	0.5
Exchange rate	0.7	2.8	7.6	3.8	2.1	2.7	4.2
Commodities	0.4	1.3	3.5	0.7	0.8	0.5	1.1

A. In South and North America, VaR levels of credit spreads and commodities are not shown separately due to their low or null materiality.

At the end of December, VaR had increased by EUR 4 million higher than at the end of 2020; however, average VaR fell by EUR 2.0 million. Average VaR fell for most risk factors owing to low market volatility throughout the year. By region, average VaR decreased in Europe and especially in North America with lower exchange rate volatility.

By risk factor, VaR has followed a generally stable trend in recent years. For many factors, temporary VaR increases generally owe more to short-term price volatility than to significant changes in positions.

Backtesting

Actual losses can differ from predicted losses because of the VaR's limitations. Grupo Santander measures the accuracy of the VaR calculation model to make sure it is reliable. The most important tests Grupo Santander runs involve backtesting:

- Backtesting of hypothetical P/L and of the entire trading book showed no exceptions to 99% VaR and VaE in 2021.
- The exceptions observed in the past year are consistent with the assumptions of the VaR calculation model.

IBOR Reform

Regulatory and supervisory context

In 2013, IOSCO published the Principles for Financial Benchmarks (IOSCO Principles) that establish standards for the development of benchmarks. Subsequently, the FSB established the Official Sector Steering Group (OSSG) for the application of the IOSCO Principles to the IBOR (Interbank Offered Rates) indices. Since then, the central banks and regulators of various jurisdictions have organized working groups to recommend alternative indices to indices such as the EONIA (Euro Overnight Index Average) and the LIBORs (London Interbank Offered Rates).

On 13 September 2018, the European Central Bank's working group recommended that the euro short-term interest rate (€STR) replace the EONIA. From 2 October 2019, the date on which the €STR was made available, the EONIA changed its methodology to be calculated as €STR plus a spread of 8.5 basis points. This change in the EONIA methodology was intended to facilitate the transition of the EONIA market to €STR before its definitive cessation on 3 January 2022.

On 5 March 2021, the Financial Conduct Authority (FCA) announced the final dates for the cessation of LIBORs:

- On 31 December 2021, the publication of USD LIBOR (1 week and 2 months term), CHF LIBOR (all terms), GBP LIBOR (overnight term, 1 week, 2 months and 12 months), JPY LIBOR (overnight term, 1 week, 2 months, and 12 months) and EUR LIBOR (all terms).
- On 31 December 2021, the calculation methodology of some LIBORs was reformed to publish temporary synthetic LIBORs that became non-representative: GBP LIBOR (1-month, 3-month and 6-month terms) and JPY LIBOR (1-month term, 3 months and 6 months).
- On 30 June 2023, the publication of the USD LIBOR will cease (overnight terms, 1 month, 3 months, 6 months and 12 months).

In October 2020, the International Swaps and Derivatives Association (ISDA) launched the fallbacks Protocol and Supplement for IBORs (effective 25 January 2021), and provided market participants with of new derivatives fallbacks of LIBORs (among others IBOR, such as EURIBOR) for current derivative contracts and for new contracts. Additionally, on 19 August 2021, ISDA launched a new protocol that allowed entities to incorporate a fallback to the EONIA as the rate applicable to collateral in ISDA collateral agreements (known as CSAs). Banco Santander SA and various Santander Group entities have adhered to these protocols.

On December 2020, the Council of the European Union endorsed the modification of the EU Benchmark Regulation (BMR), giving the European Commission the power to establish a legislative solution that proposes a replacement rate to indices the cessation of which could cause a significant disturbance to the functioning of financial markets in the EU. In this context, on 14 and 21 October 2021, the European Commission published the Implementing Regulations regarding the designation of a substitute reference index for CHF LIBOR and EONIA.

Given the relevance of the IBOR indices, the volume of contracts and exposures is very high in the banking sector. Santander Group has a significant number of contracts linked to these interest rates. The most relevant are EURIBOR, EONIA, and LIBOR. These benchmarks are widely used, including derivative products, corporate loans, retail, discount products, deposits, repos, securities lending, collateral agreements, and floating rate notes, among others.

LIBOR and EONIA Reform

The main risks to which Santander is exposed arising from the transition of the EONIA and LIBORs are: (i) legal risks arising from potential changes in the documentation required for new or existing operations; (ii) financial and accounting risks derived from market risk models and from the valuation, coverage, cancellation and recognition of the financial instruments associated with the reference indices; (iii) business risk that revenues from LIBOR-linked products decline; (iv) pricing risks arising from how changes to benchmark indices could impact pricing mechanisms on some instruments; (v) operational risks arising from the potential requirement to adapt IT systems, trade reporting infrastructure and operational processes; (vi) conduct risks arising from the potential impact of communications with customers during the transition period and (vii) litigation risks regarding our existing products and services, which could adversely impact our profitability.

In order to monitor the risks and address the challenges of the transition, Santander launched the IBOR Transition Programme in 2019. The global program ensures that all affected business units and subsidiaries have a consistent understanding of the risks associated with the transition and can take appropriate steps to mitigate them.

This transition program incorporates the recommendations, guidelines and milestones defined by the regulators and working groups of the different jurisdictions. The structure of the program focuses on the following areas: Technology and Operations, Legal, Customer Relations, Risk Management and Models, Conduct and Communication, and Accounting and Finance.

During 2021, the IBOR Transition Program has focused on making all the contractual, commercial, operational and technological changes necessary to undertake the transition of the LIBOR and EONIA rates that have been discontinued in 2021. In 2022, the program will continue to attend to the next steps of the transition related to the management of the contract history and the milestone of the cessation of the LIBOR dollar of June 2023.

In addition, Grupo and Banco Santander continue to participate, throughout 2022, in the initiatives developed by the public and private sectors related to the reform of the interest rate reference indices.

Additionally, see information included in notes 1.b and 32.

3. Structural balance sheet risks

3.1. Main aggregates and variations

Consistent with previous years, the market risk profile of Grupo and Banco Santander's balance sheet remained moderate in 2021 in terms of asset, shareholders' equity and NII volumes.

To measure interest rate risk, Grupo Santander uses statistical models based on strategies to mitigate structural risk with interest-rate instruments (such as bonds and derivatives) to keep risk profile within risk appetite.

The NII and EVE sensitivities below are based on scenarios of parallel interest rate movements from -100 to +100 basis points.

Structural VaR

With such a homogeneous metric as VaR, we can fully monitor market risk in the banking book We differentiate fixed income based on interest rates and credit spreads in ALCO portfolios, FX rates and shares.

In general, the structural VaR of Grupo and Banco Santander total assets and equity is minor.

Structural VaR

EUR million. Structural VaR 99% with a temporary horizon of one day.

	2021				2020		2019	
	Min	Average	Max	Latest	Average	Latest	Average	Latest
Structural VaR	**895.8**	**993.7**	**1,090.7**	**1,011.9**	**911.1**	**903.2**	**511.4**	**729.2**
Diversification effect	(158.8)	(327.3)	(431.4)	(240.2)	(349.8)	(263.4)	(304.2)	(402.0)
VaR Interest Rate*	224.2	400.7	540.5	287.8	465.1	345.5	345.6	629.7
VaR Exchange Rate	521.3	600.6	655.2	655.2	499.9	502.6	308.1	331.7
VaR Equities	309.1	319.7	326.4	309.1	295.9	318.5	161.9	169.8

* Includes credit spread VaR on ALCO portfolios.

Structural interest rate risk

– Europe

In general, the NII and EVE of Grupo Santander's main balance sheets (i.e. Santander España and Santander UK) show positive sensitivity to rising interest rates. Across our footprint, exposure was moderate in relation to annual budget and capital levels in 2021.

At the end of December 2021, under the scenarios previously described, the most significant NII sensitivity risk concentration in euros amounted to EUR 703 million; in pounds sterling, EUR 541 million; in Polish złoty EUR 65 million; and in the US dollar, EUR 54 million.

The most significant EVE risk concentration amounted to EUR 3,684 million; in the yield curve of the euro; of the pound sterling, EUR 1,056 million ; of the US dollar, EUR 221 million; and of the Polish zloty EUR 56 million, all relating to the interest rate cut risks.

– North America

In general, the NII and EVE of Grupo Santander's North American balance sheets tend to show positive sensitivity to rising interest rates. Exposure was moderate in relation to annual budget and capital levels in 2021.

At the end of December, the most significant risk to NII was mainly in the US and amounted to EUR 152 million.

– South America

The EVE and NII of our Grupo Santander's South American balance sheets are positioned for interest rate cuts.

Exposure in all countries was moderate in relation to the annual budget and capital levels in 2020.

In 2021, exposure was moderate in relation to annual budget and capital levels. At the end of December, the most significant risks to NII were mainly in Chile (EUR 86 million) and Brazil (EUR 83 million).

The most significant risks to EVE were recorded in Brazil (EUR 271 million) and Chile (EUR 258 million).

Structural foreign currency rate risk/results hedging

Grupo Santander's structural FX risk stems mainly from the income and hedging of foreign currency transactions for permanent financial investments. In the dynamic management of this risk, Grupo Santander aims to limit the impact of FX rate movements on the core capital ratio. In 2021, the hedged of the different currencies that have an impact on our core capital ratio was close to 100%.

In December 2021, the permanent exposures (with potential impact on shareholders' equity) were, from largest to smallest, in US dollars, British pounds sterling, Brazilian *reais*, Mexican pesos, Chilean *pesos* and Polish złoty.

Grupo Santander uses FX derivatives to hedge part of those permanent positions. The Finance division manages FX risk and hedging for the expected profits and dividends of subsidiaries whose base currency is not the euro.

Structural equity risk

Grupo Santander holds equity positions in its banking and trading books. They are either equity instruments or stock, depending on the share of ownership or control.

By the end of December 2021, the equities and shareholdings in the banking book were diversified among Spain, China, Morocco, Poland and other countries. Most of them invest in the financial and insurance sectors. Grupo Santander has minor equity exposure to property and other sectors.

Structural equity positions are exposed to market risk. VaR is calculated for these positions with a set of market prices and proxies. At the end of December 2021, VaR at a 99% confidence level over a one day horizon was EUR 325 million (EUR 319 million at the end of 2020).

3.2. Methodologies

Structural interest rate risk

As part of structural risk, interest rate risk in the banking book (IRRBB) is the main source of balance sheet risk.

Grupo Santander measures the potential impact of interest rate movements on EVE and NII. Because changing rates may generate impacts, Grupo Santander must manage and control many subtypes of interest rate risk, such as repricing risk, curve risk, basis risk and option risk (e.g. behavioural or automatic). Interest rate risk in the balance sheet and market conditions and outlooks could necessitate certain financial measures to achieve Grupo Santander's desired risk profile (such as selling positions or setting interest rates on products we market). The metrics Grupo Santander uses to monitor IRRBB include NII and EVE sensitivity to interest rate movements.

• Net interest income sensitivity

Net interest income (NII) is the difference between interest income from assets and the interest cost of liabilities in the banking book over a typical one- to three-year horizon (one year being standard in Grupo Santander). Because NII sensitivity is the difference in income between a selected scenario and the base scenario, its values can be as many as considered scenarios. It enables us to see short-term risks and supplement economic value of equity (EVE) sensitivity.

• Economic value of equity sensitivity

Economic value of equity (EVE) is the difference between the current value of all assets minus the current value of all liabilities in the banking book. It does not include shareholders' equity and non-interest-bearing instruments. Because EVE sensitivity is the difference in EVE between a selected scenario and the base scenario, it can have as many values as considered scenarios. It enables us to see long-term risks and supplement NII sensitivity.

Structural exchange-rate risk/hedging of results

Every day, Grupo Santander measures FX positions, VaR and P/L.

Structural equity risk

Grupo Santander measures equity positions, VaR and P/L.

4. Liquidity risk

Structural liquidity management aims to fund the Group and the Bank's recurring activity optimising maturities and costs, while avoiding taking on undesired liquidity risks.

Group and Banco Santander's liquidity management is based on the following principles:

- Decentralised liquidity model.
- Medium- and long-term (M/LT) funding needs must be covered by medium- and long-term instruments.
- High contribution from customer deposits due to the retail nature of the balance sheet.
- Diversification of wholesale funding sources by instruments/ investors, markets/currencies and maturities.
- Limited recourse to short-term funding.
- Availability of sufficient liquidity reserves, including standing facilities/discount windows at central banks to be used in adverse situations.
- Compliance with regulatory liquidity requirements both at Group and subsidiary level, as a new factor conditioning management.

The effective application of these principles by all institutions comprising the Group required the development of a unique management framework built upon three fundamental pillars:

- A solid organisational and governance model that ensures the involvement of the subsidiaries' senior management in decision-taking and its integration into the Group's global strategy. The decision-making process for all structural risks, including liquidity and funding risk, is carried out by local Asset and Liability Committees (ALCOs) in coordination with the global ALCO, which is the body empowered by the Bank's board in accordance with the corporate Asset and Liability Management (ALM) framework.

  This governance model has been reinforced as it has been included within Santander's Risk Appetite Framework. This framework meets demands from regulators and market players emanating from the financial crisis to strengthen banks' risk management and control systems.

- In-depth balance sheet analysis and measurement of liquidity risk, supporting decision-taking and its control. The objective is to ensure the Group and the Bank maintain adequate liquidity levels necessary to cover its short- and long-term needs with stable funding sources, optimising the impact of their costs on the income statement. Grupo and Banco Santander's liquidity risk management processes are contained within a conservative risk appetite framework established in each geographic area in accordance with its commercial strategy. This risk appetite establishes the limits within which the subsidiaries and, therefore, the Bank can operate in order to achieve their strategic objectives.

- Management adapted in practice to the liquidity needs of each business. Every year, based on business needs, a liquidity plan is developed which seeks to achieve:

  – a solid balance sheet structure, with a diversified presence in the wholesale markets;

  – the use of liquidity buffers and limited encumbrance of assets;

  – compliance with both regulatory metrics and other metrics included in each entity's risk appetite statement.

Over the course of the year, all dimensions of the plan are monitored.

Grupo Santander continues to develop the ILAAP (Internal Liquidity Adequacy Assessment Process), an internal self-assessment of liquidity adequacy which must be integrated into the Group's other risk management and strategic processes. It focuses on both quantitative and qualitative matters and is used as an input to the SREP (Supervisory Review and Evaluation Process). The ILAAP evaluates the liquidity position both in ordinary and stressed scenarios.

i. Liquidity risk measurement

Grupo Santander measures liquidity risk with tools and metrics that account for the appropriate risk factors

a) Liquidity buffer

The liquidity buffer is the total liquid assets a bank has to cope with cash outflows during periods of stress. The assets are free of encumbrances and can be used immediately to generate liquidity without losses or excessive discounts. The liquidity buffer is a tool for calculating most liquidity metrics. It is also a metric with defined limits for each subsidiary.

b) Liquidity Coverage Ratio (LCR)

The liquidity coverage ratio (LCR) is a regulatory metric. Its purpose is to promote the short-term resilience of a bank's liquidity profile and make sure it has enough high-quality liquid assets to withstand a considerable idiosyncratic or market stress scenario over 30 calendar days.

c) Wholesale liquidity metric

The wholesale liquidity metric measures the number of days Grupo and Banco Santander would survive if it used liquid assets to cover lost liquidity from a wholesale deposit run-off (without possible renewal) over a set time horizon.Grupo and Banco Santander also uses it as an internal short-term liquidity metric to reduce risk from dependence on wholesale funding.

d) Net Stable Funding Ratio (NSFR)

The net stable funding ratio (NSFR) is a regulatory metric we use to measure long-term liquidity risk. It is the ratio of available stable funding to required stable funding. It requires banks to keep a robust balance sheet, with off-balance-sheet assets and operations financed by stable liabilities.

e) Asset Encumbrance metrics

Grupo and Banco Santander calculate two metrics to measure asset encumbrance risk. On the one hand, the asset encumbrance ratio gives the proportion of encumbered assets to total assets; on the other, the structural asset encumbrance ratio gives the proportion of encumbered assets by structural funding transaction (namely long-term collateralized issues and credit transactions with central banks).

f) Other additional liquidity indicators

In addition to traditional tools to measure short and long-term liquidity and funding risk, Grupo and Banco Santander have a set of additional liquidity indicators to complement those and to measure other non-covered liquidity risk factors. These include concentration metrics, such as the main and the five largest funding counterparties, or the distribution of funding by maturity.

In addition, we calculate a number of metrics on the institution's ability to generate liquidity through collateralized financing, such as overcollateralization, eligibility ratios assets without charges and deadlines for their placement.

g) Liquidity scenario analysis

As liquidity stress tests, four standard scenarios have been defined:

i. An idiosyncratic scenario of events detrimental only to the Group;

ii. a local market scenario of events highly detrimental to a base country's financial system or real economy;

iii. a global market scenario of events highly detrimental to the global financial system; and

iv. combined scenario consisting of a combination of more severe idiosyncratic and market events (local and global) occurring simultaneously and interactively.

Grupo and Banco Santander use these stress test outcomes as tools to determine risk appetite and support business decision-making.

h) Liquidity early warning indicators

The system of early warning indicators (EWI) consists of quantitative and qualitative liquidity indicators that help predict stress situations and weaknesses in the funding and liquidity structure of Grupo Santander entities. External indicators relate to market-based financial variables; internal indicators relate to our own performance.

i) Intraday liquidity metrics

Grupo Santander follows Basel regulation and calculates several metrics and stress scenarios for intraday liquidity risk to maintain a high level of control.

ii. Liquidity coverage ratio and net stable financing ratio

As regards the liquidity coverage ratio (LCR), the regulatory requirement for this ratio, set at 100%, has been at its maximum level since 2018.

Below is a breakdown of the composition of the Group's liquid assets under the criteria set out in the supervisory prudential reporting (Commission Implementing Regulation (EU) 2017/2114 of 9 November 2017) for the determination of high quality liquid assets for the calculation of the LCR ratio (HQLA):

EUR million

	2021	2020
	Amount weighted applicable	Amount weighted applicable
High-quality liquid assets-HQLAs		
Cash and reserves available at central banks	*206,507*	*149,893*
Marketable assets Level 1	*81,925*	*104,270*
Marketable assets Level 2A	*3,422*	*5,272*
Marketable assets Level 2B	*5,446*	*4,200*
Total high-quality liquid assets	**297,300**	**263,635**

In relation to the net stable funding ratio (NSFR), its definition was approved by the Basel Committee in October 2014. The transposition of this requirement to the European regulation took place in June 2019 with the publication in the Official Gazette of the European Union of Regulation (EU) 2019/876 of the European Parliament and of the Council of May 20, 2019. The Regulation establishes that entities must have a net stable financing ratio, as defined in the Regulation, higher 100% from June 2021. For this reason, the figures for 2019 and 2020 for this ratio are calculated using the Basel methodology, while those for 2021 already include the requirement as transposed into European regulations.

The liquidity coverage ratio, broken down by component, and the net stable funding ratio for the Group at year-end 2021 and and 2020 are presented below:

EUR million

	2021	2020
High-quality liquid assets-HQLAs (numerator)	297,300	263,635
Total net cash outflows (denominator)	181,953	157,368
Cash outflows	233,294	204,813
Cash inflows	51,341	47,445
LCR ratio (%)	**163%**	**168%**
NSFR ratio (%)	**126%**	**120%**

As regards the funding structure, given the predominantly commercial nature of the Group's balance sheet, the loan portfolio is mainly financed by customer deposits. Note 22 of the consolidated annual accounts and Note 20 of the individual accounts, under the name, Debt securities' shows the composition of these liabilities on the basis of their nature and classification, the movements and maturity profile of the debt securities issued by the Group, reflecting the strategy of diversification by products, markets, issuers and maturities followed by the Group in its approach to the wholesale markets.

iii. Asset encumbrance

In accordance with the guidelines established by the European Banking Authority (EBA) in 2014 on committed and uncommitted assets, the concept of assets committed in financing transactions (asset encumbrance) includes both on-balance sheet assets provided as collateral in transactions to obtain liquidity and off-balance sheet assets that have been received and reused for similar purposes, as well as other assets associated with liabilities for reasons other than financing.

The residual maturities of the liabilities associated with the assets and guarantees received and committed are presented below, as of 31 of December of 2021 (EUR thousand million):

Residual maturities of the liabilities	Unmatured	<=1month	>1 month <=3 months	>3 months <=12 months	>1 year <=2 years	>2 years <=3 years	3 years <=5 years	5 years <=10 years	>10 years	Total
Committed assets	39.5	32.7	8.2	29.6	106.8	37.1	80.1	20.7	10.4	365.1
Guarantees received committed	24.2	15.3	12.8	25.8	1.9	0.4	0.4	—	—	80.8

The reported Group information as required by the EBA at 2020 year-end is as follows:

On-balance-sheet encumbered assets

EUR billion

	Carrying amount of encumbered assets	Fair value of encumbered assets	Fair value of non-encumbered assets	Carrying amount of non-encumbered assets
Loans and advances	262.8		984.4	
Equity instruments	8.4	8.4	13.1	13.1
Debt securities	61.0	61.1	102.9	102.8
Other assets	32.9		130.3	
Total assets	**365.1**		**1,230.7**	

Encumbrance of collateral received

EUR billion

	Fair value of encumbered collateral received or own debt securities issued	Fair value of collateral received or own debt securities issued available for encumbrance
Collateral received	**80.8**	**31.5**
Loans and advances	1.2	—
Equity instruments	5.4	7.0
Debt securities	74.2	24.5
Other collateral received	—	—
Own debt securities issued other than own covered bonds or ABSs	**—**	**0.6**

Encumbered assets and collateral received and matching liabilities

EUR billion

	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
Total sources of encumbrance (carrying amount)	325.2	445.9

On-balance-sheet encumbered assets amounted to EUR 365,100 million, of which 72% are loans (mortgage loans, corporate loans, etc.). Guarantees received committed amounted to EUR 80,800 million, relating mostly to debt securities received as security in asset purchase transactions and re-used.

Taken together, these two categories represent a total of EUR 445,900 million of encumbered assets, which give rise to EUR 325,200 million matching liabilities.

As of December 2021, total asset encumbrance in funding operations represented 26.1% of the Group's extended balance sheet under EBA criteria (total assets plus guarantees received: EUR 1,708,000 million as of December 2021). This percentage has decreased from 26.6% that presented the Group as of December 2020, mainly as a result of the increase in the balance sheet.

d) Capital risk

In the second line of defence, capital risk management can independently challenge business and first-line activities by:

- Supervising capital planning and adequacy exercises through a review of the main components affecting the capital ratios.
- Identifying key metrics to calculate the Group's regulatory capital, setting tolerance levels and analysing significant variations, as well as single transactions with impact on capital.
- Reviewing and challenging the execution of capital actions proposed in line with capital planning and risk appetite.

Grupo Santander commands a sound solvency position, above the levels required by regulators and by the European Central bank.

Regulatory capital

At 1 January 2022, at a consolidated level, the Group must maintain a minimum capital ratio of 8.85% of CET1 (4.50% being the requirement for Pillar I, 0.84% being the requirement for Pillar 2R (requirement), 2.50% being the requirement for capital conservation buffer, 1.00% being the requirement for G-SIB and 0.01% being the requirement for anti-cyclical capital buffer).

Grupo Santander must also maintain a minimum capital ratio of 10.64% of tier 1 and a minimum total ratio of 13.01%.

In 2021, the solvency target set was achieved. Santander's CET1 ratio stood at 12.51%[3] at the close of the year, demonstrating its organic capacity to generate capital. The key regulatory capital figures are indicated below:

Reconciliation of accounting capital with regulatory capital

EUR million

	2021	2020
Subscribed capital	8,670	8,670
Share premium account	47,979	52,013
Reserves	56,606	62,777
Treasury shares	(894)	(69)
Attributable profit	8,124	(8,771)
Approved dividend***	(836)	—
Shareholders' equity on public balance sheet	**119,649**	**114,620**
Valuation adjustments	(32,719)	(33,144)
Non-controlling interests	10,123	9,846
Total Equity on public balance sheet	**97,053**	**91,322**
Goodwill and intangible assets	(16,132)	(15,711)
Eligible preference shares and participating securities	10,050	9,102
Accrued dividend***	(895)	(478)
Other adjustments*	(7,624)	(5,734)
Tier 1**	**82,452**	**78,501**

*Fundamentally for non-computable non-controlling interests and deductions and reasonable filters in compliance with CRR.
**Figures calculated by applying the transitional provisions of IFRS 9.
***Assumes 20% of ordinary profit, see note 4.a for proposed distribution of results.

The following table shows the capital coefficients and a detail of the eligible internal resources of the Group:

	2021	2020
Capital coefficients		
Level 1 ordinary eligible capital (EUR million)	72,402	69,399
Level 1 additional eligible capital (EUR million)	10,050	9,102
Level 2 eligible capital (EUR million)	14,865	12,514
Risk-weighted assets (EUR million)	578,930	562,580
Level 1 ordinary capital coefficient (CET 1)	12.51%	12.34%
Level 1 additional capital coefficient (AT1)	1.73%	1.61%
Level 1 capital coefficient (TIER1)	14.24%	13.95%
Level 2 capital coefficient (TIER 2)	2.57%	2.23%
Total capital coefficient	**16.81%**	**16.18%**

[3] Figures calculated by applying the transitional provisions of IFRS 9

Eligible capital

EUR million

	2021	2020
Eligible capital		
Common Equity Tier I	**72,402**	**69,399**
Capital	8,670	8,670
(-) Treasure shares and own shares financed	(966)	(126)
Share Premium	47,979	52,013
Reserves	58,157	64,766
Other retained earnings	(34,784)	(34,937)
Minority interests	6,736	6,669
Profit net of dividends	6,394	(9,249)
Deductions	(19,784)	(18,407)
Goodwill and intangible assets	*(16,064)*	*(15,711)*
Others	*(3,720)*	*(2,696)*
Additional Tier I	**10,050**	**9,102**
Eligible instruments AT1	10,102	8,854
T1-excesses-subsidiaries	(52)	248
Residual value of dividends	—	—
Others	—	—
Tier II	**14,865**	**12,514**
Eligible instruments T2	15,424	13,351
Gen. funds and surplus loans loss prov. IRB	75	—
T2-excesses - subsidiaries	**(634)**	**(837)**
Others	**0**	**0**
Total eligible capital	**97,317**	**91,015**

Note: Banco Santander, S.A. and its affiliates had not taken part in any State aid programmes.

Leverage ratio

Basel III established the leverage ratio as a non-risk sensitive measure aimed at limiting excessive balance sheet growth relative to available capital.

The Group performs the calculation in accordance with Regulation (EU) 2019/876 of 20 May 2019 amending Regulation (EU) No 575/2013 as regards the leverage ratio.

This ratio is calculated as tier 1 capital divided by leverage exposure. Exposure is calculated as the sum of the following items:

- Accounting assets, excluding derivatives and items treated as deductions from tier 1 capital (for example, the balance of loans is included, but not that of goodwill) further excluding the exposures referred to in Article 429a(1) of the regulation.
- Off-balance-sheet items (mainly guarantees, unused credit limits granted and documentary credits) weighted using credit conversion factors.
- Inclusion of net value of derivatives (gains and losses are netted with the same counterparty, minus collaterals if they comply with certain criteria) plus a charge for the future potential exposure.
- A charge for the potential risk of security funding transactions.
- Lastly, it includes a charge for the risk of credit derivative swaps (CDS).

With the publication of Regulation (EU) 2019/876 of 20 May, 2019, amending Regulation (EU) n.º 575/2013 as regards the leverage ratio, the final calibration of the ratio is set at 3% for all entities and, for systemic entities G-SIB, an additional surcharge is also established which will be 50% of the cushion ratio applicable to the EISM. In addition, modifications are included in its calculation, including the exclusion of certain exposures from the total exposure measure: public loans, transfer loans and officially guaranteed export credits.

Banks implemented this final definition of the leverage ratio in June 2021, however, the new calibration of the ratio (the additional surcharge for G-SIBs) will take effect from January 2023.

EUR million

	2021	2020
Leverage		
Level 1 Capital	82,452	78,501
Exposure	1,536,516	1,471,480
Leverage Ratio	**5.37 %**	**5.33 %**

Global systemically important banks

Grupo Santander is one of 30 banks designated as global systemically important banks (G-SIBs).

The designation as a systemically important entity is based on the measurement set by regulators (the FSB and BCBS), based on 5 criteria (size, cross-jurisdictional activity, interconnectedness with other financial institutions, substitutability and complexity).

This definition means it has to fulfil certain additional requirements, which consist mainly of a capital buffer -1%, in TLAC requirements (total loss absorbing capacity), that we have to publish relevant information more frequently than other banks, greater regulatory requirements for internal control bodies, special supervision and drawing up of special reports to be submitted to supervisors.

The fact that Grupo Santander has to comply with these requirements makes it a more solid bank than its domestic rivals.

Santander

Appendix I

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
2 & 3 Triton Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Real estate	78	107	12
A & L CF (Guernsey) Limited (n)	Guernsey	0.00%	100.00%	100.00%	100.00%	Leasing	0	0	0
A & L CF June (2) Limited (e)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
A & L CF June (3) Limited (e)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Leasing	6	(2)	0
A & L CF March (5) Limited (d)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	1	0	0
A & L CF September (4) Limited (f)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	21	0	0
A3T Luxco 1 S.A.	Luxembourg	0.00%	100.00%	100.00%	0.00%	Holding company	4	(1)	4
A3T Luxco 2 S.A.	Luxembourg	100.00%	0.00%	100.00%	0.00%	Holding company	(18)	18	0
Abbey Business Services (India) Private Limited (d)	India	0.00%	100.00%	100.00%	100.00%	Holding company	0	0	0
Abbey Covered Bonds (Holdings) Limited	United Kingdom	—	(b)	—	—	Securitization	0	0	0
Abbey Covered Bonds (LM) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	0	0	0
Abbey Covered Bonds LLP	United Kingdom	—	(b)	—	—	Securitization	75	168	0
Abbey National Beta Investments Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Abbey National Business Office Equipment Leasing Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Abbey National International Limited	Jersey	0.00%	100.00%	100.00%	100.00%	Financial services	4	0	4

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Abbey National Nominees Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Abbey National PLP (UK) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Abbey National Property Investments	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	296	(3)	165
Abbey National Treasury Services Investments Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Abbey National Treasury Services Overseas Holdings	United Kingdom	0.00%	100.00%	100.00%	100.00%	Holding company	0	0	0
Abbey National UK Investments	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	0	0	0
Abbey Stockbrokers (Nominees) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Abbey Stockbrokers Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securities company	0	0	0
Abent 3T, S.A.P.I de C.V.	Mexico	0.00%	100.00%	100.00%	0.00%	Electricity production	115	(18)	5
Ablasa Participaciones, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	210	23	894
Aduro S.A.	Uruguay	0.00%	100.00%	100.00%	100.00%	Payments and collection services	0	0	2
Aevis Europa, S.L.	Spain	96.34%	0.00%	96.34%	96.34%	Cards	1	0	1
AFB SAM Holdings, S.L.	Spain	1.00%	99.00%	100.00%	100.00%	Holding company	0	0	0
Afisa S.A.	Chile	0.00%	100.00%	100.00%	100.00%	Fund management company	4	0	4
Aljardi SGPS, Lda.	Portugal	0.00%	100.00%	100.00%	100.00%	Holding company	1,195	(3)	1,148

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Allane Leasing GmbH	Austria	0.00%	46.95%	100.00%	100.00%	Renting	(2)	0	0
Allane Location Longue Durée S.a.r.l.	France	0.00%	46.95%	100.00%	100.00%	Renting	10	3	0
Allane Mobility Consulting AG	Switzerland	0.00%	46.95%	100.00%	100.00%	Consulting services	1	0	0
Allane Mobility Consulting B.V.	Netherlands	0.00%	46.95%	100.00%	100.00%	Consulting services	(2)	0	0
Allane Mobility Consulting GmbH	Germany	0.00%	46.95%	100.00%	100.00%	Consulting services	1	1	0
Allane Mobility Consulting Österreich GmbH	Austria	0.00%	46.95%	100.00%	100.00%	Consulting services	0	0	0
Allane Mobility Consulting S.a.r.l	France	0.00%	46.95%	100.00%	100.00%	Consulting services	(1)	0	0
Allane Schweiz AG	Switzerland	0.00%	46.95%	100.00%	100.00%	Renting	13	0	0
Allane SE	Germany	0.00%	46.95%	92.07%	92.07%	Leasing	192	0	175
Allane Services GmbH & co. KG	Germany	0.00%	46.95%	100.00%	100.00%	Services	1	0	0
Allane Services Verwaltungs GmbH	Germany	0.00%	46.95%	100.00%	100.00%	Management of portfolios	0	0	0
Alliance & Leicester Cash Solutions Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Alliance & Leicester Commercial Bank Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Alliance & Leicester Investments (Derivatives) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	0	0	0
Alliance & Leicester Investments (No.2) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Alliance & Leicester Investments Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Alliance & Leicester Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	0	0	0
Alliance & Leicester Personal Finance Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	(241)	0	0
Altamira Santander Real Estate, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Real estate	(369)	(161)	0
Alternative Leasing, FIL (Compartimento B)	Spain	100.00%	0.00%	100.00%	99.99%	Investment fund	75	3	75
Amazonia Trade Limited	United Kingdom	100.00%	0.00%	100.00%	100.00%	Holding company	0	0	0
AN (123) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Holding company	0	0	0
Andaluza de Inversiones, S.A.	Spain	0.00%	100.00%	100.00%	100.00%	Holding company	37	0	27
ANITCO Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Apê11 Tecnologia e Negócios Imobiliários S.A.	Brazil	0.00%	80.92%	90.00%	0.00%	Real estate	6	0	9
Aquanima Brasil Ltda.	Brazil	0.00%	100.00%	100.00%	100.00%	E-commerce	2	1	0
Aquanima Chile S.A.	Chile	0.00%	100.00%	100.00%	100.00%	Services	2	1	0
Aquanima México S. de R.L. de C.V.	Mexico	0.00%	100.00%	100.00%	100.00%	E-commerce	2	1	2
Aquanima S.A.	Argentina	0.00%	100.00%	100.00%	100.00%	Services	0	0	0
Artarien S.A. (o)	Uruguay	0.00%	100.00%	100.00%	0.00%	Insurance auxiliary services	0	0	0

Santander

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Asto Digital Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	39	(26)	0
Athena Corporation Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Financial services	(9)	0	0
Atlantes Azor No. 2	Portugal	—	(b)	—	—	Securitization	0	0	0
Atlantes Mortgage No. 2	Portugal	—	(b)	—	—	Securitization	0	0	0
Atlantes Mortgage No. 3	Portugal	—	(b)	—	—	Securitization	0	0	0
Atlantes Mortgage No. 4	Portugal	—	(b)	—	—	Securitization	0	0	0
Atlantes Mortgage No. 5	Portugal	—	(b)	—	—	Securitization	0	0	0
Atlantes Mortgage No. 7	Portugal	—	(b)	—	—	Securitization	0	0	0
Atual - Fundo de Invest Multimercado Crédito Privado Investimento no Exterior	Brazil	0.00%	89.91%	100.00%	100.00%	Investment fund	325	18	308
Atual Serviços de Recuperação de Créditos e Meios Digitais S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Financial services	410	15	383
Auto ABS Belgium Loans 2019, SA/NV	Belgium	—	(b)	—	—	Securitization	0	0	0
Auto ABS DFP Master Compartment France 2013	France	—	(b)	—	—	Securitization	0	0	0
Auto ABS French Leases 2018	France	—	(b)	—	—	Securitization	0	0	0
Auto ABS French Leases 2021	France	—	(b)	—	—	Securitization	0	0	0
Auto ABS French Leases Master Compartiment 2016	France	—	(b)	—	—	Securitization	0	0	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Auto ABS French Loans Master	France	—	(b)	—	—	Securitization	0	0	0
Auto ABS French LT Leases Master	France	—	(b)	—	—	Securitization	0	0	0
Auto ABS Italian Balloon 2019-1 S.R.L.	Italy	—	(b)	—	—	Securitization	0	0	0
Auto ABS Italian Loans 2018-1 S.R.L.	Italy	—	(b)	—	—	Securitization	0	0	0
Auto ABS Italian Rainbow Loans 2020-1 S.R.L.	Italy	—	(b)	—	—	Securitization	0	0	0
Auto ABS Spanish Loans 2018-1, Fondo de Titulización	Spain	—	(b)	—	—	Securitization	0	0	0
Auto ABS Spanish Loans 2020-1, Fondo de Titulización	Spain	—	(b)	—	—	Securitization	0	0	0
Auto ABS UK Loans 2017 Holdings Limited	United Kingdom	—	(b)	—	—	Securitization	0	0	0
Auto ABS UK Loans 2017 Plc	United Kingdom	—	(b)	—	—	Securitization	0	0	0
Auto ABS UK Loans 2019 Holdings Limited	United Kingdom	—	(b)	—	—	Securitization	0	0	0
Auto ABS UK Loans 2019 Plc	United Kingdom	—	(b)	—	—	Securitization	(3)	0	0
Auto ABS UK Loans Holdings Limited	United Kingdom	—	(b)	—	—	Securitization	0	0	0
Auto ABS UK Loans PLC	United Kingdom	—	(b)	—	—	Securitization	(10)	2	0
Autodescuento, S.L.	Spain	0.00%	93.89%	93.89%	93.89%	Vehicles purchase by Internet	1	1	18
Autohaus24 GmbH	Germany	0.00%	46.95%	100.00%	100.00%	Renting	(2)	0	0

Santander

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Auttar HUT Processamento de Dados Ltda.	Brazil	0.00%	89.91%	100.00%	100.00%	IT services	4	1	5
Aviación Antares, A.I.E.	Spain	99.99%	0.01%	100.00%	100.00%	Renting	48	5	28
Aviación Británica, A.I.E.	Spain	99.99%	0.01%	100.00%	100.00%	Renting	22	4	6
Aviación Centaurus, A.I.E.	Spain	99.99%	0.01%	100.00%	100.00%	Renting	7	18	25
Aviación Comillas, S.L. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Renting	7	0	8
Aviación Intercontinental, A.I.E.	Spain	99.97%	0.03%	100.00%	100.00%	Renting	66	(24)	42
Aviación Laredo, S.L.	Spain	99.00%	1.00%	100.00%	100.00%	Air transport	3	0	3
Aviación Oyambre, S.L. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Renting	1	0	1
Aviación Santillana, S.L.	Spain	99.00%	1.00%	100.00%	100.00%	Renting	3	1	2
Aviación Suances, S.L.	Spain	99.00%	1.00%	100.00%	100.00%	Air transport	5	1	3
Aviación Tritón, A.I.E.	Spain	99.99	0.01	100.00	100.00	Renting	22	7	19
Aymoré Crédito, Financiamento e Investimento S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Finance company	205	160	328
Azor Mortgages PLC (j)	Ireland	—	(b)	—	—	Securitization	0	0	0
Banca PSA Italia S.p.A.	Italy	0.00%	50.00%	50.00%	50.00%	Banking	320	72	153
Banco Bandepe S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Banking	832	24	770

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Banco de Albacete, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Banking	14	0	9
Banco Hyundai Capital Brasil S.A.	Brazil	0.00%	44.96%	50.00%	50.00%	Banking	51	5	25
Banco Madesant - Sociedade Unipessoal, S.A.	Portugal	0.00%	100.00%	100.00%	100.00%	Banking	1,076	(3)	1,073
Banco PSA Finance Brasil S.A.	Brazil	0.00%	44.96%	50.00%	50.00%	Banking	37	4	18
Banco Santander - Chile	Chile	0.00%	67.12%	67.18%	67.18%	Banking	2,963	803	2,827
Banco Santander (Brasil) S.A.	Brazil	0.04%	89.88%	90.50%	90.58%	Banking	10,104	2,373	10,795
Banco Santander (México), S.A., Institución de Banca Múltiple, Grupo Financiero Santander México como Fiduciaria del Fideicomiso 100740	Mexico	0.00%	96.24%	100.00%	100.00%	Finance company	66	11	74
Banco Santander (México), S.A., Institución de Banca Múltiple, Grupo Financiero Santander México como Fiduciaria del Fideicomiso 2002114	Mexico	0.00%	96.47%	100.00%	100.00%	Holding company	8	0	7
Banco Santander (México), S.A., Institución de Banca Múltiple, Grupo Financiero Santander México como Fiduciaria del Fideicomiso GFSSLPT	Mexico	0.00%	96.64%	100.00%	100.00%	Finance company	14	1	14
Banco Santander de Negocios Colombia S.A.	Colombia	94.90%	5.10%	100.00%	100.00%	Banking	134	6	141
Banco Santander International	United States	0.00%	100.00%	100.00%	100.00%	Banking	1,110	85	1,195
Banco Santander International SA	Switzerland	0.00%	100.00%	100.00%	100.00%	Banking	1,113	49	815
Banco Santander México, S.A., Institución de Banca Múltiple, Grupo Financiero Santander México	Mexico	21.19%	75.04%	96.24%	91.80%	Banking	6,376	778	7,425
Banco Santander Perú S.A.	Peru	100.00%	0.00%	100.00%	100.00%	Banking	194	37	122
Banco Santander Río S.A.	Argentina	0.00%	99.31%	99.26%	99.26%	Banking	1,532	92	550

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Banco Santander S.A.	Uruguay	97.75%	2.25%	100.00%	100.00%	Banking	359	69	191
Banco Santander Totta, S.A.	Portugal	0.00%	99.86%	99.96%	99.96%	Banking	3,857	303	3,415
Bansa Santander S.A.	Chile	0.00%	100.00%	100.00%	100.00%	Real estate	21	1	22
BEN Benefícios e Serviços Instituição de Pagamento S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Payment services	11	(1)	9
Bilkreditt 6 Designated Activity Company (j)	Ireland	—	(b)	—	—	Securitization	0	0	0
Bilkreditt 7 Designated Activity Company	Ireland	—	(b)	—	—	Securitization	0	0	0
Bond Company Merger Sub LLC	United States	0.00%	100.00%	100.00%	0.00%	Inactive	0	0	0
Bond First Merger Sub Inc.	United States	0.00%	100.00%	100.00%	0.00%	Inactive	0	0	0
Bond Fourth Merger Sub LLC	United States	0.00%	100.00%	100.00%	0.00%	Inactive	0	0	0
Bond Second Merger Sub LLC	United States	0.00%	100.00%	100.00%	0.00%	Inactive	0	0	0
Bond Third Merger Sub LLC	United States	0.00%	100.00%	100.00%	0.00%	Inactive	0	0	0
BRS Investments S.A.	Argentina	5.10%	94.90%	100.00%	100.00%	Finance company	41	23	35
Cántabra de Inversiones, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	(118)	262	187
Cántabro Catalana de Inversiones, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	275	3	267
Canyon Multifamily Impact Fund IV LLC (c)	United States	0.00%	98.00%	98.00%	98.00%	Real estate	26	0	27

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Capital Street Delaware LP	United States	0.00%	100.00%	100.00%	100.00%	Holding company	0	0	0
Capital Street Holdings, LLC	United States	0.00%	100.00%	100.00%	100.00%	Holding company	14	0	14
Capital Street REIT Holdings, LLC	United States	0.00%	100.00%	100.00%	100.00%	Holding company	1,212	1	1,213
Capital Street S.A.	Luxembourg	0.00%	100.00%	100.00%	100.00%	Finance company	0	0	0
Carfax (Guernsey) Limited (j) (n)	Guernsey	0.00%	100.00%	100.00%	100.00%	Insurance brokerage	0	0	0
Casa de Bolsa Santander, S.A. de C.V., Grupo Financiero Santander México	Mexico	0.00%	99.97%	99.97%	99.97%	Securities company	55	2	58
Cater Allen Holdings Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Cater Allen International Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Cater Allen Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Banking	685	34	265
Cater Allen Lloyd's Holdings Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Holding company	0	0	0
Cater Allen Syndicate Management Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
CCAP Auto Lease Ltd.	United States	0.00%	80.22%	100.00%	100.00%	Leasing	182	162	276
Centro de Capacitación Santander, A.C.	Mexico	0.00%	96.24%	100.00%	100.00%	Non-profit institute	1	0	1
Certidesa, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Aircraft rental	(59)	(5)	0
Chrysler Capital Auto Funding I LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	30	24	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Chrysler Capital Auto Funding II LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	4	(4)	0
Chrysler Capital Auto Receivables LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	0	0	0
Chrysler Capital Master Auto Receivables Funding 2 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	(217)	(27)	0
Chrysler Capital Master Auto Receivables Funding 4 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	(3)	(4)	0
Chrysler Capital Master Auto Receivables Funding LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	61	48	0
Cobranza Amigable, S.A.P.I. de C.V.	Mexico	0.00%	85.00%	100.00%	100.00%	Collection services	4	0	3
Community Development and Affordable Housing Fund LLC (c)	United States	0.00%	96.00%	96.00%	96.00%	Asset management	0	0	0
Compagnie Generale de Credit Aux Particuliers - Credipar S.A.	France	0.00%	50.00%	100.00%	100.00%	Banking	363	161	428
Compagnie Pour la Location de Vehicules - CLV	France	0.00%	50.00%	100.00%	100.00%	Banking	20	2	26
Compartment German Auto Loans 2021-1	Luxembourg	0.00%	(b)	0.00%	0.00%	Securitization	0	0	0
Comunidad Laboral Trabajando Argentina S.A. (j)	Argentina	—	100.00	100.00	100.00	Services	0	0	0
Consulteam Consultores de Gestão, Unipessoal, Lda.	Portugal	100.00%	0.00%	100.00%	100.00%	Real estate	0	0	0
Consumer Lending Receivables LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	0	0	0
Crawfall S.A. (g) (j)	Uruguay	100.00%	0.00%	100.00%	100.00%	Services	0	0	0
Darep Designated Activity Company	Ireland	100.00%	0.00%	100.00%	100.00%	Reinsurances	8	0	7

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Decarome, S.A.P.I. de C.V.	Mexico	0.00%	100.00%	100.00%	100.00%	Finance company	50	5	51
Deva Capital Advisory Company, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Advisory services	1	1	2
Deva Capital Holding Company, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	226	(9)	228
Deva Capital Investment Company, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Holding company	111	4	111
Deva Capital Management Company, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Advisory services	17	(10)	7
Deva Capital Servicer Company, S.L. Unipersonal	Spain	0.00%	100.00%	100.00%	100.00%	Holding company	97	4	96
Digital Procurement Holdings N.V.	Netherlands	0.00%	100.00%	100.00%	100.00%	Holding company	5	0	1
Diners Club Spain, S.A. Unipersonal	Spain	100.00%	0.00%	100.00%	75.00%	Cards	10	(1)	9
Dirección Estratega, S.C.	Mexico	0.00%	100.00%	100.00%	100.00%	Services	0	0	0
Drive Auto Receivables Trust 2017-3	United States	0.00%	(b)	0.00%	0.00%	Securitization	38	53	0
Drive Auto Receivables Trust 2018-1	United States	—	(b)	—	—	Securitization	25	45	0
Drive Auto Receivables Trust 2018-2	United States	—	(b)	—	—	Securitization	(6)	77	0
Drive Auto Receivables Trust 2018-3	United States	—	(b)	—	—	Securitization	(31)	82	0
Drive Auto Receivables Trust 2018-4	United States	—	(b)	—	—	Securitization	(41)	82	0
Drive Auto Receivables Trust 2018-5	United States	—	(b)	—	—	Securitization	(37)	79	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Drive Auto Receivables Trust 2019-1	United States	—	(b)	—	—	Securitization	(29)	83	0
Drive Auto Receivables Trust 2019-2	United States	—	(b)	—	—	Securitization	(51)	97	0
Drive Auto Receivables Trust 2019-3	United States	—	(b)	—	—	Securitization	(69)	136	0
Drive Auto Receivables Trust 2019-4	United States	—	(b)	—	—	Securitization	(92)	149	0
Drive Auto Receivables Trust 2020-1	United States	—	(b)	—	—	Securitization	(122)	156	0
Drive Auto Receivables Trust 2020-2	United States	—	(b)	—	—	Securitization	(135)	181	0
Drive Auto Receivables Trust 2021-1	United States	—	(b)	—	—	Securitization	0	(115)	0
Drive Auto Receivables Trust 2021-2	United States	—	(b)	—	—	Securitization	0	(310)	0
Drive Auto Receivables Trust 2021-3	United States	—	(b)	—	—	Securitization	0	(275)	0
Ductor S.à r.l. (f)	Luxembourg	1.00	—	1.00	—	Holding company	26	1	20
EDT FTPYME Pastor 3 Fondo de Titulización de Activos	Spain	0.00%	(b)	0.00%	0.00%	Securitization	0	0	0
Elcano Renovables, S.L	Spain	—	0.70	0.70	—	Holding company	1	0	1
Electrolyser, S.A. de C.V.	Mexico	0.00%	96.24%	100.00%	100.00%	Services	0	0	0
Entidad de Desarrollo a la Pequeña y Micro Empresa Santander Consumo Perú S.A.	Peru	100.00%	0.00%	100.00%	100.00%	Finance company	27	6	33
Erestone S.A.S.	France	0.00%	90.00%	90.00%	90.00%	Inactive	1	0	1

Santander

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Esfera Fidelidade S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Services	58	56	102
Evidence Previdência S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Insurance	132	(12)	95
Eyemobile Tecnologia S.A.	Brazil	0.00%	53.95%	60.00%	0.00%	IT services	2	0	1
F1rst Tecnologia e Inovação Ltda.	Brazil	0.00%	89.91%	100.00%	100.00%	IT services	2	2	4
Financeira El Corte Inglés, Portugal, S.F.C., S.A.	Portugal	0.00%	51.00%	100.00%	100.00%	Finance company	8	0	4
Financiera El Corte Inglés, E.F.C., S.A.	Spain	0.00%	51.00%	51.00%	51.00%	Finance company	260	59	140
Finsantusa, S.L. Unipersonal	Spain	0.00%	100.00%	100.00%	100.00%	Holding company	1,259	(2)	1,020
First National Motor Business Limited (j)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Leasing	0	0	0
First National Motor Contracts Limited (j)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Leasing	0	0	0
First National Motor Facilities Limited (j)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Leasing	0	0	0
First National Motor Finance Limited (j)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Advisory services	0	0	0
First National Motor Leasing Limited (j)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Leasing	0	0	0
First National Motor plc	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
First National Tricity Finance Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	6	0	6
Fondation Holding Auto ABS Belgium Loans	Belgium	0.00%	(b)	0.00%	0.00%	Securitization	0	0	0

Santander

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Fondo de Titulización de Activos Santander Consumer Spain Auto 2014-1	Spain	—	(b)	—	—	Securitization	0	0	0
Fondo de Titulización PYMES Santander 13	Spain	—	(b)	—	—	Securitization	0	0	0
Fondo de Titulización PYMES Santander 14	Spain	—	(b)	—	—	Securitization	0	0	0
Fondo de Titulización PYMES Santander 15	Spain	—	(b)	—	—	Securitization	0	0	0
Fondo de Titulización Santander Consumer Spain Auto 2016-1	Spain	—	(b)	—	—	Securitization	0	0	0
Fondo de Titulización Santander Consumer Spain Auto 2016-2	Spain	—	(b)	—	—	Securitization	0	0	0
Fondo de Titulización Santander Financiación 1	Spain	—	(b)	—	—	Securitization	0	0	0
Fondo de Titulización, RMBS Santander 7	Spain	—	(b)	—	—	Securitization	0	0	0
Fondos Santander, S.A. Administradora de Fondos de Inversión (en liquidación) (j)	Uruguay	—	100.00	100.00	100.00	Fund management company	0	0	0
Fortensky Trading, Ltd.	Ireland	0.00%	100.00%	100.00%	100.00%	Finance company	0	0	0
Fosse (Master Issuer) Holdings Limited	United Kingdom	0.00%	(b)	0.00%	0.00%	Securitization	0	0	0
Fosse Funding (No.1) Limited	United Kingdom	—	1.00	1.00	1.00	Securitization	(134)	136	0
Fosse Master Issuer PLC	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	5	(6)	0
Fosse PECOH Limited	United Kingdom	0.00%	(b)	—%	—%	Inactive	0	0	0
Fosse Trustee (UK) Limited	United Kingdom	—	100.00	100.00	100.00	Securitization	0	0	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
FTPYME Banesto 2, Fondo de Titulización de Activos	Spain	0.00%	(b)	0.00%	0.00%	Securitization	0	0	0
Fundo de Investimento em Direitos Creditórios Atacado- Não Padronizado	Brazil	—	(b)	—	—	Investment fund	130	(6)	0
Fundo de Investimentos em Direitos Creditórios Multisegmentos NPL Ipanema VI – Não padronizado	Brazil	—	(b)	—	—	Investment fund	194	23	0
Gamma, Sociedade Financeira de Titularização de Créditos, S.A.	Portugal	—	1.00	1.00	1.00	Securitization	7	0	8
GC FTPYME Pastor 4 Fondo de Titulización de Activos	Spain	0.00%	(b)	0.00%	0.00%	Securitization	0	0	0
Gentium Payments Processing FZ-LLC	United Arab Emirates	—	100.00	100.00	—	Financial services	4	(2)	2
Gesban México Servicios Administrativos Globales, S.A. de C.V.	Mexico	0.00%	100.00%	100.00%	100.00%	Services	1	0	0
Gesban Santander Servicios Profesionales Contables Limitada	Chile	0.00%	100.00%	100.00%	100.00%	Accounting services	1	0	0
Gesban Servicios Administrativos Globales, S.L.	Spain	99.99%	0.01%	100.00%	100.00%	Services	5	0	1
Gesban UK Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Payments and collection services	1	0	0
Gestión de Instalaciones Fotovoltaicas, S.L. Unipersonal	Spain	0.00%	100.00%	100.00%	100.00%	Renewable energies	1	0	0

Santander

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Gestión de Inversiones JILT, S.A. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Services	5	(2)	5
Gestora de Procesos S.A. en liquidación (j)	Peru	0.00%	100.00%	100.00%	100.00%	Holding company	0	0	0
Getnet Adquirência e Serviços para Meios de Pagamento S.A.	Brazil	0.04%	89.88%	89.91%	100.00%	Payment services	340	75	297
Getnet Europe, Entidad de Pago, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Payment services	215	6	218
Getnet Sociedade de Credito Direto S.A.	Brazil	0.00%	89.91%	100.00%	0.00%	Finance company	12	1	12
Gira, Gestão Integrada de Recebíveis do Agronegócio S.A.	Brazil	0.00%	71.93%	80.00%	0.00%	Consulting services	1	(1)	2
Golden Bar (Securitisation) S.R.L.	Italy	—	(b)	—	—	Securitization	0	0	0
Golden Bar Stand Alone 2016-1	Italy	—	(b)	—	—	Securitization	0	0	0
Golden Bar Stand Alone 2018-1	Italy	—	(b)	—	—	Securitization	0	0	0
Golden Bar Stand Alone 2019-1	Italy	—	(b)	—	—	Securitization	0	0	0
Golden Bar Stand Alone 2020-1	Italy	—	(b)	—	—	Securitization	0	0	0
Golden Bar Stand Alone 2020-2	Italy	—	(b)	—	—	Securitization	0	0	0
Golden Bar Stand Alone 2021-1	Italy	—	(b)	—	—	Securitization	0	0	0
Grupo Empresarial Santander, S.L.	Spain	99.62%	0.38%	100.00%	100.00%	Holding company	3,348	637	2,406
Grupo Financiero Santander México, S.A. de C.V.	Mexico	100.00%	0.00%	100.00%	100.00%	Holding company	4,837	584	4,510

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Guaranty Car, S.A. Unipersonal	Spain	0.00%	100.00%	100.00%	100.00%	Automotive	2	1	2
Hipototta No. 13	Portugal	—	(b)	—	—	Securitization	0	0	0
Hipototta No. 4 FTC	Portugal	—	(b)	—	—	Securitization	(51)	(2)	0
Hipototta No. 4 plc	Ireland	—	(b)	—	—	Securitization	(3)	(1)	0
Hipototta No. 5 FTC	Portugal	—	(b)	—	—	Securitization	(39)	(2)	0
Hipototta No. 5 plc	Ireland	—	(b)	—	—	Securitization	(11)	(2)	0
Holbah II Limited	Bahamas	0.00%	100.00%	100.00%	100.00%	Holding company	404	0	557
Holbah Santander, S.L. Unipersonal	Spain	0.00%	100.00%	100.00%	100.00%	Holding company	213	349	785
Holmes Funding Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	(3)	11	0
Holmes Holdings Limited	United Kingdom	—	(b)	—	—	Securitization	0	0	0
Holmes Master Issuer plc	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	(11)	(1)	0
Holmes Trustees Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	0	0	0
Hyundai Capital Bank Europe GmbH	Germany	0.00%	51.00%	51.00%	51.00%	Banking	701	(6)	391
Ibérica de Compras Corporativas, S.L.	Spain	97.17%	2.83%	100.00%	100.00%	E-commerce	7	1	6
Independence Community Bank Corp.	United States	0.00%	100.00%	100.00%	100.00%	Holding company	3,501	85	3,587

Santander

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Insurance Funding Solutions Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	0	0	0
Interfinance Holanda B.V.	Netherlands	100.00%	0.00%	100.00%	100.00%	Holding company	0	0	0
Inversiones Capital Global, S.A. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	105	(6)	111
Inversiones Marítimas del Mediterráneo, S.A.	Spain	0.00%	100.00%	100.00%	100.00%	Inactive	5	(1)	0
Isar Valley S.A.	Luxembourg	—	(b)	—	—	Securitization	0	0	0
Isla de los Buques, S.A.	Spain	99.98%	0.02%	100.00%	100.00%	Finance company	1	0	1
Klare Corredora de Seguros S.A.	Chile	0.00%	33.63%	50.10%	50.10%	Insurance brokerage	6	(3)	1
Landcompany 2020, S.L.	Spain	17.66%	82.34%	100.00%	100.00%	Real estate management	1,779	(78)	1,704
Langton Funding (No.1) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	(22)	22	0
Langton Mortgages Trustee (UK) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	0	0	0
Langton PECOH Limited	United Kingdom	—	(b)	—	—	Inactive	0	0	0
Langton Securities (2008-1) plc	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	1	(1)	0
Langton Securities (2010-1) PLC	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	2	(2)	0
Langton Securities (2010-2) PLC	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	0	0	0
Langton Securities Holdings Limited	United Kingdom	—	(b)	—	—	Securitization	0	0	0

Santander

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Laparanza, S.A.	Spain	61.59%	0.00%	61.59%	61.59%	Agricultural holding	28	0	16
Liderança Serviços Especializados em Cobranças Ltda.	Brazil	0.00%	89.91%	100.00%	0.00%	Collection services	(1)	2	1
Liquetine, S.L	Spain	0.00%	70.00%	100.00%	0.00%	Renewable energies	0	0	1
Liquidity Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Factoring	(1)	0	0
Luri 1, S.A., en liquidación (j) (m)	Spain	46.00%	0.00%	46.00%	46.00%	Real estate	0	0	0
Luri 6, S.A. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Real estate investment	1,366	(8)	1,373
MAC No. 1 Limited	United Kingdom	—	(b)	—	—	Mortgage credit company	0	0	0
Master Red Europa, S.L.	Spain	96.34%	0.00%	96.34%	96.34%	Cards	1	0	1
Mata Alta, S.L.	Spain	0.00%	61.59%	100.00%	100.00%	Real estate	0	0	0
Max Merger Sub, Inc.	United States	0.00%	100.00%	100.00%	0.00%	Inactive	0	0	0
Mercadotecnia, Ideas y Tecnología, S.A. de C.V.	Mexico	0.00%	70.00%	70.00%	0.00%	Payment methods	1	3	15
Merciver, S.L.	Spain	99.90%	0.10%	100.00%	100.00%	Financial advisory	1	0	1
Mercury Trade Finance Solutions S.A.S.	Colombia	0.00%	50.10%	100.00%	0.00%	IT services	0	0	0
Mercury Trade Finance Solutions, S.A. de C.V.	Mexico	0.00%	50.10%	100.00%	100.00%	IT services	0	0	0
Mercury Trade Finance Solutions, S.L.	Spain	0.00%	50.10%	50.10%	50.10%	IT services	10	1	24

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Mercury Trade Finance Solutions, S.p.A.	Chile	0.00%	50.10%	100.00%	100.00%	IT services	1	0	0
Merlion Aviation One Designated Activity Company	Ireland	—	(b)	—	—	Renting	25	6	0
Mortgage Engine Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Financial services	(7)	(4)	0
Motor 2016-1 Holdings Limited	United Kingdom	—	(b)	—	—	Securitization	0	0	0
Motor 2016-1 PLC	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	0	0	0
Motor 2017-1 Holdings Limited	United Kingdom	—	(b)	—	—	Securitization	0	0	0
Motor 2017-1 PLC	United Kingdom	0.00%	100.00%	100.00%	100.00%	Securitization	(6)	6	0
Motor Securities 2018-1 Designated Activity Company	Ireland	—	(b)	—	—	Securitization	(1)	(1)	0
Mouro Capital I LP	United Kingdom	0.00%	100.00%	100.00%	100.00%	Investment fund	281	211	249
Multiplica SpA	Chile	0.00%	100.00%	100.00%	100.00%	Payment services	4	0	4
Naviera Mirambel, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Finance company	0	0	0
Naviera Trans Gas, A.I.E.	Spain	99.99%	0.01%	100.00%	100.00%	Renting	21	(3)	40
Naviera Trans Iron, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	Leasing	24	0	21
Naviera Trans Ore, A.I.E.	Spain	99.99%	0.01%	100.00%	100.00%	Renting	25	3	17
Naviera Transcantábrica, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	Leasing	5	0	4

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Naviera Transchem, S.L. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Leasing	1	0	1
NeoAuto S.A.C.	Peru	0.00%	55.00%	55.00%	55.00%	Vehicles purchase by Internet	1	0	1
Newcomar, S.L., en liquidación (j)	Spain	40.00%	40.00%	80.00%	80.00%	Real estate	1	0	0
Novimovest – Fundo de Investimento Imobiliário	Portugal	0.00%	78.63%	78.74%	78.74%	Investment fund	254	4	203
NW Services CO.	United States	0.00%	100.00%	100.00%	100.00%	E-commerce	6	0	2
Open Bank Argentina S.A.	Argentina	0.00%	99.66%	100.00%	100.00%	Banking	35	(8)	33
Open Bank, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Banking	451	10	462
Open Digital Market, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Services	0	0	0
Open Digital Services Argentina S.A.U.	Argentina	0.00 %	100.00 %	100.00 %	0.00 %	IT services	0	0	0
Open Digital Services, S.L.	Spain	99.97%	0.03%	100.00%	100.00%	Services	176	(108)	18
Open Mx Servicios Administrativos, S.A. de C.V.	Mexico	0.00%	100.00%	100.00%	0.00%	Financial services	0	0	0
Operadora de Carteras Gamma, S.A.P.I. de C.V.	Mexico	100.00%	0.00%	100.00%	100.00%	Holding company	8	1	6
Optimal Investment Services SA	Switzerland	100.00%	0.00%	100.00%	100.00%	Fund management company	33	9	29
Optimal Multiadvisors Ireland Plc / Optimal Strategic US Equity Ireland Euro Fund (e) (p)	Ireland	0.00%	0.00%	0.00%	54.10%	Fund management company	0	0	0
Optimal Multiadvisors Ireland Plc / Optimal Strategic US Equity Ireland US Dollar Fund (e) (p)	Ireland	0.00%	0.00%	0.00%	51.93%	Fund management company	0	0	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
PagoFX Europe S.A.	Belgium	0.00%	100.00%	100.00%	100.00%	Payment services	2	(1)	1
PagoFX UK Ltd	United Kingdom	0.00%	100.00%	100.00%	100.00%	Payment services	5	(3)	2
PagoNxt Ltd	United Kingdom	100.00%	0.00%	100.00%	0.00%	Holding company	0	0	0
PagoNxt Merchant SoluçõesTecnológicas Brasil Ltda.	Brazil	0.00%	100.00%	100.00%	100.00%	IT services	57	(20)	37
PagoNxt Merchant Solutions, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Holding company	913	(46)	938
PagoNxt One Trade UK Ltd	United Kingdom	0.00%	100.00%	100.00%	0.00%	Financial services	0	0	0
PagoNxt OneTrade España, E.D.E., S.L.	Spain	0.00%	100.00%	100.00%	0.00%	Financial services	0	0	0
PagoNxt Solutions, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Payment services	90	(61)	29
PagoNxt Trade Services, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Services	197	(58)	140
PagoNxt Trade, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	IT services	244	(71)	172
PagoNxt, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	1,815	(153)	1,838
Parasant SA	Switzerland	100.00%	0.00%	100.00%	100.00%	Holding company	1,162	(2)	927
Paytec Logística e Armazém Ltda.	Brazil	0.00%	89.91%	100.00%	0.00%	Logistics services	0	0	0
Paytec Tecnologia em Pagamentos Ltda.	Brazil	0.00%	89.91%	100.00%	0.00%	Commerce	3	0	3
PBD Germany Auto 2018 UG (Haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
PBD Germany Auto Lease Master 2019	Luxembourg	—	(b)	—	—	Securitization	0	0	0
PBD Germany Auto Lease Master S.A, Compartment 2021-1	Luxembourg	—	(b)	—	—	Securitization	0	0	0
PBD Germany Auto Loan 2021 UG (Haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0
PBE Companies, LLC	United States	0.00%	100.00%	100.00%	100.00%	Real estate	110	0	110
PECOH Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Pereda Gestión, S.A.	Spain	99.99%	0.01%	100.00%	100.00%	Holding company	45	35	4
Phoenix C1 Aviation Designated Activity Company	Ireland	—	(b)	—	—	Renting	13	4	0
Phoenix S.A.	Uruguay	0.00%	100.00%	100.00%	0.00%	Payment methods	0	0	3
PI Distribuidora de Títulos e Valores Mobiliários S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Securities company	79	(6)	66
Pingham International, S.A. (j)	Uruguay	—	100.00	100.00	100.00	Inactive	0	0	0
Pony S.A.	Luxembourg	—	(b)	—	—	Securitization	0	0	0
Portal Universia Argentina S.A.	Argentina	0.00%	75.75%	75.75%	75.75%	Internet	0	0	0
Portal Universia Portugal, Prestação de Serviços de Informática, S.A.	Portugal	0.00%	100.00%	100.00%	100.00%	Internet	0	0	0
Prime 16 – Fundo de Investimentos Imobiliário	Brazil	0.00%	89.91%	100.00%	100.00%	Investment fund	31	(2)	24
PSA Bank Deutschland GmbH	Germany	0.00%	50.00%	50.00%	50.00%	Banking	517	57	229

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
PSA Banque France	France	0.00%	50.00%	50.00%	50.00%	Banking	1,068	74	463
PSA Consumer Finance Polska Sp. z o.o.	Poland	0.00%	40.22%	100.00%	100.00%	Finance company	3	1	0
PSA Finance Belux S.A.	Belgium	0.00%	50.00%	100.00%	50.00%	Finance company	91	15	52
PSA Finance Polska Sp. z o.o.	Poland	0.00%	40.22%	50.00%	50.00%	Finance company	33	5	10
PSA Finance UK Limited	United Kingdom	0.00%	50.00%	100.00%	50.00%	Finance company	339	65	181
PSA Financial Services Nederland B.V.	Netherlands	0.00%	50.00%	100.00%	50.00%	Finance company	52	17	32
PSA Financial Services Spain, E.F.C., S.A.	Spain	0.00%	50.00%	50.00%	50.00%	Finance company	739	53	363
PSA Renting Italia S.p.A.	Italy	0.00%	50.00%	100.00%	100.00%	Renting	9	11	3
PSRT 2019-A	United States	—	(b)	—	—	Securitization	58	53	0
Punta Lima Wind Farm, LLC	United States	0.00%	100.00%	100.00%	100.00%	Renewable energies	44	(1)	43
Punta Lima, LLC	United States	0.00%	100.00%	100.00%	100.00%	Leasing	44	(1)	43
Retail Company 2021, S.L. Unipersonal	Spain	100.00%	0.00%	100.00%	0.00%	Real estate	262	(3)	262
Retop S.A. (f)	Uruguay	100.00%	0.00%	100.00%	100.00%	Finance company	14	14	45
Return Capital S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Collection services	(1)	4	3
Riobank International (Uruguay) SAIFE (p)	Uruguay	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Roc Aviation One Designated Activity Company	Ireland	—	(b)	—	—	Renting	(2)	(2)	0
Roc Shipping One Designated Activity Company	Ireland	—	(b)	—	—	Renting	(4)	0	0
Rojo Entretenimento S.A.	Brazil	0.00%	85.06%	94.60%	94.60%	Services	21	0	17
SAM Asset Management, S.A. de C.V., Sociedad Operadora de Fondos de Inversión	Mexico	0.00%	100.00%	100.00%	100.00%	Fund management company	20	21	162
SAM Investment Holdings, S.L.	Spain	92.37%	7.63%	100.00%	100.00%	Management of funds	1,326	74	1,597
SANB Promotora de Vendas e Cobrança S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Finance company	3	(1)	2
Sancap Investimentos e Participações S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Holding company	139	39	142
Santander (CF Trustee Property Nominee) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Santander (CF Trustee) Limited (d)	United Kingdom	—	(b)	—	—	Inactive	0	0	0
Santander (UK) Group Pension Schemes Trustees Limited (d)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Santander Ahorro Inmobiliario 1, S.A.	Spain	98.53%	0.00%	98.53%	98.53%	Real estate rental	1	0	1
Santander Ahorro Inmobiliario 2, S.A.	Spain	99.91%	0.00%	99.91%	99.91%	Real estate rental	1	0	1
Santander Asesorías Financieras Limitada	Chile	0.00%	67.44%	100.00%	100.00%	Securities company	53	2	37
Santander Asset Finance (December) Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Leasing	73	5	0
Santander Asset Finance plc	United Kingdom	0.00%	100.00%	100.00%	100.00%	Leasing	287	11	173

Santander

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Asset Management - S.G.O.I.C., S.A.	Portugal	0.00%	100.00%	100.00%	100.00%	Fund management company	7	5	12
Santander Asset Management Chile S.A.	Chile	0.01%	99.94%	100.00%	100.00%	Securities investment	(5)	0	0
Santander Asset Management Luxembourg, S.A.	Luxembourg	0.00%	100.00%	100.00%	100.00%	Fund management company	4	4	0
Santander Asset Management S.A. Administradora General de Fondos	Chile	0.00%	100.00%	100.00%	100.00%	Fund management company	13	9	132
Santander Asset Management UK Holdings Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Holding company	195	5	186
Santander Asset Management UK Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Management of funds and portfolios	41	15	201
Santander Asset Management, LLC (j)	Puerto Rico	0.00%	100.00%	100.00%	100.00%	Management	0	(1)	0
Santander Asset Management, S.A., S.G.I.I.C.	Spain	0.00%	100.00%	100.00%	100.00%	Fund management company	248	61	393
Santander Back-Offices Globales Mayoristas, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Services	2	1	1
Santander Banca de Inversión Colombia, S.A.S.	Colombia	100.00%	0.00%	100.00%	100.00%	Advisory services	2	0	2
Santander Bank & Trust Ltd.	Bahamas	0.00%	100.00%	100.00%	100.00%	Banking	66	(1)	22
Santander Bank Polska S.A.	Poland	67.41%	0.00%	67.41%	67.41%	Banking	4,984	199	4,270
Santander Bank, National Association	United States	0.00%	100.00%	100.00%	100.00%	Banking	10,197	444	10,637
Santander Brasil Administradora de Consórcio Ltda.	Brazil	0.00%	89.91%	100.00%	100.00%	Services	107	53	144
Santander Brasil Gestão de Recursos Ltda.	Brazil	0.08%	99.92%	100.00%	100.00%	Securities investment	396	30	470

Santander

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Capital Desarrollo, SGEIC, S.A. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Management company of investment entities	5	0	3
Santander Capital Structuring, S.A. de C.V.	Mexico	0.00%	100.00%	100.00%	100.00%	Investment companies	11	0	0
Santander Capitalização S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Insurance	9	58	60
Santander Cards Ireland Limited	Ireland	0.00%	100.00%	100.00%	100.00%	Cards	(8)	0	0
Santander Cards Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Cards	100	0	100
Santander Cards UK Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	163	0	115
Santander Chile Holding S.A.	Chile	22.11%	77.73%	99.84%	99.84%	Holding company	1,490	310	1,208
Santander Consulting (Beijing) Co., Ltd.	China	0.00%	100.00%	100.00%	100.00%	Advisory services	9	0	4
Santander Consumer (UK) plc	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	853	296	310
Santander Consumer Auto Receivables Funding 2013-B2 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	(283)	200	0
Santander Consumer Auto Receivables Funding 2013-B3 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	101	70	0
Santander Consumer Auto Receivables Funding 2018-L1 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	182	75	0
Santander Consumer Auto Receivables Funding 2018-L3 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	63	49	0
Santander Consumer Auto Receivables Funding 2018-L5 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	53	99	0
Santander Consumer Auto Receivables Funding 2019-B1 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	(140)	190	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Consumer Auto Receivables Funding 2019-L2 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	58	87	0
Santander Consumer Auto Receivables Funding 2019-L3 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	32	36	0
Santander Consumer Auto Receivables Funding 2020-B1 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	(98)	82	0
Santander Consumer Auto Receivables Funding 2020-L1 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	71	39	0
Santander Consumer Auto Receivables Funding 2020-L2 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	7	11	0
Santander Consumer Auto Receivables Funding 2021-B1 LLC	United States	0.00%	80.22%	100.00%	0.00%	Inactive	0	0	0
Santander Consumer Auto Receivables Funding 2021-B2 LLC	United States	0.00%	80.22%	100.00%	0.00%	Inactive	0	0	0
Santander Consumer Auto Receivables Funding 2021-L1 LLC	United States	0.00%	80.22%	100.00%	0.00%	Inactive	0	0	0
Santander Consumer Auto Receivables Grantor Trust 2021-D	United States	0.00%	80.22%	100.00%	0.00%	Inactive	0	0	0
Santander Consumer Auto Receivables Trust 2021-D	United States	0.00%	80.22%	100.00%	0.00%	Inactive	0	0	0
Santander Consumer Bank AG	Germany	0.00%	100.00%	100.00%	100.00%	Banking	3,313	461	5,070
Santander Consumer Bank AS	Norway	0.00%	100.00%	100.00%	100.00%	Banking	2,540	202	2,313
Santander Consumer Bank GmbH	Austria	0.00%	100.00%	100.00%	100.00%	Banking	399	45	363
Santander Consumer Bank S.A.	Poland	0.00%	80.44%	100.00%	100.00%	Banking	743	35	484
Santander Consumer Bank S.p.A.	Italy	0.00%	100.00%	100.00%	100.00%	Banking	824	178	603

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Consumer Banque S.A.	France	0.00%	100.00%	100.00%	100.00%	Banking	544	40	492
Santander Consumer Credit Services Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	(39)	0	0
Santander Consumer Finance Global Services, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	IT	6	2	5
Santander Consumer Finance Inc.	Canada	96.42%	0.00%	96.42%	96.42%	Holding company	63	0	94
Santander Consumer Finance Limitada	Chile	49.00%	34.23%	100.00%	100.00%	Finance company	63	20	41
Santander Consumer Finance Oy	Finland	0.00%	100.00%	100.00%	100.00%	Finance company	314	54	165
Santander Consumer Finance Schweiz AG	Switzerland	0.00%	100.00%	100.00%	100.00%	Leasing	50	7	60
Santander Consumer Finance, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Banking	8,807	601	10,022
Santander Consumer Financial Solutions Sp. z o.o.	Poland	0.00%	80.44%	100.00%	100.00%	Leasing	2	0	2
Santander Consumer Finanse Sp. z o.o. w likwidacji (j)	Poland	0.00%	80.44%	100.00%	100.00%	Services	16	0	12
Santander Consumer Holding Austria GmbH	Austria	0.00%	100.00%	100.00%	100.00%	Holding company	364	20	518
Santander Consumer Holding GmbH	Germany	0.00%	100.00%	100.00%	100.00%	Holding company	5,564	309	6,077
Santander Consumer Inc.	Canada	0.00%	96.42%	100.00%	100.00%	Finance company	66	16	46
Santander Consumer International Puerto Rico LLC	Puerto Rico	0.00%	80.22%	100.00%	100.00%	Services	9	0	7
Santander Consumer Leasing GmbH	Germany	0.00%	100.00%	100.00%	100.00%	Leasing	20	109	101

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Consumer Mobility Services, S.A.	Spain	0.00%	100.00%	100.00%	100.00%	Renting	12	0	12
Santander Consumer Multirent Sp. z o.o.	Poland	0.00%	80.44%	100.00%	100.00%	Leasing	27	4	5
Santander Consumer Operations Services GmbH	Germany	0.00%	100.00%	100.00%	100.00%	Services	11	1	18
Santander Consumer Receivables 10 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	764	286	0
Santander Consumer Receivables 11 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	420	196	0
Santander Consumer Receivables 3 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	315	60	0
Santander Consumer Receivables 7 LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	303	369	0
Santander Consumer Receivables Funding LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	1	3	0
Santander Consumer Renting, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Leasing	37	1	38
Santander Consumer S.A.	Argentina	0.00%	99.31%	100.00%	100.00%	Finance company	7	(2)	6
Santander Consumer S.A. Compañía de Financiamiento	Colombia	79.02%	20.98%	100.00%	0.00%	Finance company	6	(1)	6
Santander Consumer Services GmbH	Austria	0.00%	100.00%	100.00%	100.00%	Services	0	0	0
Santander Consumer Services, S.A.	Portugal	0.00%	100.00%	100.00%	100.00%	Finance company	11	2	6
Santander Consumer Spain Auto 2019-1, Fondo de Titulización	Spain	—	(b)	—	—	Securitization	0	0	0
Santander Consumer Spain Auto 2020-1, Fondo de Titulización	Spain	—	(b)	—	—	Securitization	0	0	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Consumer Spain Auto 2021-1, Fondo de Titulización	Spain	—	(b)	—	—	Securitization	0	0	0
Santander Consumer Technology Services GmbH	Germany	0.00%	100.00%	100.00%	100.00%	IT services	21	3	22
Santander Consumer USA Holdings Inc.	United States	0.00%	80.22%	80.22%	80.24%	Holding company	4,688	2,871	6,705
Santander Consumer USA Inc.	United States	0.00%	80.22%	100.00%	100.00%	Finance company	5,257	(917)	3,481
Santander Consumo 4, F.T.	Spain	—	(b)	—	—	Securitization	0	0	0
Santander Consumo, S.A. de C.V., S.O.F.O.M., E.R., Grupo Financiero Santander México	Mexico	0.00%	96.24%	100.00%	100.00%	Cards	1,123	222	1,295
Santander Corredora de Seguros Limitada	Chile	0.00%	67.20%	100.00%	100.00%	Insurance brokerage	72	2	50
Santander Corredores de Bolsa Limitada	Chile	0.00%	83.23%	100.00%	100.00%	Securities company	47	2	40
Santander Corretora de Câmbio e Valores Mobiliários S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Securities company	114	13	115
Santander Corretora de Seguros, Investimentos e Serviços S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Holding company	567	166	656
Santander Customer Voice, S.A.	Spain	99.50%	0.50%	100.00%	100.00%	Services	2	0	1
Santander de Titulización, S.G.F.T., S.A.	Spain	81.00%	19.00%	100.00%	100.00%	Fund management company	5	3	2
Santander Digital Assets, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	IT services	0	2	4
Santander Drive Auto Receivables LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	0	0	0
Santander Drive Auto Receivables Trust 2017-3	United States	—	(b)	—	—	Securitization	52	29	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Drive Auto Receivables Trust 2018-1	United States	—	(b)	—	—	Securitization	41	39	0
Santander Drive Auto Receivables Trust 2018-2	United States	—	(b)	—	—	Securitization	18	37	0
Santander Drive Auto Receivables Trust 2018-3	United States	—	(b)	—	—	Securitization	1	52	0
Santander Drive Auto Receivables Trust 2018-4	United States	—	(b)	—	—	Securitization	4	46	0
Santander Drive Auto Receivables Trust 2018-5	United States	—	(b)	—	—	Securitization	(4)	50	0
Santander Drive Auto Receivables Trust 2019-1	United States	—	(b)	—	—	Securitization	(15)	58	0
Santander Drive Auto Receivables Trust 2019-2	United States	—	(b)	—	—	Securitization	(23)	80	0
Santander Drive Auto Receivables Trust 2019-3	United States	—	(b)	—	—	Securitization	(38)	86	0
Santander Drive Auto Receivables Trust 2020-1	United States	—	(b)	—	—	Securitization	(111)	134	0
Santander Drive Auto Receivables Trust 2020-2	United States	—	(b)	—	—	Securitization	(131)	175	0
Santander Drive Auto Receivables Trust 2020-3	United States	—	(b)	—	—	Securitization	(241)	271	0
Santander Drive Auto Receivables Trust 2020-4	United States	—	(b)	—	—	Securitization	(242)	233	0
Santander Drive Auto Receivables Trust 2021-1	United States	—	(b)	—	—	Securitization	0	(43)	0
Santander Drive Auto Receivables Trust 2021-2	United States	—	(b)	—	—	Securitization	0	(162)	0
Santander Drive Auto Receivables Trust 2021-3	United States	—	(b)	—	—	Securitization	0	(263)	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Drive Auto Receivables Trust 2021-4	United States	—	(b)	—	—	Securitization	0	(272)	0
Santander Drive Auto Receivables Trust 2022-1	United States	—	(b)	—	—	Inactive	0	0	0
Santander Drive Auto Receivables Trust 2022-2	United States	—	(b)	—	—	Inactive	0	0	0
Santander Drive Auto Receivables Trust 2022-3	United States	—	(b)	—	—	Inactive	0	0	0
Santander Drive Auto Receivables Trust 2022-4	United States	—	(b)	—	—	Inactive	0	0	0
Santander Equity Investments Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	41	(11)	35
Santander España Servicios Legales y de Cumplimiento, S.L.	Spain	99.97%	0.03%	100.00%	100.00%	Services	9	1	8
Santander Estates Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Real estate	3	(10)	0
Santander European Hospitality Opportunities	Luxembourg	100.00%	0.00%	100.00%	0.00%	Investment fund	1	0	1
Santander F24 S.A.	Poland	0.00%	67.41%	100.00%	100.00%	Finance company	0	0	0
Santander Facility Management España, S.L. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Real estate	417	(3)	392
Santander Factoring S.A.	Chile	0.00%	99.84%	100.00%	100.00%	Factoring	37	0	37
Santander Factoring Sp. z o.o.	Poland	0.00%	67.41%	100.00%	100.00%	Financial services	27	11	1
Santander Factoring y Confirming, S.A., E.F.C.	Spain	100.00%	0.00%	100.00%	100.00%	Factoring	208	70	126
Santander Finance 2012-1 LLC	United States	0.00%	100.00%	100.00%	100.00%	Financial services	3	0	3

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Financial Exchanges Limited	United Kingdom	100.00%	0.00%	100.00%	100.00%	Inactive	0	0	0
Santander Financial Services plc	United Kingdom	0.00%	100.00%	100.00%	100.00%	Banking	356	32	401
Santander Financial Services, Inc.	Puerto Rico	0.00%	100.00%	100.00%	100.00%	Finance company	22	(7)	14
Santander Financiamientos S.A.	Peru	100.00%	0.00%	100.00%	0.00%	Finance company	8	(1)	8
Santander Financing S.A.S.	Colombia	100.00%	0.00%	100.00%	100.00%	Financial advisory	1	(1)	1
Santander Finanse Sp. z o.o.	Poland	0.00%	67.41%	100.00%	100.00%	Financial services	60	7	19
Santander Fintech Holdings, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	79	(14)	61
Santander Fintech Limited	United Kingdom	100.00%	0.00%	100.00%	100.00%	Finance company	218	(7)	144
Santander Fundo de Investimento Santillana Multimercado Crédito Privado Investimento No Exterior (e)	Brazil	—	(b)	—	—	Investment fund	413	19	432
Santander Fundo de Investimento SBAC Referenciado di Crédito Privado (h)	Brazil	0.00%	89.91%	100.00%	100.00%	Investment fund	1,440	11	1,303
Santander Gestión de Recaudación y Cobranzas Ltda.	Chile	0.00%	99.84%	100.00%	100.00%	Financial services	6	0	5
Santander Global Cards & Digital Solutions Brasil S.A.	Brazil	0.00%	100.00%	100.00%	100.00%	IT consulting	0	0	0
Santander Global Consumer Finance Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Finance company	7	0	7
Santander Global Facilities, S.A. de C.V.	Mexico	100.00%	0.00%	100.00%	100.00%	Real estate management	125	3	127
Santander Global Facilities, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	Real estate	73	2	70

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Global Services S.A. (j)	Uruguay	0.00%	100.00%	100.00%	100.00%	Services	0	0	0
Santander Global Sport, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Sports activity	21	(2)	19
Santander Global Technology and Operations Brasil Ltda.	Brazil	0.00%	100.00%	100.00%	100.00%	IT services	3	0	1
Santander Global Technology and Operations Chile Limitada	Chile	0.00%	100.00%	100.00%	100.00%	IT services	22	2	20
Santander Global Technology and Operations, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	IT services	434	19	370
Santander Green Investment, S.L.	Spain	99.97%	0.03%	100.00%	0.00%	Holding company	14	0	14
Santander Guarantee Company	United Kingdom	0.00%	100.00%	100.00%	100.00%	Leasing	5	0	3
Santander Hipotecario 1 Fondo de Titulización de Activos	Spain	—	(b)	—	—	Securitization	0	0	0
Santander Hipotecario 2 Fondo de Titulización de Activos	Spain	—	(b)	—	—	Securitization	0	0	0
Santander Hipotecario 3 Fondo de Titulización de Activos	Spain	—	(b)	—	—	Securitization	0	0	0
Santander Holding Imobiliária S.A.	Brazil	0.00%	89.91%	100.00%	100.00%	Real estate	71	1	65
Santander Holding Internacional, S.A.	Spain	99.95%	0.05%	100.00%	100.00%	Holding company	4,031	26	2,247
Santander Holdings USA, Inc.	United States	100.00%	0.00%	100.00%	100.00%	Holding company	17,120	2,633	12,579
Santander Inclusión Financiera, S.A. de C.V., S.O.F.O.M., E.R., Grupo Financiero Santander México	Mexico	0.00%	96.24%	100.00%	100.00%	Finance company	14	(7)	7
Santander Insurance Agency, U.S., LLC	United States	0.00%	100.00%	100.00%	100.00%	Insurance	1	0	1

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Insurance Services UK Limited	United Kingdom	100.00%	0.00%	100.00%	100.00%	Asset management	44	0	44
Santander Intermediación Correduría de Seguros, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Insurance brokerage	24	2	18
Santander International Products, Plc. (l)	Ireland	99.99%	0.01%	100.00%	100.00%	Finance company	1	0	0
Santander Inversiones S.A.	Chile	0.00%	100.00%	100.00%	100.00%	Holding company	968	201	1,032
Santander Investment Bank Limited	Bahamas	0.00%	100.00%	100.00%	100.00%	Banking	577	15	529
Santander Investment Chile Limitada	Chile	0.00%	100.00%	100.00%	100.00%	Finance company	473	6	321
Santander Investment Securities Inc.	United States	0.00%	100.00%	100.00%	100.00%	Securities company	456	32	488
Santander Investment, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Banking	1,408	77	245
Santander Investments GP 1 S.à.r.l.	Luxembourg	0.00%	100.00%	100.00%	100.00%	Management of funds	1	0	1
Santander Inwestycje Sp. z o.o.	Poland	0.00%	67.41%	100.00%	100.00%	Securities company	17	1	7
Santander ISA Managers Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Management of funds and portfolios	37	8	6
Santander Lease, S.A., E.F.C.	Spain	100.00%	0.00%	100.00%	100.00%	Leasing	61	11	51
Santander Leasing Poland Securitization 01 Designated Activity Company	Ireland	—	(b)	—	—	Securitization	0	0	0
Santander Leasing S.A.	Poland	0.00%	67.41%	100.00%	100.00%	Leasing	133	9	28
Santander Leasing S.A. Arrendamento Mercantil	Brazil	0.00%	89.91%	100.00%	100.00%	Leasing	1,709	59	1,590

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Leasing, LLC	United States	0.00%	100.00%	100.00%	100.00%	Leasing	0	1	2
Santander Lending Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Mortgage credit company	243	10	247
Santander Mediación Operador de Banca-Seguros Vinculado, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Insurance intermediary	49	1	3
Santander Merchant Platform Operations, S.A. de C.V.	Mexico	0.00%	98.16%	100.00%	100.00%	Financial services	1	1	2
Santander Merchant Platform Services, S.A. de C.V.	Mexico	0.00%	98.16%	100.00%	100.00%	Financial services	1	0	1
Santander Merchant Platform Solutions México, S.A. de C.V.	Mexico	0.00%	98.16%	100.00%	100.00%	Holding company	119	28	134
Santander Merchant Platform Solutions S.A.	Argentina	0.00%	99.66%	100.00%	100.00%	Payment methods	15	(6)	10
Santander Merchant Platform Solutions Uruguay S.A.	Uruguay	0.00%	100.00%	100.00%	100.00%	Payment methods	5	0	5
Santander Merchant S.A.	Argentina	5.10%	94.90%	100.00%	100.00%	Finance company	1	0	2
Santander Mortgage Holdings Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Financial services	(1)	(23)	0
Santander Paraty Qif PLC	Ireland	0.00%	89.91%	100.00%	100.00%	Investment companies	261	0	235
Santander Pensiones, S.A., E.G.F.P.	Spain	0.00%	100.00%	100.00%	100.00%	Pension fund management company	83	16	184
Santander Pensões - Sociedade Gestora de Fundos de Pensões, S.A.	Portugal	100.00%	0.00%	100.00%	100.00%	Pension fund management company	3	0	3
Santander Prime Auto Issuance Notes 2018-A Designated Activity Company	Ireland	—	(b)	—	—	Securitization	(15)	10	0
Santander Prime Auto Issuance Notes 2018-B Designated Activity Company	Ireland	—	(b)	—	—	Securitization	(17)	(12)	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Prime Auto Issuance Notes 2018-C Designated Activity Company	Ireland	—	(b)	—	—	Securitization	(6)	(1)	0
Santander Prime Auto Issuance Notes 2018-D Designated Activity Company	Ireland	—	(b)	—	—	Securitization	(24)	(2)	0
Santander Prime Auto Issuance Notes 2018-E Designated Activity Company	Ireland	—	(b)	—	—	Securitization	(10)	(4)	0
Santander Private Banking Gestión, S.A., S.G.I.I.C.	Spain	100.00%	0.00%	100.00%	100.00%	Fund management company	52	12	35
Santander Private Banking s.p.a. in Liquidazione (j)	Italy	100.00%	0.00%	100.00%	100.00%	Finance company	13	1	7
Santander Private Banking UK Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Holding company	304	0	414
Santander Private Real Estate Advisory & Management, S.A.	Spain	99.99%	0.01%	100.00%	100.00%	Real estate	4	0	4
Santander Private Real Estate Advisory, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Real estate	14	1	15
Santander Real Estate, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Inactive	1	0	1
Santander Retail Auto Lease Funding LLC	United States	0.00%	80.22%	100.00%	100.00%	Finance company	0	0	0
Santander Retail Auto Lease Trust 2019-A	United States	—	(b)	—	—	Securitization	67	89	0
Santander Retail Auto Lease Trust 2019-B	United States	—	(b)	—	—	Securitization	42	71	0
Santander Retail Auto Lease Trust 2019-C	United States	—	(b)	—	—	Securitization	45	59	0
Santander Retail Auto Lease Trust 2020-A	United States	—	(b)	—	—	Securitization	48	33	0
Santander Retail Auto Lease Trust 2020-B	United States	—	(b)	—	—	Securitization	26	40	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander: Direct	% of ownership held by Banco Santander: Indirect	Percentage of voting power (k): Year 2021	Percentage of voting power (k): Year 2020	Activity	EUR million (a): Capital + reserves	EUR million (a): Net results	EUR million (a): Carrying amount
Santander Retail Auto Lease Trust 2021-A	United States	—	(b)	—	—	Securitization	0	63	0
Santander Retail Auto Lease Trust 2021-B	United States	—	(b)	—	—	Securitization	0	63	0
Santander Retail Auto Lease Trust 2021-C	United States	—	(b)	—	—	Securitization	0	88	0
Santander Retail Auto Lease Trust 2022-A	United States	—	(b)	—	—	Inactive	0	0	0
Santander Retail Auto Lease Trust 2022-B	United States	—	(b)	—	—	Inactive	0	0	0
Santander Retail Auto Lease Trust 2022-C	United States	—	(b)	—	—	Inactive	0	0	0
Santander Revolving Auto Loan Trust 2019-A	United States	—	(b)	—	—	Securitization	(112)	111	0
Santander Revolving Auto Loan Trust 2021-A	United States	—	(b)	—	—	Inactive	0	0	0
Santander Río Asset Management Gerente de Fondos Comunes de Inversión S.A.	Argentina	0.00%	100.00%	100.00%	100.00%	Fund management company	6	7	3
Santander Río Trust S.A.	Argentina	0.00%	99.97%	100.00%	100.00%	Services	0	0	0
Santander Río Valores S.A.	Argentina	5.10%	94.25%	100.00%	100.00%	Securities company	3	1	4
Santander RMBS 6, Fondo de Titulización	Spain	—	(b)	—	—	Securitization	0	0	0
Santander S.A. Sociedad Securitizadora	Chile	0.00%	67.24%	100.00%	100.00%	Fund management company	0	0	0
Santander Secretariat Services Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Holding company	0	0	0
Santander Securities LLC	United States	0.00%	100.00%	100.00%	100.00%	Securities company	39	4	43

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander Seguros y Reaseguros, Compañía Aseguradora, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Insurance	1,434	191	1,188
Santander Servicios Corporativos, S.A. de C.V.	Mexico	0.00%	96.24%	100.00%	100.00%	Services	11	0	11
Santander Servicios Especializados, S.A. de C.V.	Mexico	0.00%	96.24%	100.00%	100.00%	Services	3	0	3
Santander Technology USA, LLC	United States	0.00%	100.00%	100.00%	100.00%	IT services	80	(12)	69
Santander Tecnología Argentina S.A.	Argentina	0.00%	99.35%	100.00%	100.00%	IT services	3	2	4
Santander Tecnología México, S.A. de C.V.	Mexico	0.00%	96.24%	100.00%	100.00%	IT services	45	1	45
Santander Tecnología y Operaciones España, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	IT services	46	(4)	37
Santander Totta Seguros, Companhia de Seguros de Vida, S.A.	Portugal	0.00%	99.91%	100.00%	100.00%	Insurance	117	25	47
Santander Totta, SGPS, S.A.	Portugal	99.91 %	0.00 %	99.91 %	99.91 %	Holding company	3,550	54	5,351
Santander Towarzystwo Funduszy Inwestycyjnych S.A.	Poland	50.00 %	33.70 %	100.00 %	100.00 %	Fund management company	4	25	15
Santander Trade Services Limited	Hong Kong	0.00 %	100.00 %	100.00 %	100.00 %	Inactive	19	3	16
Santander UK Group Holdings plc	United Kingdom	77.67 %	22.33 %	100.00 %	100.00 %	Finance company	14,302	1,783	16,444
Santander UK Investments	United Kingdom	100.00 %	0.00 %	100.00 %	100.00 %	Finance company	53	(2)	48
Santander UK Operations Limited	United Kingdom	0.00 %	100.00 %	100.00 %	100.00 %	Services	27	2	18
Santander UK plc	United Kingdom	0.00 %	100.00 %	100.00 %	100.00 %	Banking	16,029	937	15,741

Santander

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Santander UK Technology Limited	United Kingdom	0.00 %	100.00 %	100.00 %	100.00 %	IT services	39	4	7
Santander Wealth Management International SA	Switzerland	0.00 %	100.00 %	100.00 %	100.00 %	Asset management	0	0	0
Santusa Holding, S.L.	Spain	69.76 %	30.24 %	100.00 %	100.00 %	Holding company	8,423	637	6,524
SC Austria Finance 2020-1 Designated Activity Company	Ireland	—	(b)	—	—	Securitization	0	0	0
SC Germany Auto 2014-2 UG (haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0
SC Germany Auto 2016-2 UG (haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0
SC Germany Auto 2018-1 UG (haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	(1)	0	0
SC Germany Auto 2019-1 UG (haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0
SC Germany Consumer 2014-1 UG (haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0
SC Germany Consumer 2018-1 UG (haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0
SC Germany Mobility 2019-1 UG (haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0
SC Germany S.A.	Luxembourg	—	(b)	—	—	Securitization	0	0	0
SC Germany S.A., Compartment Consumer 2020-1	Luxembourg	—	(b)	—	—	Securitization	0	0	0
SC Germany S.A., Compartment Consumer 2021-1	Luxembourg	—	(b)	—	—	Securitization	0	0	0
SC Germany S.A., Compartment Mobility 2020-1	Luxembourg	—	(b)	—	—	Securitization	0	0	0

Subsidiaries of Banco Santander, S.A. [1]

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
SC Germany Vehicles 2013-1 UG (haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0
SC Germany Vehicles 2015-1 UG (haftungsbeschränkt)	Germany	—	(b)	—	—	Securitization	0	0	0
SC Poland Consumer 15-1 Sp. z.o.o. (j)	Poland	—	(b)	—	—	Securitization	0	0	0
SC Poland Consumer 16-1 Sp. z o.o.	Poland	—	(b)	—	—	Securitization	0	0	0
SCF Ajoneuvohallinto I Limited (j)	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Ajoneuvohallinto II Limited (j)	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Ajoneuvohallinto IX Limited	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Ajoneuvohallinto KIMI VI Limited (j)	Ireland	—	(b)	—	—	Securitization	0	0	0

Subsidiaries of Banco Santander, S.A.1

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
SCF Ajoneuvohallinto VII Limited	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Ajoneuvohallinto VIII Limited	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Ajoneuvohallinto X Limited	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Eastside Locks GP Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Real estate management	0	0	0
SCF Rahoituspalvelut I Designated Activity Company (j)	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Rahoituspalvelut II Designated Activity Company (j)	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Rahoituspalvelut IX DAC	Ireland	—	(b)	—	—	Securitization	1	0	0
SCF Rahoituspalvelut KIMI VI Designated Activity Company (j)	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Rahoituspalvelut VII Designated Activity Company	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Rahoituspalvelut VIII Designated Activity Company	Ireland	—	(b)	—	—	Securitization	0	0	0
SCF Rahoituspalvelut X DAC	Ireland	—	(b)	—	—	Securitization	0	0	0
SCM Poland Auto 2019-1 DAC	Ireland	—	(b)	—	—	Securitization	0	0	0
SDMX Superdigital, S.A. de C.V.	Mexico	0.00%	100.00%	100.00%	100.00%	Payment platform	0	0	2
Secucor Finance 2013-I Designated Activity Company (i) (j)	Ireland	—	(b)	—	—	Securitization	0	0	0

Subsidiaries of Banco Santander, S.A.1

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Secucor Finance 2021-1, DAC	Ireland	—	(b)	—	—	Securitization	0	0	0
Services and Promotions Delaware Corp.	United States	0.00%	100.00%	100.00%	100.00%	Holding company	58	2	60
Services and Promotions Miami LLC	United States	0.00%	100.00%	100.00%	100.00%	Real estate	51	3	53
Servicio de Alarmas Controladas por Ordenador, S.A.	Spain	99.99%	0.01%	100.00%	100.00%	Security	2	0	1
Servicios de Cobranza, Recuperación y Seguimiento, S.A. de C.V.	Mexico	0.00%	85.00%	85.00%	85.00%	Finance company	34	1	32
Sheppards Moneybrokers Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Shiloh III Wind Project, LLC	United States	0.00%	100.00%	100.00%	100.00%	Renewable energies	324	1	325
Silk Finance No. 5	Portugal	—	(b)	—	—	Securitization	1	9	0
SMPS Merchant Platform Solutions México, S.A de C.V	Mexico	0.00%	98.16%	100.00%	100.00%	Payments and collection services	112	27	141
Sociedad Integral de Valoraciones Automatizadas, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Appraisals	1	1	1
Sociedad Operadora de Tarjetas de Pago Santander Getnet Chile S.A.	Chile	0.00%	67.12%	100.00%	100.00%	Payments and collection services	20	-8	8
Socur S.A. (f)	Uruguay	100.00%	0.00%	100.00%	100.00%	Finance company	43	23	59
Solarlaser Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Solution 4Fleet Consultoria Empresarial S.A.	Brazil	0.00%	71.93%	80.00%	0.00%	Vehicle rental	3	0	2

Subsidiaries of Banco Santander, S.A.1

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Sovereign Community Development Company	United States	0.00%	100.00%	100.00%	100.00%	Holding company	38	1	39
Sovereign Delaware Investment Corporation	United States	0.00%	100.00%	100.00%	100.00%	Holding company	134	1	135
Sovereign Lease Holdings, LLC	United States	0.00%	100.00%	100.00%	100.00%	Financial services	221	1	221
Sovereign REIT Holdings, Inc.	United States	0.00%	100.00%	100.00%	100.00%	Holding company	7501	74	7575
Sovereign Spirit Limited (n)	Bermudas	0.00%	100.00%	100.00%	100.00%	Leasing	0	0	0
SSA Swiss Advisors AG	Switzerland	0.00%	100.00%	100.00%	0.00%	Asset management	0	0	3
Sterrebeeck B.V.	Netherlands	100.00%	0.00%	100.00%	100.00%	Holding company	4058	713	10331
Suleyado 2003, S.L. Unipersonal	Spain	0.00%	100.00%	100.00%	100.00%	Securities investment	25	0	24
Summer Empreendimentos Ltda.	Brazil	0.00%	89.91%	100.00%	100.00%	Real estate management	3	0	3
Super Pagamentos e Administração de Meios Eletrônicos S.A.	Brazil	0.00%	100.00%	100.00%	100.00%	Payment services	30	-7	79
Superdigital Argentina S.A.U.	Argentina	0.00%	100.00%	100.00%	100.00%	IT services	1	-1	1
Superdigital Colombia S.A.S.	Colombia	0.00%	100.00%	100.00%	99.97%	IT services	0	0	0
Superdigital Holding Company, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Holding company	103	3	106
Superdigital Perú S.A.C.	Peru	0.00%	100.00%	100.00%	100.00%	Financial services	1	0	0

Subsidiaries of Banco Santander, S.A.1

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Suzuki Servicios Financieros, S.L.	Spain	0.00%	51.00%	51.00%	51.00%	Intermediation	9	3	0
Svensk Autofinans WH 1 Designated Activity Company	Ireland	—	(b)	—	—	Securitization	0	0	0
Swesant SA	Switzerland	0.00%	100.00%	100.00%	100.00%	Holding company	19	42	0
SX Negócios Ltda.	Brazil	0.00%	89.91%	100.00%	100.00%	Telemarketing	10	2	11
Tabasco Energía España, S.L. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	6	0	0
Taxagest Sociedade Gestora de Participações Sociais, S.A.	Portugal	0.00%	99.87%	100.00%	100.00%	Holding company	56	0	0
Teatinos Siglo XXI Inversiones S.A.	Chile	50.00%	50.00%	100.00%	100.00%	Holding company	1497	277	2064
Tekutina Private Limited	India	0.00%	100.00%	100.00%	0.00%	Financial services	1	0	1
The Alliance & Leicester Corporation Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Real estate	14	0	14
The Best Specialty Coffee, S.L. Unipersonal	Spain	100.00%	0.00%	100.00%	100.00%	Restaurant services	3	0	2
Time Retail Finance Limited (j)	United Kingdom	0.00%	100.00%	100.00%	100.00%	Services	0	0	0
TIMFin S.p.A.	Italy	0.00%	51.00%	51.00%	51.00%	Finance company	53	-8	28
Tonopah Solar I, LLC	United States	0.00%	100.00%	100.00%	100.00%	Holding company	5	0	5
Tornquist Asesores de Seguros S.A. (j)	Argentina	0.00%	99.99%	99.99%	99.99%	Inactive	0	0	0

Subsidiaries of Banco Santander, S.A.1

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Toro Corretora de Títulos e Valores Mobiliários Ltda.	Brazil	0.00%	53.95%	60.00%	0.00%	Securities investment	11	-2	5
Toro Investimentos S.A.	Brazil	0.00%	53.95%	100.00%	0.00%	Consulting services	5	-1	2
Totta (Ireland), PLC (h)	Ireland	0.00%	99.86%	100.00%	100.00%	Finance company	451	9	450
Totta Urbe - Empresa de Administração e Construções, S.A.	Portugal	0.00%	99.86%	100.00%	100.00%	Real estate	102	-5	100
Trabajando.com Mexico, S.A. de C.V. en liquidación (j)	Mexico	0.00%	100.00%	100.00%	100.00%	Services	0	0	0
Trade Maps 3 Hong Kong Limited	Hong-Kong	—	(b)	—	—	Securitization	0	0	0
Trade Maps 3 Ireland Limited (j)	Ireland	—	(b)	—	—	Securitization	0	0	0
Trans Rotor Limited (j)	United Kingdom	100.00%	0.00%	100.00%	100.00%	Renting	0	0	0
Transolver Finance EFC, S.A.	Spain	0.00%	51.00%	51.00%	51.00%	Leasing	67	4	17
Tresmares Growth Fund Santander, SCR, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	32	0	32
Tresmares Santander Direct Lending, SICC, S.A.	Spain	99.60%	0.00%	99.60%	99.60%	Management of funds	414	6	413
Tuttle and Son Limited	United Kingdom	0.00%	100.00%	100.00%	100.00%	Inactive	0	0	0
Universia Brasil S.A.	Brazil	0.00%	100.00%	100.00%	100.00%	Internet	0	0	0
Universia Chile S.A.	Chile	0.00%	86.84%	86.84%	86.84%	Internet	0	0	0

Subsidiaries of Banco Santander, S.A.1

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (k)		Activity	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020		Capital + reserves	Net results	Carrying amount
Universia Colombia S.A.S.	Colombia	0.00%	100.00%	100.00%	100.00%	Internet	0	0	0
Universia España Red de Universidades, S.A.	Spain	0.00%	89.45%	89.45%	89.45%	Internet	2	0	2
Universia Holding, S.L.	Spain	100.00%	0.00%	100.00%	100.00%	Holding company	19	-3	17
Universia México, S.A. de C.V.	Mexico	0.00%	100.00%	100.00%	100.00%	Internet	0	0	0
Universia Perú, S.A.	Peru	0.00%	99.76%	99.76%	100.00%	Internet	0	0	0
Universia Uruguay, S.A.	Uruguay	0.00%	100.00%	100.00%	100.00%	Internet	0	0	0
Uro Property Holdings, SOCIMI, S.A. (c)	Spain	99.99%	0.00%	99.99%	99.99%	Real estate investment	163	9	179
Verbena FCVS - Fundo de Investimentos em Direitos Creditórios	Brazil	—	(b)	—	—	Investment fund	-3	3	0
Wallcesa, S.A.	Spain	100.00%	0.00%	100.00%	100.00%	Financial services	-936	9	0
Wave Holdco, S.L.	Spain	0.00%	100.00%	100.00%	100.00%	Holding company	0	0	0
Waypoint Insurance Group, Inc.	United States	0.00%	100.00%	100.00%	100.00%	Holding company	9	0	9
WIM Servicios Corporativos, S.A. de C.V.	Mexico	0.00%	100.00%	100.00%	100.00%	Advisory services	0	0	0
WTW Shipping Designated Activity Company	Ireland	100.00%	0.00%	100.00%	100.00%	Leasing	15	1	9
Yera Servicer Company 2021, S.L. Unipersonal	Spain	0.00%	100.00%	100.00%	0.00%	Real estate management	19	-1	18

a. Amount according to the provisional books of each company at the date of publication of these annexes generally referring to 31 December 2021 without taking into account, where applicable, interim dividends paid during the year. In the carrying amount (cost net of provision), the Group's percentage ownership has been applied to the figure for each holding company, disregarding goodwill impairments made in the consolidation process. The figures for foreign companies are converted into euros at the year-end exchange rate.
b. Companies over which effective control is maintained.
c. Data as at 31 December 2020, latest available accounts.
d. Data as at 31 March 2021, latest accounts available.
e. Data as at 30 June 2021, last accounts available.
f. Data as at 30 September 2021, last accounts available.
g. Data as at 31 July 2021, last accounts available.
h. Data as at 30 November 2021, last accounts available.
i. Data as at 31 January 2021, latest available accounts.
j. Company in liquidation as at 31 December 2021.
k. Pursuant to Article 3 of Royal Decree 1159/ 2010, of 17 September, approving the rules for the preparation of consolidated annual accounts, in order to determine the voting rights, voting rights held directly by the parent company have been added to those held by companies controlled by the parent company or by other persons acting in their own name but on behalf of a Group company. For these purposes, the number of votes corresponding to the parent company, in relation to the companies indirectly dependent on it, is that corresponding to the dependent company that directly participates in the share capital of the latter.
l. Company resident for tax purposes in Spain.
m. See note 2.b.i.
n. Company resident for tax purposes in the United Kingdom.
o. Data as at 28 February 2021, last accounts available.
p. Companies in liquidation. Pending registration.

(1) Companies issuing preference shares are listed in Annex III, together with other relevant information.

Santander

Appendix II

Societies of which Grupo Santander owns more than 5% (g) , entities associated with Grupo Santander and jointly controlled entities

		% of ownership held by Banco Santander		Percentage of voting power (f)				EUR million (a)		
Company	Location	Direct	Indirect	Year 2021	Year 2020	Activity	Type of company	Asset	Capital + reserves	Net results
Abra 1 Limited (k)	Caymand Island	—	(h)	—	—	Leasing	Joint venture	0	0	0
Achmea Tussenholding, B.V. (b)	Netherlands	8.89%	0.00%	8.89%	8.89%	Holding company	-	356	356	20
Administrador Financiero de Transantiago S.A.	Chile	0.00%	13.42%	20.00%	20.00%	Payment and collection services	Associated	56	18	2
Aegon Santander Portugal Não Vida - Companhia de Seguros, S.A.	Portugal	0.00%	48.95%	49.00%	49.00%	Insurance	Joint venture	56	14	9
Aegon Santander Portugal Vida - Companhia de Seguros Vida, S.A.	Portugal	0.00%	48.95%	49.00%	49.00%	Insurance	Joint venture	129	23	18
Aeroplan - Sociedade Construtora de Aeroportos, Lda. (e)	Portugal	0.00%	19.97%	20.00%	20.00%	Inactive	-	0	0	0
Aguas de Fuensanta, S.A. (e) (k)	Spain	36.78%	0.00%	36.78%	36.78%	Food	-	0	0	0
Alcuter 2, S.L. (k)	Spain	37.23%	0.00%	37.23%	37.23%	Technical services	-	0	0	0
Alma UK Holdings Ltd	United Kingdom	30.00%	0.00%	30.00%	0.00%	Holding company	Joint venture	4	4	-1
Altamira Asset Management, S.A. (consolidado)	Spain	0.00%	15.00%	15.00%	15.00%	Real estate	-	236	3	-2
Apolo Fundo de Investimento em Direitos Creditórios	Brazil	0.00%	29.97%	33.33%	33.33%	Investment fund	Joint venture	454	421	33
Arena Communications Network, S.L. (consolidado) (b)	Spain	20.00%	0.00%	20.00%	20.00%	Advertising	Associated	296	99	-6
Attijariwafa Bank Société Anonyme (consolidado) (b)	Morocco	0.00%	5.10%	5.10%	5.11%	Banking	-	54,011	4,809	352

Santander

Societies of which Grupo Santander owns more than 5% (g) , entities associated with Grupo Santander and jointly controlled entities

		% of ownership held by Banco Santander		Percentage of voting power (f)				EUR million (a)		
Company	Location	Direct	Indirect	Year 2021	Year 2020	Activity	Type of company	Asset	Capital + reserves	Net results
Autopistas del Sol S.A. (b)	Argentina	0.00%	14.17%	14.17%	14.17%	Motorway concession	-	169	82	0
Banco RCI Brasil S.A.	Brazil	0.00%	35.87%	39.89%	39.89%	Banking	Joint venture	1,699	217	25
Banco S3 Caceis México, S.A., Institución de Banca Múltiple	Mexico	0.00%	50.00%	50.00%	50.00%	Banking	Joint venture	157	67	4
Bank of Beijing Consumer Finance Company	China	0.00%	20.00%	20.00%	20.00%	Finance company	Associated	1,369	120	8
Bank of Shanghai Co., Ltd. (consolidado) (b)	China	6.54%	0.00%	6.54%	6.54%	Banking	-	342,252	23,563	2,903
CACEIS (consolidado)	France	0.00%	30.50%	30.50%	30.50%	Custody services	Associated	122,132	3,979	187
Câmara Interbancária de Pagamentos - CIP	Brazil	0.00%	16.07%	17.87%	17.65%	Payment and collection services	-	342	235	69
Cantabria Capital, SGEIC, S.A.	Spain	50.00%	0.00%	50.00%	50.00%	Venture capital	Associated	0	0	0
Car10 Tecnologia e Informação S.A.	Brazil	0.00%	41.96%	46.67%	—	Internet	Joint venture	8	2	(1)
CCPT - ComprarCasa, Rede Serviços Imobiliários, S.A.	Portugal	0.00%	49.98%	49.98%	49.98%	Real estate services	Joint venture	0	0	0
Centro de Compensación Automatizado S.A.	Chile	0.00%	22.37%	33.33%	33.33%	Payment and collection services	Associated	14	9	3
Centro para el Desarrollo, Investigación y Aplicación de Nuevas Tecnologías, S.A. (b)	Spain	0.00%	49.00%	49.00%	49.00%	Technology	Associated	3	2	0
CNP Santander Insurance Europe Designated Activity Company	Ireland	49.00%	0.00%	49.00%	49.00%	Insurance brokerage	Associated	1,004	191	42
CNP Santander Insurance Life Designated Activity Company	Ireland	49.00%	0.00%	49.00%	49.00%	Insurance brokerage	Associated	1,294	151	43

Santander

Societies of which Grupo Santander owns more than 5% (g) , entities associated with Grupo Santander and jointly controlled entities

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (f)		Activity	Type of company	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020			Asset	Capital + reserves	Net results
CNP Santander Insurance Services Ireland Limited	Ireland	49.00%	0.00%	49.00%	49.00%	Services	Associated	31	4	1
Comder Contraparte Central S.A	Chile	0.00%	8.37%	12.47%	12.47%	Financial services	Associated	34	11	1
Companhia Promotora UCI	Brazil	0.00%	25.00%	25.00%	25.00%	Financial services	Joint venture	1	-1	0
Compañia Española de Financiación de Desarrollo, Cofides, S.A., SME (b)	Spain	20.18%	0.00%	20.18%	20.18%	Finance company	-	153	140	10
Compañía Española de Seguros de Crédito a la Exportación, S.A., Compañía de Seguros y Reaseguros (consolidado) (b)	Spain	23.33%	0.55%	23.88%	23.88%	Credit insurance	-	942	385	34
Compañía Española de Viviendas en Alquiler, S.A.	Spain	24.07%	0.00%	24.07%	24.07%	Real estate	Associated	528	333	14
Compañía para los Desarrollos Inmobiliarios de la Ciudad de Hispalis, S.L., en liquidación (l) (e)	Spain	21.98%	0.00%	21.98%	21.98%	Real estate development	-	38	6	0
Connecting Visions Ecosystems, S.L.	Spain	19.90%	0.00%	19.90%	19.90%	Consulting services	Joint venture	2	2	-1
Corkfoc Cortiças, S.A. (c)	Portugal	0.00%	27.55%	27.58%	27.58%	Cork industry	-	3	20	0
Corridor Texas Holdings LLC (consolidado) (b)	United States	0.00%	33.40%	33.40%	36.30%	Holding company	-	190	163	-5
Desarrollo Eólico las Majas VI, S.L.	Spain	45.00%	0.00%	45.00%	0.00%	Renewable energies	Joint venture	28	6	0
Ebury Partners Limited (consolidado) (d) (m)	United Kingdom	0.00%	44.06%	51.28%	50.41%	Payment services	Associated	781	55	-69
Energias Renovables de Ormonde 25, S.L.	Spain	0.00%	55.00%	55.00%	0.00%	Renewable energies	Joint venture	0	0	0
Energias Renovables de Ormonde 26, S.L.	Spain	0.00%	55.00%	55.00%	0.00%	Renewable energies	Joint venture	0	0	0

Santander

Societies of which Grupo Santander owns more than 5% (g) , entities associated with Grupo Santander and jointly controlled entities

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (f)		Activity	Type of company	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020			Asset	Capital + reserves	Net results
Energias Renovables de Ormonde 27, S.L.	Spain	0.00%	55.00%	55.00%	0.00%	Renewable energies	Joint venture	0	0	0
Energias Renovables de Ormonde 30, S.L.	Spain	0.00%	55.00%	55.00%	0.00%	Renewable energies	Joint venture	1	0	0
Energias Renovables de Titania, S.L.	Spain	0.00%	55.00%	55.00%	0.00%	Renewable energies	Joint venture	0	0	0
Energias Renovables Gladiateur 45, S.L.	Spain	0.00%	55.00%	55.00%	0.00%	Renewable energies	Joint venture	0	0	0
Energias Renovables Prometeo, S.L.	Spain	0.00%	55.00%	55.00%	0.00%	Renewable energies	Joint venture	0	0	0
Euro Automatic Cash Entidad de Pago, S.L.	Spain	50.00%	0.00%	50.00%	50.00%	Payment services	Associated	57	46	-12
European Hospitality Opportunities S.à r.l. (o)	Luxembourg	0.00%	49.00%	49.00%	0.00%	Holding company	Joint venture	0	0	0
Evolve SPV S.r.l.	Italy	—	(h)	—	—	Securitizations	Joint venture	105	0	7
FAFER- Empreendimentos Urbanísticos e de Construção, S.A. (b) (e)	Portugal	0.00%	36.57%	36.62%	36.62%	Real estate	-	0	1	0
Federal Reserve Bank of Boston (b)	United States	0.00%	20.09%	20.09%	25.73%	Banking	-	194,429	1,573	-1
Fondo de Titulización de Activos UCI 11	Spain	—	(h)	—	—	Securitizations	Joint venture	133	0	0
Fondo de Titulización de Activos UCI 14	Spain	—	(h)	—	—	Securitizations	Joint venture	346	0	0
Fondo de Titulización de Activos UCI 15	Spain	—	(h)	—	—	Securitizations	Joint venture	426	0	0
Fondo de Titulización de Activos UCI 16	Spain	—	(h)	—	—	Securitizations	Joint venture	597	0	0

Santander

Societies of which Grupo Santander owns more than 5% (g) , entities associated with Grupo Santander and jointly controlled entities

		% of ownership held by Banco Santander		Percentage of voting power (f)				EUR million (a)		
Company	Location	Direct	Indirect	Year 2021	Year 2020	Activity	Type of company	Asset	Capital + reserves	Net results
Fondo de Titulización de Activos UCI 17	Spain	—	(h)	—	—	Securitizations	Joint venture	517	0	0
Fondo de Titulización Hipotecaria UCI 12	Spain	—	(h)	—	—	Securitizations	Joint venture	189	0	0
Fondo de Titulización, RMBS Prado III	Spain	—	(h)	—	—	Securitizations	Joint venture	0	0	0
Fondo de Titulización, RMBS Prado IV	Spain	—	(h)	—	—	Securitizations	Joint venture	288	0	0
Fondo de Titulización, RMBS Prado IX	Spain	—	(h)	—	—	Securitizations	Joint venture	499	0	0
Fondo de Titulización, RMBS Prado V	Spain	—	(h)	—	—	Securitizations	Joint venture	309	0	0
Fondo de Titulización, RMBS Prado VI	Spain	—	(h)	—	—	Securitizations	Joint venture	340	0	0
Fondo de Titulización, RMBS Prado VII	Spain	—	(h)	—	—	Securitizations	Joint venture	481	0	0
Fondo de Titulización, RMBS Prado VIII	Spain	—	(h)	—	—	Securitizations	Joint venture	467	0	0
Fortune Auto Finance Co., Ltd	China	0.00%	50.00%	50.00%	50.00%	Finance company	Joint venture	3,181	384	61
Fremman limited	United Kingdom	33.00%	0.00%	4.99%	4.99%	Finance company	Associated	2	0	-3
Gestora de Inteligência de Crédito S.A.	Brazil	0.00%	17.98%	20.00%	20.00%	Collection	Joint venture	186	21	-10
Gire S.A.	Argentina	0.00%	57.93%	58.33%	58.33%	Payment and collection services	Associated	158	25	13
HCUK Auto Funding 2017-2 Ltd	United Kingdom	—	(h)	—	—	Securitizations	Joint venture	833	0	0

Santander

Societies of which Grupo Santander owns more than 5% (g) , entities associated with Grupo Santander and jointly controlled entities

		% of ownership held by Banco Santander		Percentage of voting power (f)				EUR million (a)		
Company	Location	Direct	Indirect	Year 2021	Year 2020	Activity	Type of company	Asset	Capital + reserves	Net results
Healthy Neighborhoods Equity Fund I LP (b)	United States	0.00%	22.37%	22.37%	22.37%	Real estate	-	14	14	-2
Hyundai Capital UK Limited	United Kingdom	0.00%	50.01%	50.01%	50.01%	Finance company	Joint venture	4,338	323	79
Hyundai Corretora de Seguros Ltda.	Brazil	0.00%	44.96%	50.00%	50.00%	Insurance brokerage	Joint venture	1	0	0
Imperial Holding S.C.A. (e) (i)	Luxembourg	0.00%	36.36%	36.36%	36.36%	Securities investment	-	0	-112	0
Imperial Management S.à r.l. (b) (e)	Luxembourg	0.00%	40.20%	40.20%	40.20%	Holding company	-	0	0	0
Indice Iberoamericano de Investigación y Conocimiento, A.I.E.	Spain	0.00%	51.00%	51.00%	51.00%	Information system	Joint venture	1	-6	-1
Inmoalemania Gestión de Activos Inmobiliarios, S.A.	Spain	0.00%	20.00%	20.00%	20.00%	Holding company	-	0	0	0
Innohub S.A.P.I. de C.V.	Mexico	0.00%	20.00%	20.00%	20.00%	IT services	Associated	1	3	-2
Inverlur Aguilas I, S.L.	Spain	0.00%	50.00%	50.00%	50.00%	Real estate	Joint venture	0	0	0
Inverlur Aguilas II, S.L.	Spain	0.00%	50.00%	50.00%	50.00%	Real estate	Joint venture	1	1	0
Inversiones Ibersuizas, S.A. (b)	Spain	25.42%	0.00%	25.42%	25.42%	Venture capital	-	31	19	10
Inversiones ZS América Dos Ltda.	Chile	0.00%	49.00%	49.00%	49.00%	Real estate and securities investment	Associated	269	269	34
Inversiones ZS América SpA	Chile	0.00%	49.00%	49.00%	49.00%	Real estate and securities investment	Associated	395	396	35
J.C. Flowers I L.P. (b)	United States	0.00%	11.10%	0.00%	0.00%	Holding company	-	2	2	-1

Santander

Societies of which Grupo Santander owns more than 5% (g) , entities associated with Grupo Santander and jointly controlled entities

		% of ownership held by Banco Santander		Percentage of voting power (f)				EUR million (a)		
Company	Location	Direct	Indirect	Year 2021	Year 2020	Activity	Type of company	Asset	Capital + reserves	Net results
JCF AIV P L.P. (b)	Canada	0.00%	7.67%	4.99%	4.99%	Holding company	-	5	5	0
LB Oprent, S.A.	Spain	40.00%	0.00%	40.00%	38.33%	Industrial machinery rent	Associated	4	1	1
Loop Gestão de Pátios S.A.	Brazil	0.00%	32.10%	35.70%	35.70%	Business services	Joint venture	7	2	-1
Mapfre Santander Portugal - Companhia de Seguros, S.A.	Portugal	0.00%	49.94%	49.99%	49.99%	Insurance	Associated	13	8	-3
Massachusetts Business Development Corp. (consolidado) (b)	United States	0.00%	21.61%	21.61%	21.61%	Finance company	-	55	11	1
MB Capital Fund IV, LLC (b)	United States	0.00%	21.51%	21.51%	21.51%	Finance company	-	18	17	1
Merlin Properties, SOCIMI, S.A. (consolidado) (b)	Spain	19.07%	5.70%	24.77%	24.81%	Real estate investment	Associated	13,478	6,640	56
Metrovacesa, S.A. (consolidado) (b)	Spain	31.94%	17.50%	49.44%	49.45%	Real estate development	Associated	2,927	2,343	-164
New PEL S.à r.l. (c) (e)	Luxembourg	0.00%	7.67%	0.00%	0.00%	Holding company	-	0	0	0
NIB Special Investors IV-A LP (n)	Canada	0.00%	0.00%	0.00%	4.99%	Holding company	-	0	0	0
NIB Special Investors IV-B LP (n)	Canada	0.00%	0.00%	0.00%	4.99%	Holding company	-	0	0	0
Niuco 15, S.L. (k)	Spain	37.23%	0.00%	37.23%	37.23%	Technical services	-	0	0	0
Ocyener 2008, S.L.	Spain	0.00%	45.00%	45.00%	0.00%	Holding company	Associated	2	1	1
Operadora de Activos Beta, S.A. de C.V.	Mexico	49.99%	0.00%	49.99%	49.99%	Finance company	Associated	0	0	0

Santander

Societies of which Grupo Santander owns more than 5% (g) , entities associated with Grupo Santander and jointly controlled entities

		% of ownership held by Banco Santander		Percentage of voting power (f)				EUR million (a)		
Company	Location	Direct	Indirect	Year 2021	Year 2020	Activity	Type of company	Asset	Capital + reserves	Net results
Pag10 Fomento Mercantil Eireli	Brazil	0.00%	41.96%	46.67%	—	Factoring	Joint venture	0	0	0
Payever GmbH	Germany	0.00%	10.00%	10.00%	10.00%	Software	Associated	3	2	0
Play Digital S.A.	Argentina	0.00%	15.59%	15.70%	0.00%	Payment platform	Associated	11	23	-12
POLFUND - Fundusz Poręczeń Kredytowych S.A.	Poland	0.00%	33.70%	50.00%	50.00%	Management	Associated	28	20	0
Portland SPV S.r.l.	Italy	0.00%	(h)	0.00%	0.00%	Securitizations	Joint venture	234	0	0
Procapital - Investimentos Imobiliários, S.A. (c) (e)	Portugal	0.00%	39.96%	40.00%	40.00%	Real estate	-	2	13	0
Project Quasar Investments 2017, S.L. (consolidado) (b)	Spain	49.00%	0.00%	49.00%	49.00%	Holding company	-	6,984	2,638	-1,852
Promontoria Manzana, S.A. (consolidado) (b)	Spain	20.00%	0.00%	20.00%	20.00%	Holding company	Associated	1,068	319	-38
PSA Corretora de Seguros e Serviços Ltda.	Brazil	0.00%	44.96%	50.00%	50.00%	Insurance	Joint venture	0	0	0
PSA Insurance Europe Limited	Malta	0.00%	50.00%	50.00%	50.00%	Insurance	Joint venture	254	59	26
PSA Life Insurance Europe Limited	Malta	0.00%	50.00%	50.00%	50.00%	Insurance	Joint venture	110	13	20
Redbanc S.A.	Chile	0.00%	22.44%	33.43%	33.43%	Services	Associated	29	9	1
Redsys Servicios de Procesamiento, S.L. (consolidado)	Spain	24.90%	0.06%	24.96%	20.06%	Cards	Associated	108	71	4
Relevante e Astuto, S.A.	Portugal	0.00%	70.00%	70.00%	0.00%	Real estate management	Joint venture	5	0	0

Santander

Societies of which Grupo Santander owns more than 5% (g) , entities associated with Grupo Santander and jointly controlled entities

		% of ownership held by Banco Santander		Percentage of voting power (f)				EUR million (a)		
Company	Location	Direct	Indirect	Year 2021	Year 2020	Activity	Type of company	Asset	Capital + reserves	Net results
Retama Real Estate, S.A.	Spain	0.00%	50.00%	50.00%	50.00%	Services	Joint venture	30	-45	-1
Rías Redbanc S.A.	Uruguay	0.00%	25.00%	25.00%	25.00%	Services	-	3	1	0
RMBS Green Belem I	Portugal	—	(h)	—	—	Securitizations	Joint venture	309	0	0
S3 Caceis Brasil Distribuidora de Títulos e Valores Mobiliários S.A.	Brazil	0.00%	50.00%	50.00%	50.00%	Securities investment	Joint venture	207	143	18
S3 Caceis Brasil Participações S.A.	Brazil	0.00%	50.00%	50.00%	50.00%	Holding company	Joint venture	163	145	18
Sancus Green Investments II, S.C.R., S.A. (o)	Spain	0.00%	43.29%	43.29%	0.00%	Venture capital	-	0	0	0
Santander Alternatives SICAV RAIF (c)	Luxembourg	0.00%	48.03%	48.03%	100.00%	Investment company	-	13	12	0
Santander Assurance Solutions, S.A.	Spain	0.00%	66.67%	66.67%	73.99%	Insurance intermediary	Joint venture	10	4	1
Santander Auto S.A.	Brazil	0.00%	44.96%	50.00%	50.00%	Insurance	Associated	25	5	2
Santander Aviva Towarzystwo Ubezpieczeń na Życie S.A.	Poland	0.00%	33.03%	49.00%	49.00%	Insurance	Associated	299	20	21
Santander Aviva Towarzystwo Ubezpieczeń S.A.	Poland	0.00%	33.03%	49.00%	49.00%	Insurance	Associated	94	39	12
Santander Caceis Colombia S.A. Sociedad Fiduciaria	Colombia	0.00%	50.00%	50.00%	50.00%	Finance company	Joint venture	7	7	-1
Santander Caceis Latam Holding 1, S.L.	Spain	0.00%	50.00%	50.00%	50.00%	Holding company	Joint venture	722	716	5
Santander Caceis Latam Holding 2, S.L.	Spain	0.00%	50.00%	50.00%	50.00%	Holding company	Joint venture	2	2	0

Santander

Societies of which Grupo Santander owns more than 5% (g) , entities associated with Grupo Santander and jointly controlled entities

		% of ownership held by Banco Santander		Percentage of voting power (f)				EUR million (a)		
Company	Location	Direct	Indirect	Year 2021	Year 2020	Activity	Type of company	Asset	Capital + reserves	Net results
Santander Generales Seguros y Reaseguros, S.A.	Spain	0.00%	49.00%	49.00%	49.00%	Insurance	Joint venture	732	206	39
Santander Mapfre Seguros y Reaseguros, S.A.	Spain	0.00%	49.99%	49.99%	49.99%	Insurance	Associated	90	57	-13
Santander Vida Seguros y Reaseguros, S.A.	Spain	0.00%	49.00%	49.00%	49.00%	Insurance	Joint venture	1,036	367	36
Sedesa Seguros de Depósitos S.A. (b)	Argentina	0.00%	13.47%	13.56%	0.00%	Fund management	-	2	2	0
Sepacon 31, S.L. (k)	Spain	37.23%	0.00%	37.23%	37.23%	Technical services	-	0	0	0
Servicios de Infraestructura de Mercado OTC S.A	Chile	0.00%	8.37%	12.48%	12.48%	Services	Associated	37	13	0
SIBS-SGPS, S.A. (b)	Portugal	0.00%	16.52%	16.55%	16.55%	Portfolio management	-	365	59	41
Siguler Guff SBIC Fund LP (b)	United States	0.00%	20.00%	20.00%	20.00%	Investment fund	-	8	1	0
Sistema de Tarjetas y Medios de Pago, S.A. (b)	Spain	20.61%	0.00%	20.61%	18.11%	Payment methods	Associated	673	4	0
Sistemas Técnicos de Encofrados, S.A. (consolidado) (b)	Spain	27.15%	0.00%	27.15%	27.15%	Building materials	-	89	14	0
Sociedad Conjunta para la Emisión y Gestión de Medios de Pago, E.F.C., S.A.	Spain	45.70%	0.00%	45.70%	45.70%	Payment services	Joint venture	107	36	1
Sociedad de Garantía Recíproca de Santander, S.G.R. (b)	Spain	25.35%	0.25%	25.60%	25.73%	Financial services	-	17	11	0
Sociedad de Gestión de Activos Procedentes de la Reestructuración Bancaria, S.A. (b)	Spain	22.21%	0.00%	22.21%	22.21%	Financial services	-	27,586	230	-1,073
Sociedad Interbancaria de Depósitos de Valores S.A.	Chile	0.00%	19.66%	29.29%	29.29%	Securities deposit	Associated	7	6	1

Santander

Societies of which Grupo Santander owns more than 5% (g) , entities associated with Grupo Santander and jointly controlled entities

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (f)		Activity	Type of company	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020			Asset	Capital + reserves	Net results
Solar Maritime Designated Activity Company (b)	Ireland	—	(h)	—	—	Leasing	Joint venture	113	-7	0
Stephens Ranch Wind Energy Holdco LLC (consolidado) (b)	United States	0.00%	17.10%	17.10%	19.20%	Renewable energies	-	218	208	-7
Tbforte Segurança e Transporte de Valores Ltda.	Brazil	0.00%	17.06%	18.98%	19.81%	Security	Associated	101	62	2
Tbnet Comércio, Locação e Administração Ltda.	Brazil	0.00%	17.06%	18.98%	19.81%	Telecommunications	Associated	69	66	2
Tecban Serviços Integrados Ltda.	Brazil	0.00%	17.06%	18.98%	0.00%	IT services	Associated	0	0	0
Tecnologia Bancária S.A.	Brazil	0.00%	17.06%	19.81%	19.81%	ATM	Associated	428	115	26
Tikgi Aviation One Designated Activity Company	Ireland	—	(h)	—	—	Renting	-	224	-2	1
Tonopah Solar Energy Holdings I, LLC (consolidado) (b)	United States	0.00%	26.80%	26.80%	26.80%	Holding company	Joint venture	0	0	0
Trabajando.com Chile S.A.	Chile	0.00%	33.33%	33.33%	33.33%	Services	Associated	2	-1	1
Transbank S.A.	Chile	0.00%	16.78%	25.00%	25.00%	Cards	Associated	1,366	101	-13
Tresmares Growth Fund II, SCR, S.A.	Spain	40.00%	0.00%	40.00%	40.00%	Holding company	-	49	45	-2
Tresmares Growth Fund III, SCR, S.A.	Spain	40.00%	0.00%	40.00%	40.00%	Holding company	-	38	34	-2
U.C.I., S.A.	Spain	50.00%	0.00%	50.00%	50.00%	Holding company	Joint venture	448	127	-6
UCI Hellas Credit and Loan Receivables Servicing Company S.A.	Greece	0.00%	50.00%	50.00%	50.00%	Financial services	Joint venture	1	1	0

Santander

Societies of which Grupo Santander owns more than 5% (g) , entities associated with Grupo Santander and jointly controlled entities

Company	Location	% of ownership held by Banco Santander		Percentage of voting power (f)		Activity	Type of company	EUR million (a)		
		Direct	Indirect	Year 2021	Year 2020			Asset	Capital + reserves	Net results
UCI Holding Brasil Ltda.	Brazil	0.00%	50.00%	50.00%	50.00%	Holding company	Joint venture	1	0	0
UCI Mediação de Seguros Unipessoal, Lda.	Portugal	0.00%	50.00%	50.00%	50.00%	Insurance brokerage	Joint venture	0	0	0
UCI Servicios para Profesionales Inmobiliarios, S.A.	Spain	0.00%	50.00%	50.00%	50.00%	Real estate services	Joint venture	1	0	0
Unicre-Instituição Financeira de Crédito, S.A.	Portugal	0.00%	21.83%	21.86%	21.86%	Finance company	Associated	409	99	20
Unión de Créditos Inmobiliarios, S.A., EFC	Spain	0.00%	50.00%	50.00%	50.00%	Mortgage credit company	Joint venture	11,294	459	7
VCFS Germany GmbH	Germany	0.00%	50.00%	50.00%	50.00%	Marketing	Joint venture	1	0	0
Venda de Veículos Fundo de Investimento em Direitos Creditórios	Brazil	—	(h)	—	—	Securitizations	Joint venture	107	103	4
Volvo Car Financial Services UK Limited	United Kingdom	0.00%	50.01%	50.01%	50.00%	Leasing	Joint venture	927	81	-4
Webmotors S.A.	Brazil	0.00%	62.94%	70.00%	70.00%	Services	Joint venture	54	32	10
Zurich Santander Brasil Seguros e Previdência S.A.	Brazil	0.00%	48.79%	48.79%	48.79%	Insurance	Associated	11,892	365	106
Zurich Santander Brasil Seguros S.A.	Brazil	0.00%	48.79%	48.79%	48.79%	Insurance	Associated	156	-2	29
Zurich Santander Holding (Spain), S.L.	Spain	0.00%	49.00%	49.00%	49.00%	Holding company	Associated	1,182	936	246
Zurich Santander Holding Dos (Spain), S.L.	Spain	0.00%	49.00%	49.00%	49.00%	Holding company	Associated	587	384	204
Zurich Santander Insurance América, S.L.	Spain	49.00%	0.00%	49.00%	49.00%	Holding company	Associated	1,996	1,490	475

Santander

Societies of which Grupo Santander owns more than 5% (g) , entities associated with Grupo Santander and jointly controlled entities

		% of ownership held by Banco Santander		Percentage of voting power (f)				EUR million (a)		
Company	Location	Direct	Indirect	Year 2021	Year 2020	Activity	Type of company	Asset	Capital + reserves	Net results
Zurich Santander Seguros Argentina S.A. (j)	Argentina	0.00%	49.00%	49.00%	49.00%	Insurance	Associated	60	18	18
Zurich Santander Seguros de Vida Chile S.A.	Chile	0.00%	49.00%	49.00%	49.00%	Insurance	Associated	213	23	30
Zurich Santander Seguros Generales Chile S.A.	Chile	0.00%	49.00%	49.00%	49.00%	Insurance	Associated	249	45	13
Zurich Santander Seguros México, S.A.	Mexico	0.00%	49.00%	49.00%	49.00%	Insurance	Associated	887	34	88
Zurich Santander Seguros Uruguay S.A.	Uruguay	0.00%	49.00%	49.00%	49.00%	Insurance	Associated	32	14	7

a. Amount according to the provisional books at the date of publication of these annexes of each company generally referring to 31 December 2021, unless otherwise indicated because the annual accounts have not yet been prepared. Data for foreign companies are converted into euros at the year-end exchange rate.
b. Data as at 31 December 2020, latest available accounts.
c. Data as at 31 December 2019, latest available accounts.
d. The Group is entitled to receive 51.28% of the dividends distributed by the company.
e. Company in liquidation as at 31 December 2021.
f. Pursuant to Article 3 of Royal Decree 1159/ 2010, of 17 September, approving the rules for the preparation of consolidated annual accounts, in order to determine the voting rights, voting rights held directly by the parent company have been added to those held by companies controlled by the parent company or by other persons acting in their own name but on behalf of a group company. For these purposes, the number of votes corresponding to the parent company, in relation to the companies indirectly dependent on it, is that corresponding to the dependent company that directly participates in the share capital of the latter.
g. Excluding the Group companies listed in Appendix I, as well as those which are of negligible interest with respect to the true and fair view that the consolidated financial statements must give (in accordance with articles 48 of the Commercial Code and 260 of the Spanish Companies Act).
h. Companies over which joint control is maintained.
i. Data as at 31 October 2020, latest available accounts.
j. Data as at 30 June 2021, latest available accounts.
k. Company with no financial information available.
l. Data as at 30 November 2018, latest available accounts.
m. Data as at 30 April 2021, latest available accounts.
n. Company in liquidation. Pending registration.
o. Company recently incorporated, no accounts available.

Santander

Appendix III

Issuing subsidiaries of shares and preference shares

Company	Location	% of ownership held by Banco Santander		Activity	EUR million (a)			
		Direct	Indirect		Capital	Reserves	Cost of preferred	Net results
Emisora Santander España, S.A. Unipersonal	Spain	100.00%	0.00%	Finance company	2	—	—	—
Santander UK (Structured Solutions) Limited	United Kingdom	0.00%	100.00%	Finance company	—	—	—	—
Sovereign Real Estate Investment Trust	United States	0.00%	100.00%	Finance company	4,931	(3,219)	43	74

a. Amount according to the books of each interim company as at 31 December 2021, converted into euro (in the case of foreign companies) at the year-end exchange rate.

Santander

Appendix IV

Notifications of acquisitions and disposals of investments in 2021

Details of the notifications of acquisitions and disposals of participations for 2021 in accordance with Article 125 of the Securities Market Law may be found below:

On 10 May 2021, Banco Santander, S.A. notified to the CNMV of the increase of its stake in REPSOL above the 3% threshold up to 3.584%, dated as of 4 May 4 2021.

On 25 June 2021, Banco Santander, S.A. notified to the CNMV of the decrease of its stake in REPSOL, S.A. below the 3% threshold up to 2.718%, dated as of 21 June 2021.

On 26 November 2021, Banco Santander, S.A. notified to the CNMV of the increase of its stake in REPSOL above the 3% threshold up to 3.829%, dated as of 22 November 2021.

In relation to the information required by 155 of the Corporate Enterprises Act, on the shareholdings in which Grupo Santander owns more than 10% of the capital of another company, and the successive acquisitions of more than 5% of the share capital, see appendices I, II and III.

Appendix V

Deduction for reinvestment of extraordinary income corresponding to the companies of the Fiscal Consolidation Group, whose dominant was Banco Popular Español, S.A.U.

Based on the provisions of the Transitional Provision 24th of Law 27/2014 on income eligible for the reinvestment of extraordinary profits provided for in article 42 of the previous Consolidated Text of the Corporation Income Tax Law, which states that such income shall be regulated by the provisions of the aforementioned article 42, and in particular compliance with paragraph 10 of that provision, which provides for the obligation to detail the amount of the income received from the deduction provided for in that Article, as well as the year in which the reinvestment took place, all of this as long as the period for maintaining the investment has not yet been met provided for in paragraph 8 of the aforementioned provision, the following information is collected concerning capital gains generated up to the financial year 2014, with a reinvestment period from the year 2014 to 2017.

The detailed information refers to both Banco Popular and other companies in its Fiscal Consolidated Group up to 2017, inclusive, which obtained income eligible for the reinvestment deduction and/or have made investments in assets referred to in Article 42 (3).

Amount of income received to the 12% deduction in 2017: EUR 21,333,543.67.

Reinvestments made in 2017: EUR 47,546,533.73.

Appendix VI

List of Transactions subject to the Special Regime for Mergers, Divisions, Assets Contributions and Exchange of Securities in which the company has acted as an Acquiring Entity or Partner

In compliance with the reporting obligations established in Article 86 of Law 27/2014, of 27 November, on Corporate Tax (LIS), the following information is provided on the transactions subject to the tax regime of mergers, divisions, contributions of assets and exchange of securities, provided for in Chapter VII of Title VII of the LIS, in which BANCO SANTANDER, S.A. has intervened during 2021:

I. According to Article 86 (1) of the LIS, it is reported that the company BANCO SANTANDER, S.A. has intervened as an acquirer in the following transactions:

- Merger by absorption of POPULAR SPAIN HOLDING DE INVERSIONES S.L.U., SANTANDER INVESTMENT I S.A.U. and ADMINISTRACIÓN DE BANCOS LATINOAMERICANOS SANTANDER S.L., by BANCO SANTANDER, S.A. which owned all the shares of the absorbed entities, directly or indirectly. This transaction constitutes a merger as regulated in Article 76.1.c) of the LIS. The information required by Article 86.1 of the LIS is included in these notes to the consolidated financial statements.

II. According to Article 86 (2) of the LIS, it is reported that BANCO SANTANDER, S.A. has intervened as a partner in the following operations:

- Merger by absorption of SANTANDER GLOBAL OPERATIONS, S.A., SOCIEDAD UNIPERSONAL by SANTANDER GLOBAL TECHNOLOGY AND OPERATIONS, S.L., SOCIEDAD UNIPERSONAL (formerly SANTANDER GLOBAL TECHNOLOGY, S.L., SOCIEDAD UNIPERSONAL). This transaction constitutes a merger as regulated in article 76.1.a) of the LIS. BANCO SANTANDER, S.A. had a full shareholding in the capital of both the absorbed company and the absorbing company. The book value of the securities delivered from SANTANDER GLOBAL OPERATIONS, S.A., SOCIEDAD UNIPERSONAL was EUR 23,619,104.29. The value at which BANCO SANTANDER, S.A. has accounted for the securities received in the entity SANTANDER GLOBAL TECHNOLOGY AND OPERATIONS, S.L., SOCIEDAD UNIPERSONAL is EUR 23,619,104.29.
- Segregation of the autonomous economic unit that integrates the business of management of empty bank branches, with project of closure or leased to third parties not linked to the banking activity of BANCO SANTANDER, S.A. in favor of a newly created company called RETAILCOMPANY 2021, S.L.U. This operation constitutes a spin-off of those regulated in article 76.2.1ºb) of the LIS. The net value of the assets and liabilities corresponding to the branch of activity contributed amounts to EUR 262,030,688.77. The value at which BANCO SANTANDER, S.A. has recorded the securities received from RETAILCOMPANY 2021, S.L.U. is EUR 262,030,688.77.
- Exchange of securities regulated in articles 76.5 and 80 of the LIS by which PAGONxt, S.L. acquires most of the voting rights (51%) in the entity GETNET EUROPE, ENTIDAD DE PAGO, S.L. (formerly called SANTANDER ESPAÑA MERCHANT SERVICES ENTIDAD DE PAGO S.L.) through the attribution to its partner BANCO SANTANDER, S.A., of securities representing the acquiring entity. The book value at which BANCO SANTANDER, S.A. had accounted for the securities delivered from GETNET EUROPE, ENTIDAD DE PAGO, S.L. was EUR 94,452,410.36. The value at which BANCO SANTANDER, S.A. has accounted for the securities received from PAGONxt, S.L. is EUR 110,111,550.00.
- Exchange of securities regulated in articles 76.5 and 80 of the LIS by which PAGONxt, S.L. acquires a greater shareholding (it already held the majority) of the voting rights in the entity PAGONxt MERCHANT SOLUTIONS S.L. This transaction is executed as a contribution to reserves made by the partners, consisting of a non-monetary contribution by BANCO SANTANDER, S.A. of the shares of PAGONxt MERCHANT SOLUTIONS S.L. (representing a 39.4% share of the share capital of this company and of its voting rights). The book value at which BANCO SANTANDER, S.A. had recorded the securities delivered from PAGONxt MERCHANT SOLUTIONS S.L. was EUR 295,504,952.66, while their tax value amounted to EUR 594,734,704.60, the difference corresponding to a mark-to-market adjustment made in BANCO SANTANDER, S.A. as a result of the spin-off operations that gave rise to the acquisition of the holdings (article 17.4 of the LIS). The value at which BANCO SANTANDER, S.A. has recorded the securities received from PAGONxt, S.L. is EUR 295,504,952.66.

- Non-monetary contribution regulated in article 87 of the LIS by which PAGONxt, S.L. acquires a participation (49%) in the entity GETNET EUROPE, ENTIDAD DE PAGO, S.L. (formerly called SANTANDER ESPAÑA MERCHANT SERVICES ENTIDAD DE PAGO S.L.) through the attribution to its partner BANCO SANTANDER, S.A., of securities representing the acquiring entity. The book value at which BANCO SANTANDER, S.A. had accounted for the securities delivered from GETNET EUROPE, ENTIDAD DE PAGO, S.L. was EUR 90,748,394.22. The value at which BANCO SANTANDER, S.A. has accounted for the securities received from PAGONxt, S.L. is EUR 104,924,000.

- Non-monetary contribution of assets by BANCO SANTANDER, S.A. and ALTAMIRA SANTANDER REAL ESTATE, S.A. to LANDCOMPANY 2020, S.L. This transaction constitutes a non-monetary contribution as regulated in article 87 of the LIS and did not benefit from the regime provided for in article 77.1 of said regulation. The net value of the assets contributed amounts to EUR 20,998,930.00. The value at which BANCO SANTANDER, S.A. has accounted for the securities received from LANDCOMPANY 2020, S.L. is EUR 20,998,930.00.

III. In compliance with Article 86.3 of the LIS, it is noted that the particulars required by Article 86 (1) and (2) relating to transactions subject to the tax regime for mergers, divisions, contributions of assets and exchange of securities provided for in Chapter VII of Title VII of the LIS, in which BANCO SANTANDER , S.A. has intervened as an acquirer or as a partner during previous years, they are listed in the first annual report approved after each of the aforementioned operations.

Appendix VII

Information to include in compliance with Article 12.3 of the TRLIS

Regarding the information requested in Article 12.3 of the Consolidated Text which passes on the Corporate Income Tax Law as amended by Law 4/2008 of December 23, 2008, regarding tax periods whisch began on January 1, 2008, until its repeal by Law 16/2013 of October 29, 2013, Banco Santander has no deductions pending to integrate as of year-end 2021.

Appendix VIII

Information regarding the merger by absorption of Popular Spain Holding de Inversiones, S.L.U., Santander Investment I, S.A.U. and Administración de Bancos Latinoamericanos Santander, S.L., pursuant to Article 86.1 of the Corporate Income Tax Law 27/2014.

a. A year in which the transferring entity acquired the transferred assets that are liable to amortization.

There are no assets in Santander Global Property, S.L.U. and BPE Financiaciones, S.A.U. entities that are subject to amortization.

There are no assets at Popular Spain Holding de Inversiones, S.L.U., Santander Investment I, S.A.U. and Administración de Bancos Latinoamericanos Santander, S.L. that are subject to depreciation.

b. Last balance sheet closed by transmitting entities.

The latest balance sheets of transmitting entities are contained in note 1.i.

c. A list of assets acquired which have been incorporated into the accounting books for a value other than the value listed in the transferring entity prior to the completion of the transaction, expressing both values as well as the value corrections made in the accounting books of the two entities.

The following is a detail of the asset captions in the balance sheet of the transferring entity that have been recorded at a different carrying amount in the acquiring entity:

EUR thousand

Heading	Book value Santander Investment I, S.A.U.	Merge Value Adjustment	Book value Banco Santander
Investments in subsidiaries, joint ventures and associates	1,857	227	2,084

EUR thousand

Heading	Book value Administración de Bancos Latinoamericanos Santander, S.L.	Merge Value Adjustment	Book value Banco Santander
Investments in subsidiaries, joint ventures and associates	576	176	752

d. List of tax profits enjoyed by the transferring entity, for which the acquiring entity must assume compliance with certain requirements.

There are no tax benefits in the transferring entity over which Banco Santander, S.A. must assume compliance with certain requirements.

Santander

Appendix IX

Agent network - Collaborating agents, Agents empowered at 31 of December 2021.

NEOBAN SL

BERCAMLU S.L.

SALVADOR CEA PEREZ

FRANCISCO JAVIER MARTINEZ FERNANDEZ

ANTONIO GUILLEN RAMIREZ

MARIA DE LOS ANGELES ESCUDERO ORTEGA

ALBERTO SANTIAGO LLORENTE MARTINEZ

JOSE ANTONIO ESCUDERO ORTEGA

JOAQUIN GALVEZ RODRIGUEZ

CRISTOPHER DIAZ MUÑOZ

IVAN PEREZ VARGAS

SIMO CONSULTORIA SL

ALICIA MATILDE LOPEZ FRANCO

RAFAEL JESUS VILLARREAL ARIZA

SARA GIL LECHADO

FANDILA GARCIA ZAMORA

CARBALLO & CARO 2019, S.L.

ERNESTO MARTINEZ FERNANDEZ

ISAMAR ORDOÑEZ MUÑOZ

BRIGIDA MARIA ROMERO SALADO

FRANCISCA MARIA LOPEZ PEREZ

GONZALO MARTINEZ-CAÑAVATE GOMEZ-MILLAN

MAYKA GONZALEZ HEREDIA

LIDIA MONTILLA GONZALEZ

JOSEFA SIMON YEBENES

MANUEL BARRIGA DORADO

FERNANDO GONZALEZ SANCHEZ

CORDOBESA DE INVERSIONES PUNTAS LEÓN S.L.

AAFF RUTE S.L.

FINANTOR 2017, S.L.

ROLARG SERVICIOS FINANCIEROS, S.L.

BURMA AGENTES FINANCIEROS S.L.

MONICA CARRANZA S.L.U.

TINTO SANTA ROSA S.L.

SERSAF S.L.

BOPECON INVERSIONES S.L.

CHARUMA S.L.

CETINVE, S.L.

TREZAVILLA SLU

SANPIBO SL

NUBARPOL S.L.

SERVICIOS FINANCIEROS SANLO, S.L.

GRANDERSAN SLU

VINUESA & MOCHON 2014, S.L.L.

ISAMER FINANCIEROS S.L.

ABU ROAD, S.L.

RODRIGUEZ CALS FINANCIERA S.L.

GESTIÓN FINANCIERA MALACITANA 2007 S.L.

RC 2007 FINANCIEROS SL

ESTEPONA FINANCIEROS, S.L.

MIGUEL ANGEL CASASOLA CASASOLA

AGUEDA MARTIN RAMIREZ

FRANCISCO JOSE LOPEZ SILVENTE

SOLEDAD LAMBERTO GARCIA

GESTIONES MORENO E HIJOS S.L.

ANTONIO MARIN VALIENTE

ANTONIO ALFONSO HERRERA RAMIREZ

ANTONIO CEREZUELA RUIZ

FRANCISCO JOSE GARCIA MORA

MULTIALGAIDA, S.L.

MARIA LUISA PEREZ GUILLEN

CRISTINA NADALES PEREZ

NATALIA FERNANDEZ SANCHEZ

SERVICIOS FINANCIEROS PEDRO ABAD, S.L.

JOSE MARIN PEREZ

Santander

JUAN CARLOS GOMEZ GARCIA

ANGEL LOPEZ RODRIGUEZ

JOSE MANUEL GUEVARA GONZALEZ

SERVICIOS FINANCIEROS DEL CONDADO S.L.U.

ASESORIA GESTION GLOBAL S.L.

ANA MARIA DIAZ SANTANA

NURIA MONTERO GONZALEZ

MARIA ISABEL GARCIA GONZALEZ

FRANCISCO JAVIER ORTIZ CASTILLO

MARIA ANTONIA POZA GARCIA

NURIA FERNANDEZ REYES

MARIA DEL PILAR PLAZA MUÑOZ

MARIA JOSE CHARNECO HERRERO

ANTONIO ESCUDERO VILLAREJO

CARMEN PINTO DIAZ

LOURDES ROMERO LOPEZ

REQUERTILLO, S.L.

JUAN LEON NAVARRETE

SERVICIOS INTEGRALES DOÑANA S.L.

MARIA DOLORES MORIANA RODRIGUEZ

RICARDO PIÑERO GARCIA

FRANCISCO CASTILLO CONTRERAS

MARIA VICTORIA POVEDA DIOS

MARIA JESUS MARTIN RODRIGUEZ

JOSE CABRERA COSANO

JOMICACE, S.L.

MANUEL DOMINGUEZ BEATO

SEBASTIAN PAVON CAMPOY

JUAN PEDRO BENITEZ GARCIA

MARIA BELEN GONZALEZ RAMIREZ

MARIA CONCEPCION TELLEZ RUIZ

GRUPO ALMARES 2015 S.L.

SERGIO MUÑOZ RAMIREZ

ROCIO BELTRAN ZAFRA

FERNANDO POLO MATEOS

PLAZA SERVICIOS FINANCIEROS SL

CARLOS GAVIN LORIENTE

JOSE ANTONIO GARCIA CHINCHETRU

MARIA PILAR UROZ PASCUAL

HECTOR EDO ALEGRE

ALCARRAZ PERALTA, S.L.

ANA BELEN PAMPLONA CALAHORRA

JAVIER GURIDI EZQUERRO

MARIA ELENA TREMPS ALDEA

LIDYA FERNANDEZ AMURRIO

MAXIMO PLUMED LUCAS

NAVARRETE GESTION 2018 SL

JOAN FELIU PUIGVERT

MARIA DEL CARMEN NIEVES MARTINEZ

MARIA DEL PILAR RAMIREZ DIEZ

MARIA HERNANDEZ ALONSO

LANZA MENDOZA GESTION FINANCIERA, S.L.

LOURDES GIMENO TIRADO

GEMMA ARRUFAT RAFALES

JOSE GABRIEL PASTOR MANZANO

DIEGO CARCAS SANCHEZ

ELSA TORRES MOLINA

IRENE ABIZANDA VAL

MARIA JOSE AUSEJO MARTINEZ

MARIA AURORA TORRES GARCIA

LAURA MARTINEZ ZUBIRI

ALVARO MOLINER ABADIA

SERGIO URDANIZ GARBAYO

IGNACIO SAGÜETA URTASUN

ANA ISABEL MONTULL CACHO

OSCAR MANUEL MATA VIDAL

MIRIAM GARCIA ALFARO

SARA MORALES ECHEVERRIA

MANUEL GARCIA MONTOLIO

Santander

BELEN PALACIO TORRES

BEATRIZ SERRANO SAN PEDRO

GONZALEZ Y NAVES, S.L.

MARIA EUGENIA GONZALEZ SANCHEZ

RAUL RIVAS VAL

ALVARO DIAZ ASTARLOA

MARIA DANIELA URUÑUELA NAJERA

SAIORA ELISABET GARCIA URZAINQUI

RAMON ARENAS NUÑEZ

JOSE JAVIER MAZUELA CREGO

OLAIA SAN MIGUEL MICHELENA

ALMUDENA GONZALEZ GALLEGO

VICTOR JIMENEZ VERANO

SHEILA DEL BARRIO SAENZ

VICTOR GONZALEZ CABO

Oliver Labarta S.L.

ANGELA FIGAROLA TARDIU

NOELIA MARTIN BOLIVAR

ANA MARIA RUBIO PALACIOS

JUAN ROSSELLO AMENGUAL

FRANCISCO JOSE VIEJO GONZALEZ

ROSA MARIA POBLADOR ASENSIO

MARMA MALLORCA, S.L.

JAVIER TERAN CAMUS

LAURA ALTABA ASENJO

MARIA JOSE DE LA DUEÑA FUSTER

DAVID GONZALEZ SANZ

FINANZAS ALLOZA S.L

ERNESTO DOMINGUEZ SLU

OLGA LLORENTE DA COSTA

JOSE DANIEL GARCES VIRGOS

MARIA ANTONIA BARCELO AMENGUAL

HELLEN JANETH MENDEZ MURCIA

ADRIAN MILIAN GONZALEZ

ANGEL MOLLEDA VELEZ

OSCAR MANUEL ALFAGEME MARTIN

INTERMEDIACION NASARRE S.L.

MIGUEL SUAREZ RODRIGUEZ

HECTOR DIAZ DIEZ

JESUS QUINTANA MAULEON

LIDIA RIVAS JODAR

MARIA VISITACION BECARES MARTINEZ

PASCUAL HIGINIO DOMINGO PEÑA

MARIA DE LOS ANGELES RODRIGO GUTIERREZ

LUIS MIGUEL VEGA JANILLO

CLARA URGEL CASEDAS

MARIA FERNANDEZ DE LA UZ

EMILIO MARTIN LANCHAS

LAURA COMENGE HIGUERAS

PEDRO CONDE DIEZ

MARIA SASTRE GONZALEZ

MARIA MERCEDES SALAS BAENA

PATRICIA RODRIGUEZ ALONSO

0880 SANTANDER SANTIBAÑEZ, S.L.

MARIA ESTHER FERRANDEZ PARDOS

RAQUEL RIVERA PALACIO

PABLO HERRERO ALONSO

PRISCILA CRISTOBAL MALO

JAVIER COBO GARCIA

MARIA MANUELA SANCHEZ CASTAÑO

SERGIO BUIL GARCIA

CARLA SANJULIAN MENDEZ

DAVID LOPEZ-GAVALO GAGO

ALEJANDRO IBAÑEZ LERA

BUSINESS AND PERSONAL SERVICE S.A.

ALBERTO RIAÑO MOROCHO

JOSE JAVIER SALAVERRI MARTINEZ

LAP ASTURIAS S.L.

ARCADIO SAEZ SANZ

RAUL DE PABLO DEL OLMO

FRANCISCO ALBARRÁN PELAYO

RAQUEL BARBA ARRANZ

JAIME RIVERO CALVO

1321 SANTANDER LA ALBERCA S.L.

MARIA VICTORIA IGLESIAS MATEOS

RAQUEL GAVELA SANCHEZ

JUAN MANUEL CASTRO FANEGO

ÓRDAS CASADO S.L.

MARTA ISABEL MARTINEZ ESCOBAR

FERNANDO ENRIQUE RODRIGUEZ PEREZ

MARIA TERESA SALGADO RODRIGUEZ

MARIA VICTORIA DURAN ALVEZ

MADRIGAL FINANCIERO SL

BEATRIZ GALLEGO MARTIN

JESUS CANTON GONZALEZ

VANESA VEGA BLANCO

CRISTINA GONZALEZ MARTIN

MARIA SALOME DE LA ROSA DIEZ

SONSOLES RIVERO HERNANDEZ

FERNANDO AREVALO GOMEZ

JORGE ALONSO ARRIBAS

MARIA TERESA FRUTOS BERNAL

ASUNCION MATEOS PASCUAL

MARIA ELENA BRAVO SAN INOCENTE

2927 GESTION SANTANDER SL

40165 AGENTE COLABORADOR PRADENA, S.L.

ALBA SANCHEZ MATEOS

MARIA INES VALCUENDE GARMON

AGUSTINA AGUDO FRANCIA

IGNACIO MARIA ANTOLIN FERNANDEZ

JULIANA BERLANA DEL POZO

MARIA VICTORIA SAN ROMAN FERNANDEZ

NOELIA SANZ VILLARREAL

JORGE APARICIO GONZALEZ

ANGELA MAGDALENO GONZALEZ

ALBERTO MORAN PEREZ

EDUARDO GONZALEZ MARTIN

ALBARRAN FIGAL S.L.

GONZALO PEREZ JOSE

MARIA ELISA ROSON FERRERO

MARTA HERNANDEZ PEREZ

ANA MARIA SIERRA HERNANDEZ

JONATAN PEREZ DE DIOS

A.C. SANTOVENIA DE PISUERGA SL.

PABLO ALVAREZ CORTIÑAS

BEATRIZ GARRIDO SANTANDER S.L.

24198 SANTANDER LA VIRGEN DEL CAMINO, S.L.

JOSE MARIA CABERO MATA

GESBANCYL, S.L.

JOSE BERZAL MIGUEL

4079 SANTANDER-SACRAMENIA S.L.

PEDRO CUESTA BAUTISTA

6155 SANTANDER LEDESMA, S.L.

SUSANA CASADO FERRERO

CLARA HERNANDEZ NOVOA

MARCIAL SANTOS SANCHEZ

6395 Poyales del Hoyo Agente Colaborador S.L.

JOANA LOPEZ ROZAS

ANA MARIA SAN MILLAN COBO

IGNACIO ARROYO RODRIGUEZ

SANTOS BOL GARCIA

NURIA COBELO DE ANDRES

MARIA DEL CARMEN CAMUS SAN EMETERIO

MIGUEL ANGEL PRIETO CORDERO

A.C. LAGUNA DE NEGRILLOS S.L.

MERINO LOBATO S.L.

MARIA MERCEDES GUZON LIEBANA

JACINTO MANUEL PALOMERO PALOMERO

MARIA DEL SOCORRO BENAVIDES SANCHEZ

GESTION SANTANDER CARBAJOSA, S.L.

MIKEL ANDRES SANCHEZ CASTILLO

BENEDICTO GUTIERREZ BERNAL

MARIA AUXILIADORA PEREZ SERRADA

ANNA LOURDES MATEOS SANCHEZ

ARACELI GONZALEZ MEJIAS

JUAN ANTONIO ARRIBAS CRISTOBAL

ANA MARIA MARTIN LOBO

MARCOS ASENJO HERNANDO

AREVALO Y MONGE, S.L.

EDUARDO LERONES AGUADO

MIRIAM CARRO HERNANDO

JUAN ANTONIO SALGADO HERNANDEZ

ALICIA FADRIQUE PICO

MARTA MARIA GARCINUÑO CASELLES

GESTION INTEGRAL SANTANDER, S.L.

ENRIQUE Y SINDE ASOCIADOS SL

MARIA TERESA RODRIGUEZ FUENTES

LORENA HERNANDEZ ATIENZA

CARLOS GARCIA RODRIGUEZ

ANGEL ARMENTEROS CUESTA

JESUS BERZAL MIGUEL

JOSE GARDUÑO CALVO

MARIA ANTONIA ROVIROSA PIÑOL

MIGUEL JOSE MALAVE FERNANDEZ

GERENCIA & DESARROLLO DE SUCURSALES S.L.

OLGA MARIA SANCHO ARASA

SERGIO LORENZO RODRIGUEZ

MARIA DOLORES MORERA SOLA

ANTONI MONSO BONET

MANUELA BUERA GILABERT

MATEU & SANTANDER, S.L.

MARIA AFRICA CARDIEL COLL

MONTSERRAT SABATE BORRELL

ERIC NADAL GRIFOL

ALEXANDRE COLL QUINTANA

ISABEL OLMO VIBORAS

PABLO GODAYOL RUIZ

DAVID RIDER JIMENEZ

MARIA PILAR ALMARAZ FERNANDEZ

AGUSTI MONTANE DELCOR

MARIA ROSA BERTRAN CASALS

AMALIA GEMMA AGUILAR CASAS

OSCAR BLANCO CID

ESTEVE UTSET BADIELLA

EDUARD RAMON NADEU ABENOZA

VIRGINIA LEDESMA ARCOS

JIA AGENTS SL

MARIA DOLORES ROCA BLANCH

DAMIÁ RIERA ALBAREDA

DIPTOS, S.L.

PILAR UREÑA QUEROL

GESTION INVERGARA S.L.

MARTI FORTUNY PLANAS

FINANZAS SAN ANDRÉS S.L.

ALBALATE SERVICIOS FINANCIEROS Y DE GESTION

EVA CASAHUGA FUSET

SISMOINT, S.L.

EMA VILATORRADA 2007, S.L.

MATARÓ ASESORES LEGALES Y TRIBUTARIOS, S.L.

BANEST BLANES, S.L.

Glinkgo Biloba Properties S.L.

SERVEIS FINANCERS DE BANYOLES, S.L.

PUNT FINANCER GESTIO I ASSESSORAMENT, S.L.

DAVID OLMO FORTE

ANA MARIA JIMENEZ AGUAYO

CRISTINA HUERTOS CABEZA

INVERSIONES TERRA FERMA, S.L.

FINANCERES ARO, S.L.

FRANQUICIES FINANCERES LLEIDA S.L.

GRUP BBR GESTIO PRIVADA, S.L.

ALEIX SUBIRA SOLER

PAU FONT RODES

MONTSERRAT OLIVA MANDAÑA

INMACULADA SAHUN JOVE

INVERSIONS RIBAGORÇA S.L.

TANIA GELPI ESCANDIL

JORDI BRULL MARGALEF

BBR BATEA GROUP S.L.

AAFF OLESA 2019,S.L.

SUSANA MARIA JOVANI BELTRAN

INGRID QUILES SANCHEZ

ELISABET PUGA JODAR

ELOY HARO ROMERO

MYRIAM ALPAÑEZ PINO

FELIPE PARRA CARRERA

JAUME VEGAS BAUTISTA

MANUEL MOLINA ESTEBAN

ROSA MARIA PADROS ANGUITA

DANIEL TORRES MUIXI

DANIEL LIENAS GRANDE

OSCAR PLANES NOVAU

ANTONIO DE PADUA BELLAUBI MIRO

MARC MAYORAL SERRET

JOSE MARIA FONT VILASECA

ANNA SANS GARDEÑES

SONIA ROIGE VIDAL

ANTONIO FORNOS ISERN

PALMIRA RODRIGUEZ PEREZ

ANTONIO VICO ARCE

ABEL ISERN ROIG

GUADALUPE FORNE TENA

JOAQUIN SERRA BERTRAN

MARIA BELEN GARCIA BLANCO

JORDI ALUJA OSSO

OFICINA 6788, S.L.

ENRIC PUJOL ROVIRA

CRISTINA PURROY CASTELLO

OSCAR MUSTE ROIG

MARIA LUISA VALIENTE LORENZO

ROBERTO MARTIN RIVERO

SAUL ANTONIO TOVAR ASENSIO

PATRICIA FRIERO BRAGADO

MONICA LIBERAL CAMISÓN

ANABEL SANCHEZ MARTIN

CECILIO ALVARADO GARCIA

ANA MARIA LOPEZ OVEJERO

MARIA CARMEN CIUDAD MORENO

JOSE IGNACIO BORDALLO MEDINA

PATRICIA GUIJO LOZANO

OSCAR RODRIGUEZ ROMERO

MERCEDES GARCIA DURAN

MARIA PILAR FERNANDEZ CARRASCO

LOURDES IGLESIAS ALONSO

RAFAEL SALGUERO VARGAS

ALBERTO VAZQUEZ OLMEDA

MARIA ROSA AMPARO BLAZQUEZ FRAILE

JUAN MIGUEL ALFARO GONZALEZ

FELIX ALFONSO TORRADO DIAZ

VICTOR MANUEL DIAZ MARRON

VICTOR TOME LLANOS

ALICIA ESTEBAN GARRIDO

ANGELICA MONTERO ASENSIO

VIRGINIA CASTAÑO GONZALEZ

ALEJANDRO GOMEZ CORRALES

MARIA ANGELICA RODRIGUEZ OLIVEROS

CARLOS MIGUEL GIJON MELENDEZ

Santander

SERVICIOS FINANCIEROS CERES SL

MARIA MERCEDES GARCIA SANTANA

JUAN MANUEL MARTIN DURAN

REYES MARTIN MORENO

ANA MARIA GARCIA DOMINGUEZ

FELIX CARPINTERO DELEITO

MARIA DEL CARMEN LEDESMA COUTO

JULIAN HERNANDEZ RANZ

JOSE CARLOS VENERO TANCO

MIGUEL RODRIGUEZ GARCIA

ARCADIO PAREDES ROMERO

PEDRO MANUEL BALSERA GARCIA

JOSE CARLOS GARCIA SANCHEZ

ELENA LAJA MONTES

ELENA DIAZ FERNANDEZ

ANA MARIA MORALES NUÑEZ

ANGEL LUIS GIL PEÑA

NOEMI VIVAS SANCHEZ

ALMUDENA GARCIA SANCHEZ

PATRICIA ACOSTA SERRADILLA

JUAN HERNANDEZ DE TORRES

MARTA ESPINAR SANCHEZ

MARIA SAZO SALGUERO

LAURA MARTIN PALOMO

OLMO JULIAN PUERTO FERNANDEZ

SERVICIOS FINANCIEROS AHIGAL, S.L.

CARLOS RUIZ BURDALO

VIRGINIA VELASCO MAJADA

LAURA FERNANDEZ TORIBIO

AMBROSIO TORNAVACAS VINAGRE

BELEN GONZALEZ BERMEJO

DAMIAN CEBALLOS SORIA

MARIA TRINIDAD BRIEVA DOMINGUEZ

MARIA MARTIN SANCHEZ

CRISTINA SANCHEZ MARTIN

VALENZUELA MARTIN ASESORES S.L.

ANSELMO HERNANDEZ RANZ

JOSE GAMERO MUÑIZ

ASEVAL ASESORES S.L

JOAQUIN SANCHEZ GRANDE TOVAR

VERONICA GOMEZ MONTERO

MARIA JOSE SALGADO ALVAREZ

OSCAR SOTELO SALINAS

MONICA ALVAREZ ALVAREZ

CESAR RODRIGUEZ SOTELO

JUAN MIGUEL GOMEZ LOPEZ

MARIA LUZ IMIA RIVERA

JOSE LUIS EXPOSITO PITA

PAULA EIRIZ OTERO

CONCEPCION ISOLINA SOMOZA CALVIÑO

PATRICIA SOUTO LOPEZ

OSCAR PARDAL ANIDO

JOSE LUIS COUCEIRO DORELLE

SERBAN AGUIÑO S.L.

JOSE ALFONSO FUENTE PARGA

NATALIA DIOS OUTEDA

ARACELI GONZALEZ GONZALEZ

ALEX BEMBIBRE ALVAREZ

MARIA DEL CARMEN CARBALLO GOMEZ

MARTA MARIA COPA PEREZ

HECTOR PIÑEIRO MARTIN

JOSE RAMON DOMONTE RODRIGUEZ

SONIA LANDROVE MARTINEZ

MARIA PRAXEDES FRANCISCO FERNANDEZ

CARLOTA RODRIGUEZ VARELA

MARIA CARMEN GONZALEZ BARRAL

ANXO VAZQUEZ BLANCO

JOSE MANUEL AMEAL MAS

MARIA LUISA VALIÑO IGLESIAS

MARTA GARRIDO FERNANDEZ

GAGO Y SOUTO FINANCIAL SERVICES S.L.

JAVIER PONTANILLA MARTINEZ

AGENCIA FINANCIERA ULLOA S.L.

SERCOM ASFICO AGENTES FINANCIEROS, S.L.

MEDA FINANCIERA, S.L.

INTERMEDIACION FINANCIERA RIAS BAIXAS, SLL

MARIA MARTINA GONZALEZ ANDRADE

ÓSCAR NÚÑEZ PUGA

PILAR VILA AYERBE

DAVID GONZALEZ BECEIRO

JOSE MANUEL FURELOS FERREIRA

ANGELINA CUESTA BERAMENDI

TANIA ARAUJO SOTO

BORJA MENDEZ VAZQUEZ

BARBARA FARIÑA REBOREDO

SERVICIOS FINANCIEROS FORCAREI, S.L.

DANIEL VIEIROS CAMPOS

LUCIA MARTIN GRANDE

ROBERTO QUIROGA LOPEZ

ANGEL LUIS GONZALEZ CASTRO

ASESORES FINANCIEROS VIANA SL

MARIA ROCIO LOPEZ TABOADA

MARIA CRISTINA SANCHEZ UZAL

OFILAR 2020 S.L.

CELIA MONICA MARTINEZ OTERO

MARIA ELISA CAMBEIRO CAAMAÑO

MONICA GARCIA CAAMAÑO

JOSE LUIS FARIÑAS PEREZ

MANUEL MARIA GARCIA FERNANDEZ

MANUEL ARTURO DOVALE VAZQUEZ

IVAN GONZALEZ MARTINEZ

ADRIAN TELLA VILLAMARIN

MARTA FEIJOO ARIAS

LUCIA ALVAREZ GONZALEZ

QUIRINO MASCITTI

JOSE BENITO SAMPEDRO FEIJOO

ESTHER LOPEZ GONZALEZ

JOSE LUIS PRIETO PARADA

JUAN SOTELO LORENZO

CANDIDO JUNCAL RUA

CELAVEDRA S.L

NIEVES NUÑEZ PUGA

BLANCA FERNANDEZ MURAS

MIRIAM SAMPAYO IGLESIAS

RICARDO CORREA FOLGAR

GHG COPERNICO, S.L.L.

SERVIBAN OURENSE, S.L.

ANA BELEN DUARTE FIGUEIRAS

SERVICIOS FINANCIEROS SOUTELO SL

PABLO SEIJO NOVOA

ANDREA SAYANS RIVEIRO

FABIAN MANTEIGA VARELA

JOSE MANUEL SOBREDO SIGUEIRO

JOSE MANUEL VAZQUEZ BERTOA

ANABEL PALLAS FUENTES

NATALIA LOPEZ LOPEZ

JAVIER NOVIO MIDON

MARIA JIMENEZ GONZALEZ

RAFAEL ROMERO RODRIGUEZ

ANTONIO SANCHEZ ARGÜELLES

EQUITY CONSULTING FINANCIERO, S.L.

ELVIRA DE CASTRO FERNANDEZ

LUIS ALFONSO MARTINEZ JIMENEZ

FRANCISCO JAVIER ARTEAGA LOPEZ

JOSE ANTONIO LOPEZ LOPEZ

MARIA ANGELICA CORTES CORTES

FRANCISCO FLORES ROMERO

ARREAZA SERVICIOS FINANCIEROS, S.L.

JUAN JOSE TAMUREJO CARDOSO

JOSE LUIS HERNANDEZ-SONSECA MIRANDA

JOSE LUIS BLAZQUEZ FERNANDEZ

CARLOS ARCAS CHECA

LETICIA MARÍA MARTINEZ ABAD

VICENTE CANO CAMARA

ANA MARIA RODRIGUEZ MORENO

JOSE CARLOS LOZANO CANO

LUCIA CARO ESPARCIA

MARIA ANGELES GONZÁLEZ IBÁÑEZ

LUIS JAVIER NAVARRO SIMON

JUAN FRANCISCO GARCIA JUNCOS

RUBEN LOPEZ CARMONA

MARIA TRINIDAD SORIANO RAMIREZ

JESSICA MARIA SEGADOR RISCO

ROSA ARCE LANDETE

JUAN MONTERO RODENAS

BRAULIO ALMENA AMARO

TERESA ROLDAN QUINQUER

SANDRA ORTEGA QUILON

MIGUEL ANGEL RUIZ LOPEZ

FELIPE CHILLARON CASTILLO

MARIA PAZ CULEBRAS RAMOS

MARIA JOSE PACHECO GALLEGO

MONICA CANO CANO

LUCIA PEREZ CUELLAR

EMPRESA GESTORA JUAN JOSE MUÑOZ S.L.

BEATRIZ BLANES RUIZ

DAVID MOYA LUCAS

ESTHER PEIRO ORTEGA

ASIS DE FEREZ S.L.

AROA GOMEZ LOZANO

ANA CRISTINA MUÑOZ ALVAREZ

VILLASEQUILLA AP SL

MARTA TRIGUERO RUIZ

ANTONIO MOTOS RECUENCO

CARLOS MORENO LOPEZ SOLORZANO

DIEGO GALLEGO VALVERDE

PATRICIA MONTERO DURAN

YEBEGEST S.L.

ANGELA ZURITA MARTINEZ

MARIA TERESA OLMEDA PICAZO

ARANCHA LOPEZ SANTOS

MARIA DEL PILAR MUÑOZ GONZALEZ

JAVIER MONGE LOPEZ

ANA MARIA RODRIGUEZ VARGAS

MARTA LUJAN FERNANDEZ

JUAN CARLOS LAZARO BERDEJO

CRISTOBAL NAVARRO DE VEGA

MARIA EUGENIA DE LA CRUZ DE LA ROSA

BARRIOS DE LA CRUZ, S.L.

BNT 2008 AGENTES FINANCIEROS SL

SARA PULIDO PANADERO

AGUADO Y ORTEGA ASESORES S L

ASESORAMIENTOS FINANCIEROS TEM 2012, S.L.L.

JESUS ALVARADO CAMARA

JAIME VALDES BRAVO

EVA LEON BELINCHON

MIGUEL MORENO ALONSO

LORENZO CANDELAS MIRANDA GARCIA CARO

TANIA BOGALO ROMERO

MARIA LUISA SANGUINO GUTIERREZ

ROSA ISABEL BENEITEZ SALINERO

IVAN QUINTANA ROJAS

MIGUEL GARCIA TAPIA

ALFONSO RODRIGUEZ MADROÑAL

PEDRO CARO CANO

JESUS MATEO HIDALGO MARTIN

MARIA CARMEN SANCHEZ PEÑA

SANDRA COFRADES SANCHEZ

FERNANDO GARCIA BARATAS

MARIA DEL CARMEN PALMERO MORENO CID

RAQUEL MAQUEDA MUÑOZ

SONIA MELGUIZO BEJAR

CARMEN CARLA PEREZ CUESTA

SAGRARIO MAQUEDA RUIZ

JOSE MARIA FERNANDEZ RAMIREZ

MARCOS GARCIA-DIES PASTRANA

MIGUEL ANGEL ORTIZ DE MIGUEL

ALEJANDRA SANCHEZ JUAN

DAVID RUIZ MARCHESE

ALBERTO ANDION ACEDOS

LUIS CARLOS SEPULVEDA SANCHEZ

RAUL VEGA ROMERO

MARIA LETICIA GUTIERREZ SANZ

CARLOS ALBERTO PALACIOS MARTIN

AYZA FINANZAS S.L.

ANTONIO BERNAL MERINO

DANIEL NAVAS ALONSO

LASTRAS AGENTE FINANCIERO SLP

FINANZAS NUEVA ERA S.L.

ZONA 4 SERVICIOS FINANCIEROS S.R.L.

BUZABRIN, S.L.

DE-TWO Y MAS INVESTMENT SERVICES S.L.

COFARESA SERVICIOS FINANCIEROS COMPLEMENTARIOS, S.A.U.

G.S.G. GRUPO CORPORATIVO DE SERVICIOS S.L.

BANFORTUNIA S.L.

SOLUCIONES DE PATRIMONIO E INVERSIÓN, S.L.

TABULA AGO,S.L.

OFISFIN S.L.

ALMA 812 S.L

MARIA FERNANDEZ RUFO

MARIA DE LAS NIEVES CALDERON IZQUIERDO

PAOLA GARCIA NUÑEZ

ANGELA MARTIN PUENTES

FINANCIAL ADVANTAGES SL.

EDUARDO GOMES HORCAJUELO

MARIA PILAR PEREZ NAVARRO

ROBERTO BLANCO GARCIA

JESSICA LIMA BLANCO

ANPADU INVERSIONES, S.L.

MARIA-TERESA JIMENEZ PACIOS

BEATRIZ TORREÑO NIETO

ALFONSOCRIADO SL

DIEGO CAÑAMERO NAVARRO

RUBEN BERNALDO DE QUIROS DE DOMPABLO

PATRICIA CONDE GARCIA BLANCO

LUCIA DIAZ PRUDENCIO

JOSE MANUEL TORRES MIGUEL

PALOMA MILAGROS BLANCO GONZALEZ

MAIALEN SAEZ SEGUROLA

MIGUEL LLANO ABAITUA

AGURTZANE ITZIAR AGUIRRE COLECHA

AINARA GONZALEZ ANGULO

IÑIGO MARTINEZ GARCIA

BRUNO MARTIN GARCIA

OSCAR CAÑIBANO ALVAREZ

OSCAR CAUDELI BOLO

MANSANET RIPOLL SL

ENRIQUE CHACON FERNANDEZ

RUBEN MARTI CALATAYUD

VICENTE MANUEL MARTI SEGARRA

JOSE IGNACIO CANTO PEREZ

RAFAEL BELLMUNT BELLMUNT

CONCEPCION MORATA HOMBRIA

FERNANDO DONET ALBEROLA

MARIA JOSE CABALLERO GRAU

YOLANDA CASTILLO VILA

MARIA TERESA BROCH RUBERT

SILVANA JAIME GARCES

LIDIA CARRASCO MARIN

MIRIAM PEREZ SORIA

MARIA MERCEDES RIERA RIERA

SONIA BELLMUNT SAURA

JOAN ANDREU GABARRI LLOP

JUANA MARTINEZ MARTINEZ

ALBERO PAYA FINANCIEROS, S.L.

DRIMTY S.L.

VERIS SERVICIOS FINANCIEROS S.L.

TRAMYGEST FINANCIERA S.L.

SAVINGS ELX 2014, S.L.

ERNESTO DAIMAN MARQUES ASENSIO

ASEMAR FINANCIERA, S.L.

GESTIONES FINANCIERAS FERRER Y GARCIA 2015, S.L.

AGENTES XIRIVELLA, S.L.

AGENCIA FINANCIERA ANNA FRANCO, S.L.

HOTRARESCON SL

VIMAGARMA A.F. SL

CAROLINA GARCIA BELMONTE

JOSE SANTAMARIA CABRERA

VANESA GONZALEZ VILA

SUSANA DONAT DE LA CRUZ

JOSE JOAQUIN APARISI GRAU

ISABEL CARMEN DOMINGUEZ ZANON

CARLES ROYO DELPOZO

MIGUEL ANGEL FERNANDEZ MENDEZ

MIREYA GARCIA MARTINEZ

ALEJANDRO SANCHEZ BERMUDEZ

ANA MARIA LOPEZ MARTINEZ

DIEGO MARTINEZ OTON

MARIA DELS DESAMPARATS ROSELLO MORELL

MIGUEL ANGEL VIDAL JOVER

VEGUILLAS Y VEGUILLAS SL

JOSE ALFONSO TARI ESCLAPEZ

MAGDALENA JOVER SELLER

PAULA GRACIA CABRERA COLONQUES

GESFINPRO, S.L

BEATRIZ PEREZ GARCIA

MIGUEL ALCALDE PITARCH

ANTONIO LUIS CASTELLO APARISI

MARTA FAUS BLANES

JUAN ANTONIO ALCAIDE NAVARRO

MIGUEL GARCIA ABAD

VICENTE MOSCARDO TORRES

JUAN JOSE MONTEAGUDO MARTINEZ

SEMAGERA, S.L.L.

ALESA CAPITAL, S.L.

AYALA MARTINEZ MELERO, SLL

INMACULADA FERRUS AZNAR

ALEJANDRO SANTAELLA FERRER

JOSE JUAN FERRANDEZ SANCHEZ

BEATRIZ SALA GARCIA

ARANTXA CARDENAL FERNANDEZ

MARTA HERREROS LOPEZ

MARÍA CRUZ GARCÍA-ESTELLER TORRES

SILVIA GARCIA SENDRA

FRANCISCO MUÑOZ PUERTO

ANGEL EDUARDO RODRIGUEZ REY

HOPE FINANCE SL

JESUS MARTINEZ CAÑAVATE GOMEZ MILLAN

MARIA ISABEL RAMIREZ RODRIGUEZ

ALBERTO LOPEZ CARDENAS

JUAN CARLOS MALDONADO HODAR

JULUM FINANZAS, S.L.U.

FRANCISCO JIMENEZ PERALVAREZ

AM SERVICIOS FINANCIEROS SL

MARIA PAZ IBARRA RECHE

JUCAR ASESORES, S.L.

ALVARO FABREGAS SANTAMARIA

ASESORAMIENTO Y COACHING FINANCIERO S.L.

EFEROR ASOCIADOS S.L.

JOSE PABLO CASTELLANO GARCIA-DONAS

FINANSANDO S.L

FRANCISCA MARQUEZ CONTRERAS

NUÑEZ MONTES FINANCIEROS S.L.

JOLUANCA 2006 S.L.

BERNABE JOSE VALLECILLO MUÑOZ

ASESORAMIENTO FINANCIERO Y ANALISIS DE MERCADOS SLU

JUAN RAMON BENITEZ GOMEZ

JOSE MANUEL MARTINEZ MILLAN

PEDRO ANGEL LUPIAÑEZ RODRIGUEZ

CASTOR INVERYSER S.L

MARTA DOLORES CASTRO HIDALGO

MANUEL GUERRERO VERDEJA

IGNACIO IÑARETA MARQUEZ

JESUS RAMOS NIETO

ALVARO DELGADO DE MENDOZA CORTES

VC SERVICIOS FINANCIEROS SL

SEFIAL 2021, S.L.

SERVICIOS BANCARIOS BERJA SL

ONUBA FINANCIEROS SL

DANIEL MARTI RODRIGUEZ

SANPUEBLA SL

GABRIEL MENENDEZ NOTARIO

MILAGROSA ESTUDILLO CEPILLO

MARIA DEL MAR CARRETERO FERNANDEZ

JORGE BARRERA PEREZ

JUAN MANUEL MAYORGA BELLOSO

MARIA DEL CARMEN ZAMBRANO MONGE

FATIMA DEL PINO ARIZA

JUAN DAVID PEREZ VALENZUELA

MARIA ASUNCION PALOMARES RUIZ

JUAN MANUEL PEREZ PRADO

FINANCIACIONES LAS CABEZAS SL

MARIA ESCRIBANO PAVON

MARIA MORATALLA RUIZ

MIGUEL ANGEL MARTIN ISERTE

MARIA EUGENIA BOZAL HUGUET

JAVIER DOMINGO PASCUAL JIMENEZ

LUIS FERNANDO ANDRES VILLALBA

JULIA MARIA SEGURA VICENTE

ROSA ANA FATAS LAPLANA

MARIA TERESA MARTIN MUNIESA

MARIA DOLORES FOLLA-CISNEROS GARCIA

JOSE JIMENEZ OVEJAS

MARIA GEMA GARCIA BUIL

VERONICA PUEY MUÑOZ

JOSE GABRIEL BALLESTERO FERNANDEZ

USTARIZ ZUBIRI ASOCIADOS SL

FEDERICO SOROLLA LLAQUET

VERONICA REMIRO BASANTA

RAUL LANGA GOMEZ

OIHANE AICUA RODRIGUEZ

JAVIER ROYO HERRANZ

FLORENTINO LARA NOTIVOLI

OSCAR ADAN CABEZON

CRISTINA ZABALA USTARIZ

ANDONI ABRIL GOICOECHEA

FERNANDEZ DEL VALLE NOE 046869184C S L N E

GUILLERMO FOS ALZAMORA

JORDI JUAN RIBAS

ALBERTO BARTOLOME DE BLAS GUASP

GUILLEM GENOVARD CALDENTEY

CECILIA MARIA ROSSELLO FLORIT

DAMIAN DAVID PONCELL OLIVER

ELISENDA ARIMANY BALLART

ADELA GALLEGO BERMUDEZ

JUAN CARBONELL SOCIAS S.L.

JUAN MANUEL ALARCON GARCIA

LUIS DA COSTA FERNANDEZ

MALULA SERVICIOS FINANCIEROS SL

TEROR VP INVERSION SL

OMAR PEREZ GARCIA

LUIS FERRERAS GRANADO

LETICIA INES MARTIN SANGUINO

ANA ISABEL GARCIA RODRIGUEZ

FRANCISCO JAVIER SANTIAGO ALEMAN

PEDRO JAVIER SANCHEZ RODRIGUEZ

JOSE MANUEL PERERA QUINTANA

FRANCISCO JAVIER CABRERA LLAMAS

EDUARDO HERNANDEZ HERNANDEZ

PEDRO ROMAN SANMARTI

RUBEN TORIJANO BUENO

JOSE ANDRES HERNANDEZ FALCON

GORKA PEREZ DIAGO

JON DIEZ DE DIEGO

SARA SANCHEZ GONZALEZ

ENRIQUE MARCOS ORTEGA

AGUSTIN RUIZ SAIZ

ALEJANDRO FERNANDEZ GARCIA

ALEJANDRO MARTIN KARLSSON

CARLOS MESA DIEZ

JESUS ARDUENGO CUADRADO

LUCAS RIVAS PORTILLO

EMMANUEL GRANDA TARRAZO

POSADA GESTION FINANCIERA SLU

DAVID GARCIA-ARCICOLLAR RODRIGUEZ

SERFISAN SERVICIOS FINANCIEROS S.L.

DAVID INCHAUSPE PEÑA

TAMARA CANTERO SANCHEZ

ENRIQUE ARAUJO IRUSTA

IGNACIO SORDO AGÜERO

JOSE IGNACIO UBILLA BOLADO

ENRIQUE FOMPEROSA RUIZ

SERVICIOS FINANCIEROS MAZA Y VILAR SL

CLARA POO GARCIA

JESUS ANTONIO AMO FERNANDEZ

SERGIO GONZALEZ PALACIO

YOLANDA ALVAREZ RODRIGUEZ

AOMAR NUÑEZ APARICIO

JONATHAN AGUSTIN COLODRO DIAZ

JUAN MARIA VALDES MARTIN

JOSE MARIA ANTON GARCIA

MONICA CUBAS HERNANDEZ

A C CARRIZO DE LA RIBERA SL

ALBERTO GONZALEZ MONTES

MARIA ELISA SAEZ JIMENEZ

MARIA JESUS MONROY CARNERO

PEDRO MARIA MARINA MEDRANO

JOSE ANGEL TIERNO ARANDA

JESUS ANGEL GUTIERREZ QUINTANILLA

MANUEL JAVIER DELBOY RODRIGUEZ

A.C. PAREDES DE NAVA S.L.

SERGIO SANCHEZ RODRIGUEZ

A.C. CIGUEÑA SL

A.C. VILLARCAYO S.L.

JUAN BAUTISTA HIDALGO IÑIGO

JUAN ANTONIO YUBERO MORENO

JOSE ENRIQUE ARBONAS MAS

MARIA SOLE RIBERA

ROGER BELLET SANJUAN

JORDI RIBALTA ARIAS

CARLOS DE PABLO LOPEZ

VICENT MORE CAMPS

MARTA CORTES MARISTANY

ROSA MARIA HOMEDES PERIS

JORGE TORTA BELBIS

GROUP CLOP INVERSIO SL

JUAN JOSE GISBERT FERRERES

ALEJANDRO LLERA FERNANDEZ

JORDI ROSA ARIZA

MARC OLIVA VIDAL

ANNA BATALLA FARRE

AINOA LORAS COLL

ELISA SANS VIDAL

BERTA RIERA FERRAN

IVAN GUIU FARRE

MARIA TERESA BORRELL MICOLA

DANIEL MASSA I RAMIREZ

SAUSOLUCIONS SL

NESTOR GALIMANY SANROMA

ISIDRE CALBO PELLICER

POL MIR MARTINEZ

ENRIQUE SANCHEZ CASADEVALL

ENRIC CORTADA GUTIERREZ

ALEXANDRE UTSET BADIELLA

ALFONSO ROMERO IDIGORA

MARC TARRES MALE

FINANCIAL VALUE INVESTMENT, SL

LORENZO BARREIRA VIA

AA FF NV FINANCERA 2018 SL

EDUARD MAS POMES

JOSE MARIA BALTASAR TOMAS

INVERSORA TUCKERTON SLU

ESTHER NOGUES FERNANDEZ

LUIS LOPEZ SIRER

LARA & RAUL ASOCIADOS S.L.

SOLEDAD GALAN FREJO

JUAN JOSE SANCHEZ ACEDO

CARMEN MARIA MARTINEZ BOHORQUEZ

BARBARA FERNANDES DIAS

MARIA EVA NUÑEZ GONZALEZ

RAQUEL BARRERO GORDILLO

JUAN MARIA DOMINGUEZ GARCIA

SATURNINO QUIÑONES GARCIA

ISMAEL PALACIOS AGUDO

ELENA PUERTO GALVEZ

JOSE MARIA MANZANO CIDONCHA

ROBERTO CABALLERO MARTIN

ALEJANDRO PIÑOL PEREZ

LAURA MACIA GONZALEZ

INTERMEDIACION FINANCIERA DEL NOROESTE SL

SUSANA FARIÑA FERNANDEZ

JOSE MANUEL CAPON FERNANDEZ

SILVA&RUA ASOCIADOS SLU

ANGELA MUÑIZ ARROJO

SOLFIN CONSULTORIA DE MERCADOS SL

SONIA LOPEZ AZNAR

ALEJANDRO GIADANES TORREIRA

MARIA CARMEN CEREIJO VARGAS

JOSE MARTINEZ PARDO

MIGUEL ANGEL FUENTE REGO

CARLOS GONZALEZ FERNANDEZ

DAVID VALIN ANTON

ADRIÁN MONTERO VARELA

BRAIS MIDON LOPEZ

GREGORIO LEAL MORALEDA

PEDRO JESUS ROLDAN PRIETO

CRISTINA GOMEZ GUTIERREZ

MARIA DE RUS MONTERO ORTEGA

JOSE LUIS BECERRA QUIROS

SERGIO GONZALEZ RUISECO

DIEGO FERNANDEZ MARCOTE

CECILIO PARRO CORTES

Santander

JUAN ANGEL ALCAZAR VERGARA

GEMMA GUTIERREZ BAJO

ALFONSO ILLAN GARCIA ROJAS

MARIA LOPEZ MARTINEZ

JAVIER GUTIERREZ ARAGON

MIGUEL ANGEL GARCIA RODRIGUEZ

ARACELI CARAVANTES CASTILLO

CARMELO PACHECO MARIN

BEATRIZ ARROYO AVILA

NURIA DEL AMO LETON

INMACULADA TORRES BERMUDEZ

DIANA DIAZ ANGELINA

CRISTINA TORIJA PRIETO

SONIA ARNAO VILLANUEVA

FRANCISCO DAVID SAIZ CANO

ALEJANDRO MATESANZ FLORENCIO

FRANCISCO JAVIER MARTIN ROMERO

BEATRIZ LOPEZ MONTEJO

LUIS ALBERTO MASEDO DEL CASTILLO

ALEJANDRO GARCIA GUERRERO

TAGOAN JUAREZ SL

MARIA DEL PILAR MARTIN SANCHEZ

ALVARO FERNANDEZ ROCAMORA

JUAN CARLOS FUSTER DE CACERES

FERNANDO DOMINGUEZ RUIZ

MARTA ZAMBRANO PEREZ

MARIA TERESA PEREZ PEREZ DE LAS VACAS

ANDREA PRATS SEGURA

CRISTINA HIDALGO GARCIA

JESUS MAILLO NIETO

FRANCISCO JAVIER RIVAS VALENZUELA

MARIA TERESA GUTIERREZ GALERON

MARIA ALMUDENA MORENO NAVARRO

IEA SERVICIOS FINANCIEROS S.L.U.

IMANOL IPARRAGUIRRE JAUREGUI

MKS GESTION FINANCIERA S.L.

UNAI LEKUBE ARAMBERRI

ALFREDO ROLDAN FERNANDEZ

MARIA MANUELA GONZALEZ CUESTA

JUAN JOSE ARAGONESES MARTINEZ

JESUS RAMON HERNANDEZ GARCIA

NEREA SOBRADILLO TRUEBA

JOSE MANUEL MUÑOZ EZQUERRO

CRISTINA NAVARRO MACHIN

ELENA EGAÑA ALZAGA

EDER SERVICIOS FINANCIEROS SL

FRANCISCO JAVIER MORALES MURCIA

ANTONIO IGLESIAS SANCHEZ

ENRIQUE SATURNINO MORENO

BASKY INVERSIONES FINANCIERAS SL

FORUM 20 S.L.

ALEXANDRA FRANCH CANALDA

CASTEL GANDOLFO S.L

MILAGROS FLORES LEAL

FINANZAS E INVERSIONES ALBAL S.L.

ROSA CARRERES LUCAS

ELOISA ESPUIG IBORRA

ALICANTE VALLEY SERVICIOS FINACIEROS S.L.

TRAKZIONA INVEST SL

ENRIQUE MARTINEZ MORENO

JOSE ANTONIO SANCHEZ NAVARRO

PIC LLOCH MONTGO SOCIEDAD LIMITADA

RUBEN TRAVER SALES

ANDRES RIVERO JIMENEZ

JUAN ANTONIO CANTERO SANCHEZ

JOSE MANUEL AYALA ARNALDOS

JAVIER GONZALVEZ BOTELLA

SONIA ZAPLANA VERGARA

MOR FINANCE SL

INMACULADA LATORRE CANA	MARGARITA LUZ BOLINCHES IBAÑEZ	GRATIANA TORRES ROSA
ALBERTO SAEZ CLEMENTE	C M FINANCIAL SERVICES S.L.	SERGIO VIVANCOS ALVARO
MISTERA BUSINESS SOLUTIONS S.L.	EUGENIA DURAN HERNANDEZ	IVÁN LÓPEZ DURÁ
SAMAI FINANZAS S.L.U.	ISIDRO VIVANCOS ROS	IVAN GODINEZ GUERRERO
LUIS ALBERTO SALA GARCIA	ROCIO NAVARRETE MARTÍNEZ	MUNICH FINANZ S.L
VANESSA SORO GINER	JOSE LUIS MATA RIBELLES	CARMEN RODRIGUEZ-BUSTELO GONZALEZ
ROSA MARIA BLAY PASCUAL	MIGUEL ANGEL RIOS MUT	BEATRIZ GARCIA ESTELLER TORRES
SANDRA CHOVER GOMEZ	RAMON DANIEL MUNUERA SANZ	ISABEL CARBONELL SERNA
NURIA MANUEL CERVERA	MARIA MERCEDES SABATER JIMENEZ	
JOSE FERMIN MOMPO VIDAL	SANMAFRAILES SL	

Directors' report

Banco Santander, S.A.

1. Introduction

Banco Santander, S.A. ('the Bank' or 'Banco Santander') is a Spanish bank, incorporated as a sociedad anónima in Spain and is the parent company of Grupo Santander or Santander. Banco Santander, S.A. operates under the commercial name Santander.

Banco Santander operates through a branch network distributed in Spain and abroad.

On 7 June 2017, Banco Santander acquired the entire share capital of Banco Popular Español, S.A.U. ('Banco Popular') in an auction in connection with a resolution plan adopted by the European Single Resolution Board (the European banking resolution authority) and executed by the FROB (the Spanish banking resolution authority) following a determination by the European Central Bank that Banco Popular was failing or likely to fail, in accordance with Regulation (EU) 806/2014 establishing a framework for the recovery and resolution of credit institutions and investment firms. On 24 April 2018, Banco Santander announced that the boards of directors of Banco Santander, S.A. and Banco Popular Español, S.A.U. had agreed to an absorption of Banco Popular by Banco Santander. The legal absorption was effective on 28 September 2018.

The directors' report has been prepared based on the accounting and Management records of Banco Santander, S.A.

The financial information included in this directors' report has been prepared in conformity with the Bank of Spain Circular 4/2017 of 27 November on Public and Reserved Financial Information Regulations and Financial Statements Forms, and subsequent modifications.

2. Situation of Banco Santander

Santander is one of the largest banks in the eurozone. As of December 2021, we had EUR 1,595,835 million of assets and EUR 1,153,656 million of total funds. Our market capitalization reached EUR 50,990 million.

Our purpose is to help people and businesses prosper in a way that is Simple, Personal and Fair. We do not merely meet our legal and regulatory obligations, but also aspire to exceed expectations. We focus on areas where our activity can have the greatest impact, supporting economic growth in an inclusive and sustainable way.

We engage in all types of typical banking activities, operations and services. Our track record, business model and strategic execution drive our aim to be the best open digital financial services platform, acting responsibly and earning the lasting loyalty of our stakeholders (customers, shareholders, people and communities).

Therefore, in 2021, a year in which the global economy and society were still affected by the covid-19 pandemic, we continued to play an active role in the the economic recovery and continued to support our 153 million customers and society.

With regard to our 197,070 employees, our priority remains safeguarding their health and safety in line with local government recommendations and based on three pillars: (i) development and implementation of health and safety protocols; (ii) remote working where necessary; and (iii) track and tracing (diagnostic tests, health apps and even vaccination centres in our corporate buildings for employees and the general public).

We are living in an increasingly digital world, and the covid-19 pandemic has contributed largely to this transformation. As such, more than ever, our aim is to continue to offer our customers digital products and services that meet their needs, and support them in their digital learning.

We interact with our customers through a wide variety of channels. We have a network of 9,879 branches. In recent years, significant effort and investment has been put in to ensuring our branches meet our customers' needs.

Our offices include universal offices and specialist centres for certain customer segments, such as businesses and universities. We are also promoting new collaborative spaces with excellent digital capabilities (Work Café, SmartBank and Ágil branches). Additionally, our contact centres, which provide model service quality, continue to serve our customers.

Through this process, in addition to improving our branches, we are continuously investing in our digital capabilities and technological infrastructure to optimize our product and service offerings, reducing our cost to serve while being among the top banks in customer satisfaction in almost all of our main markets.

As a result, the number of digital and loyal customers as well as digital activity continued to increase. We have more than 25 million loyal customers (+11% year-on-year), with growth in both individuals and companies. Digital customers rose 12% in the year, exceeding 47 million. Similarly, digital sales accounted for 54% of total sales (44% in 2020 and 36% in 2019).

The world is also increasingly aware of the different environmental, social and corporate governance factors (most commonly known as ESG).

In this regard, we are focused on delivering profitable growth responsibly and creating value for our 3.9 million shareholders.

Our strategic priorities and their execution are essential to improving the profitability of our core businesses by offering simple, fair and innovative products.

Grupo Santander has a balanced diversification in three geographical between mature and emerging markets, and operates mainly in 10 core units, where it has significant market shares.

3. Financial performance

3.1 Economic outlook:

In 2021, Santander developed its activity in an environment marked by (i) the implementation of fiscal and monetary policies in response to the adverse effects of the covid-19 pandemic (ii) the ongoing recovery from this pandemic, uneven across countries and sectors, (iii) new variants of covid-19 and significant outbreaks (iv) the overall upturn in inflation in the second half of the year, which, in the case of mature markets, reached a three-decade high.

Inflationary pressures have intensified as a results of a number of factors, including the revitalization of demand for consumer goods, labour shortages, tensions in the supply chains of microchips and other key items, transportation problems and the increase in the price of energy, certain raw materials and food.

Under these circumstances, the expansionary fiscal and monetary policies implemented in response to the covid-19 pandemic began to reverse, especially in the last quarter of 2021, particularly in countries with the greatest pressure on prices.

Economic performance in the Eurozone and Spain was as follows:

- Eurozone (GDP: 5.2% estimated in 2021). GDP growth driven by the lifting of lockdown measures and expansionary monetary and fiscal policies. The ECB kept interest rates stable despite the 5% rise in inflation in December, on the expectation that this rebound is transitory. However, in December the ECB announced a reduction in its asset purchases starting on spring 2022.

- Spain (GDP: 5.0% in 2021). Economic recovery continued in 2021, likely to reach pre-pandemic GDP levels in 2022. Improvement in the labour market accelerated, with employment exceeding pre-pandemic levels. Inflation reached 6.7% in December, largely due to energy prices.

- To complete the information with the performance indicators of the rest of geographies where the Group is present, see the Consolidated Directors' Report.

3.2 Balance sheet and results:

Banco Santander, S.A. is the Parent Bank of a financial group that operates in different countries through different businesses therefore its financial statements not only reflect its commercial activity in Spain, but also the activity derived from being the head of the Group. This last aspect makes it difficult to analyse its evolution without distinguishing the results obtained from the commercial activity from those more directly related to its holding nature.

Strong pick up of activity in individuals in 2021, especially in residential mortgages, where we reached record highs in new lending, and in consumer credit, which recovered to pre-pandemic levels in Q2. As a result, we gained market share in both products.

In corporates, signs of recovery started to show in H2'21, with growth in working capital management (+15% year-on-year). However, there was an overall slowdown in the demand for loans due to the extensions of grace periods in ICO funding and expectations regarding the European Next Generation EU funds.

In transactional products, we continued to grow in PoS with significant market share gains and customer base expansion, which was reflected in a 44% increase in turnover compared to the previous year. Card turnover rose 17% year-on-year, both credit and debit.

Regarding the balance sheet, as of 31 December 2021, the **total assets** of Banco Santander stood at EUR 657,950 million, with an increase of 4.54% over the previous year.

Loans and advances to customers at the end of the year stood at EUR 308,367 million, with an increase of 4.24% over the previous year driven by the growth of mortgages and consumer loans.

Customer deposits, at the end of the year, stood at EUR 308,603 million with an increase of 7.65% over the previous year. Demand deposits increased by 9.02%, offsetting the fall in time deposits (-0.04%), with growth in both corporates and households.

Net interest income in 2021 stood at EUR 3,620 million, 7.48% higher than the previous year due to the higher income derived from the TLTRO and the greater volume of credit, which offset the lower interest rates.

Income from equity instruments amounted to EUR 5,489 million in 2021. This line includes **dividends** received from the Group subsidiaries.

Net fee income increased by 11.26% compared to 2020 to 2,578 million euros, highlighting the strong growth in commissions from investment funds, insurance and those from wholesale banking.

Gains/losses on financial transactions (including exchange differences) reflected gains of EUR 253 million as compared to 645 million in the previous year.

General administrative expenses (personnel and other administrative expenses) were EUR 4,673 million, increasing 1.54% as compared to the previous year.

Impairment losses on financial assets (net) in 2021 accounted for EUR 2,287 million, 0.6% of financial assets at fair value with changes in other comprehensive income plus financial assets at amortized cost.

On the other hand, **the reversal of impairment of investments in subsidiaries, joint ventures or associates** in 2021 amounted to EUR 800 million and **losses of non-current assets held for sale** amounted to EUR 50 million.

Distribution proposal of the Bank's profit

ECB Recommendation of 15 December 2020, which asked banks not to pay out dividends charged against 2021 results (ECB Recommendation III), was in force for over half of 2021.

On 23 July 2021, the ECB believed the reasons underpinning ECB Recommendation III to limit dividend payouts were no longer valid and, thus, repealed it effectively on 30 September 2021.

On 28 September 2021, the board announced its 2021 shareholder remuneration policy to pay out an interim distribution from approximately 40% of the Group's underlying profit (half through a cash dividend and half through a shares buyback).

- Interim remuneration. Accordingly, it authorized the payment of an interim dividend of 4.85 euro cents per share (i.e. 20% of the Group's underlying profit for H1'21), in cash and charged against 2021 profits; it was paid on 2 November 2021. The board also voted to launch the First Buyback Programme worth 841 million euros (20% of the Group's underlying profit for H1'21) once the ECB approved it on 28 September 2021.
- Final remuneration. On 24 February 2022, within the 2021 shareholder remuneration policy, the board of directors voted to:
  - submit a resolution at the 2022 AGM to approve a final cash dividend in the gross amount of 5.15 euro cents per share, worth approximately 865 million euros (approximately 20% of the Group's underlying profit for H2 2021). If approved at the AGM, the dividend would be payable from 2 May 2022. The estimate of 865 million euros is based on the assumption that, once the Second Buyback Programme has taken place, the number of outstanding shares entitled to receiving dividends will be 16,804,353,202. Therefore, the total dividend may be higher if fewer shares than anticipated are acquired in the Second Buyback Programme; otherwise, it will be lower.

- implement a Second Buyback Programme worth 865 million euros (approximately 20% of the Group's underlying profit for H2 2021), once the necessary regulatory authorization has been obtained.

If shareholders approve the dividend payout resolution and the ECB authorizes the Second Buyback Programme, it will result in a payout of approximately 40% of the Group's underlying attributable profit for 2021. If the buyback reaches the maximum within the programme period, remuneration will be split equally between cash dividends and shares buybacks. This final remuneration will enable Santander to meet the target set in the shareholder remuneration policy disclosed to the market on 28 September 2021.

See more information in section 9.2 Dividend policy.

4. Trend information

This director's report contains certain prospective information on the directors' plans, forecasts and estimates, based on what they consider to be reasonable assumptions.

Readers of this report should take into account that such prospective information must not be considered a guarantee of our future performance. As the plans, forecasts and estimates are subject to numerous risks and uncertainties, our future performance may not match initial expectations. These risks and uncertainties are described in note 49 of the financial statements.

The economic outlook for 2022 is subject to considerable uncertainty due to the spread of new covid-19 variants in Europe and the US in the final stretch of 2021 - and the risk of it spreading to other areas - and doubts as to the more or less temporary nature of the 2021 inflation hike.

The impact of the Omicron variant and any future variants or outbreaks and their effect on activity is difficult to gauge. It will depend to a large extent on the pressure they generate on hospital capacity, which is not easy to foresee given, on the one hand, the varying capacity for contagion and virulence of each variant of the covid-19. Inflation will have an adverse impact on consumption and on financial conditions.

In our baseline scenario, we assume that covid-19 control measures will have a moderate effect on activity, that inflation will ease and return to the target from spring onwards and that, with some exceptions, the withdrawal of monetary stimuli will be very gradual. In this environment, among the most relevant economies for the bank, the European economies and the United States are expected to maintain strong growth, while in Latin America the evolution may be more uneven.

The macroeconomic forecast for 2022 **by country/region** is as follows:

Euro area

Growth recorded in 2021 is expected to continue in 2022, although the start of the year could be somewhat hesitant, supported by financial conditions that will continue to be openly expansionary, fiscal conditions that will not yet be restrictive, a greater weight of European Next Generation EU funds, an improvement in the pandemic and a gradual decline in inflation.

The elections to be held in several countries in the area and the reforms and credibility of the countries' fiscal consolidation plans will be relevant, in a year in which the reestablishment of the Stability and Growth Pact may be announced and the monetary and prudential measures used to face the pandemic will be gradually withdrawn.

Spain

In Europe, the deployment of European funds (especially relevant for the country), the potential improvement of international tourism, the time left for household consumption to recover and the expected reactivation of residential construction suggest remarkable growth that could drive GPD close to pre-pandemic levels.

The success of ongoing structural reforms, partly related to European funds, will be fundamental in the short and medium term.

The priority for Europe is the integration of all European businesses within a common operating model that allows us to continue capturing cost efficiencies and improving service quality. To this end, the main action lines in 2022 are:

→ To continue to expand our digital capabilities in the region, accelerating customer-to-digital conversion to improve service quality and thus customer satisfaction, while reducing the cost base.

→ Deliver on our EUR 1 billion cost savings commitment.

→ Leverage our global businesses (SCIB and WM&I) and the connection with PagoNxt to accelerate efficient allocation of capital to the most profitable segments and thereby improve the overall profitability of the business.

→ Excel in risk management, maintaining and reinforcing our balance sheet strength.

The cornerstone of our strategy in Spain is customer service:

- Grow the customer base through excellence service quality and seamless interaction with both customers and non-customers through digital channels.
- Increase customer loyalty by improving customer experience when acquiring products through simple, digital processes.
- Achieve operational excellence and improve NPS.
- Develop low capital-intensive revenue streams (funds and insurance) .
- Continue to review the cost structure, as the new model will be more efficient.

See more information in the Consolidated Directors' Report.

5. Non-financial information

This Statement of Non-Financial Disclosures of Banco Santander, S.A., which is part of the Separate Directors' Report, contains the non-financial disclosures set out in the Consolidated Directors' Report of Grupo Santander together with other material useful comparative information for Banco Santander, S.A. that is appropriate for an understanding of the trends, results, status and impact of the activities of Banco Santander, S.A., including information on matters of the environment, society, human rights, the fight against corruption and bribery, and personnel.

When drawing up the non-financial information contained in this Separate Statement Of Non-Financial Disclosures, Banco Santander performed a materiality analysis, in line with the international reporting framework developed by the Global Reporting Initiative (GRI), which enabled it to identify the most important aspects about which to inform its stakeholders in accordance with the GRI standards.

General information

The purpose of Santander Group is to help people and businesses prosper. To achieve this, it has a distinctive business model that seeks to satisfy the needs of all kinds of customer: private individuals with varying income levels; companies of any size and sector; private corporations and public institutions.

Long-term personal relationships with its customers are the basis of the business. Through innovation, Banco Santander is transforming its commercial model to capture a greater number of loyal and digital customers, thereby driving a more profitable and sustainable business.

Banco Santander considers the proper integration of environmental, social and governance (ESG) criteria in its financial activity to be critical.

To achieve this, and in compliance with the international best practices regarding sustainability and responsible banking, Banco Santander has a sound corporate governance structure, with the board of directors as the maximum decision-making body of the Banco Santander, with the exclusive power to approve Grupo and Banco Santander general policies and strategies, including those regarding sustainability.

It also has a general sustainability policy that defines our general sustainability principles and our voluntary commitments with the aim of generating long-term value for our stakeholders, and with a new environmental and social risk management policy that governs the Groups's financial activity in sectors such as energy, mining/metals and soft commodities (e.g. palm oil, soya and timber). It also has a defence sector policy outlining the criteria for the group's operations with companies that perform defence-related activities.

Likewise, the Bank has a sensitive sector policy that sets down guidelines for assessment and decision making about Banco Santander's participation in certain sectors, whose potential impact could lead to reputational risks. These policies are reviewed annually.

Banco Santander's responsible banking strategy is also underpinned by other internal regulations such as the general code of conduct, the corporate culture policy (which includes principles of diversity and inclusion governing the Group), the human rights policy, the consumer protection policy, the cybersecurity policy, or the Third-party certification policy (which includes the principles on the responsible behaviour of suppliers).

Moreover, Banco Santander redesigned and strengthened its corporate governance, both to ensure it is compliant and to help address the challenges that were identified.

The responsible banking, sustainability and culture committee (RBSCC) has been created which will help the board of directors to comply with its responsibilities regarding the definition and supervision of the responsible banking, sustainability and culture strategy.

The committee is supported by the Responsible banking forum, which meets at least six times a year. It executes the responsible banking agenda across the Group, drives decision-making on responsible banking issues and, ensures the execution of any mandates from the RBSCC, other Board committees and the board of directors. It also ensures alignment on key issues, including the review and escalation of reports to the RBSCC.

The corporate Responsible Banking unit coordinates and drives the responsible banking agenda. Supporting this unit, Santander has a Senior Advisor on Responsible Business Practices, who reports directly to the executive chairman.

In addition, in 2019 metrics and medium and long-term public commitments have been established to drive Santander´s and embed Responsible Banking agenda into the heart of Group Santander's business strategy (these public commitments are carved out throughout the report).

The identification of non-financial risks associated with its activity is a priority for Banco Santander.

Banco Santander has procedures in place for their identification, analysis and assessment in transactions subject to Group policies and to external commitments such as the criteria of the Equator Principles, an initiative the Bank joined in 2009.

In this sense, Banco Santander recognises the right of communities to a clean and healthy environment and undertakes to minimise the environmental impact of its operations, which means:

- Assuming, in line with the bank's commitment to the Equator Principles, the obligation to analyse, identify and correct, during the analysis of the risks of financing activities and consistently with the guidelines approved by the International Finance Corporation, the negative social and environmental impacts, including those affecting local communities.
- During due diligence prior to signing agreements for financing or of any other kind and complying with the Equator Principles and social and environmental risk management policies, Santander undertakes, as part of its analysis, to assess the human rights policies and practices of its counterparties.
- Establish specific policies governing the requirements for offering financing to those sectors, activities or potential customers that present a special risk in respect of social, environmental or human rights issues.

Banco Santander is part of the main initiatives at international level regarding sustainability (United Nations World Agreement, Banking Environment Initiative, World Business Council for sustainable Development, UNEP FI, Equator Principles, Responsible Banking Principles, CEO Partnership for Financial Inclusion, etc.). In addition, we are one of the founding signatories of the United Nations Principles of Responsible Banking. The aim is to contribute to the fight against climate change and the achievement of the United Nations' Sustainable Development Goals.

In 2021 we joined the we joined the Glasgow Financial Alliance for Net Zero, Net Zero Asset Management and were co-founders to the Net Zero Banking Alliance. Within GFANZ, we co-led the Net Zero Public Policy and their call to action launched in October.

In Spain, we are member of Foretica, of the Green Growth Spanish Group as well as Fundación SERES.

In addition, Banco Santander forms part of the main stock market indices that analyse and evaluate companies' actions on sustainability.

We are member of Dow Jones Sustainability Index for the 21st year in a row, with top marks in financial inclusion, environmental reporting, operational eco-efficiency and social reporting. Santander was also included in the S&P Sustainability Yearbook, receiving a silver class award.

MSCI increased our rating from BBB (2020) to AA (2021),

CDP rating category up from B to A-, putting us among leading financial institutions.

Sustainalytics also recognized our progress, raising our score from 27.1 to 23.9

We are members of the FTSE4GOOD Index, and improved from 4.3 in 2020 to 4.5 out of 5 in 2021.

We increased our score in the Bloomberg Gender-Equality Index (BGEI) from 85 to 90 and were the highest-ranked bank and second highest company.

Information about environmental issues

At Santander, we want to play our part in supporting our customers and the global economy to be zero by 2050.

We are offering our customers decarbonization solutions to help them fulfil their climate goals. We are aligning our portfolios with the Paris Agreement Goals and keeping our operations carbon-neutral. Integrating climate within our risk management is key to tracking our plan's robustness.

We have a four-pronged climate strategy and public commitments to:

1) align our portfolio with the Paris Agreement Goals and set sectorportfolio alignment targets in line with the NZBA and with the NZAMi: to ensure projected carbon emissions will contribute to limiting warming to a 1.5ºC rise above pre-industrial levels.

2) help customers transition to a low-carbon economy, with the commitment to raise EUR 120bn in green finance between 2019 and 2025 and EUR 220bn by 2030; offer our customers guidance, advice and specific business solutions; and enable them to invest in a wide-ranging ESG proposition according to their sustainability preferences.

Some environmental products and services delivered by Banco Santander in Spain are:

• Funding renewable energy projects: In 2021 Banco Santander helped to finance new renewable energy projects in Spain with an installed capacity of 3.212 MW.

• Management of credit lines in relation to energy efficiency in collaboration with multilateral institutions such as the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD).

Financing of low-emission vehicles, Banco Santander offers Ecological Car loans for the purchase of hybrid or electric cars with reduced interest rates.

3) reduce our impact on the environment by remaining carbon neutral and sourcing all our electricity from renewable energy by 2025.

In 2021, Banco Santander S.A.. has continued reducing its CO_2 emissions by 56.7% compared to 2020. Additionally, 100% of the electricity used by Banco Santander S.A. comes from green energy sources.

Banco Santander continues to hold the ISO 14001 environmental certificate for the Santander Group City in Boadilla, the bank's headquarters. It has also obtained the LEED GOLD certificate for the new headquarters of Santander España (Luca de Tena), the Abelias building and the DPC in Santander.

4) embed climate in risk management; understand and manage the sources of climate change risks in our portfolios.

Banco Santander considers social and environmental aspects to be crucial in risk analysis and decision making within its financing operations in accordance with its general and sector policies in respect of sustainability, as mentioned above.

In this regard, the bank has established procedures for the analysis and assessment of these risks in operations subject to Banco Santander policies and to external commitments such as the Equator Principles.

Santander Asset Management is operating in 10 countries and aims to have net zero greenhouse gas emissions from the assets we manage by 2050, and it was the first asset manager in Spain and Latam (ex Brazil) to join the initiative. This is consistent with Santander's push for leadership in sustainability and the Group commitment to be net zero in CO2 emissions by 2050.

We continued to make progress in meeting the public commitments set out in 2019.

- Financing or facilitating the mobilisation of EUR 120 billion up to 2025 and EUR 220 billion up to 2030. Since 2019 we have already mobilised €61 billion.
- Since 2020 we are carbon neutral in our own operations.
- That 100% of the electricity we use comes from renewable sources by 2025. At the end of 2021, 77% of the energy consumed in the Group (10 main geographies) came from renewable sources. In Spain it is 100%.
- Eliminate the use of unnecessary single-use plastic in all our offices and buildings. By the end of 2021 we have completely eliminated unnecessary single-use plastic.

Information about labour questions and employees

Banco Santander aims to be one of the best banks to work for, able to attract and retain the best global talent, enabling it to accelerate the transformation and helping people and society prosper.

Human resources strategy is based on having the best team of professionals: a diverse and committed team with a common culture (based on corporate behaviour and a way of making things simple, personal and fair) ready to give customers a distinctive and quality service.

a) Employment

At 31 December 2021, Banco Santander, SA, in Spain, had a headcount of 21,848 employees, 1.8% less than in 2020, with an average age of 45, of whom 50% were women and 50% men.

Some 99.9% of labour contracts are permanent full-time.

In 2021, we began to reduce our workforce on organizational, production-based and economic grounds. Following informal discussions with workers' legal representatives to explain our reasons, we entered into formal negotiations that ended with an agreement with most trade unions. All of the measures agreed with the European Works Council to align workforce restructuring with socially responsible practices were in the restructuring agreement. The alternative measures we proposed included geographic and in-company relocations to lower the number of potential lay-offs. On top of considering employees in vulnerable situations to protect their jobs. In total there were 3,541 dismissals.

The gender pay gap at Banco Santander S.A. in Spain is 13.1% (in median) and the difference in compensation for identical positions is 5.1%. The difference in comparison with the Group (1%) is due mainly to the legacy of the mergers carried out in recent years and to changes in functions or the fact that some positions are not equivalent.

Employees with a disability account for 1.4% of the total (+0.2 vs 2020).

b) Work organisation

At Santander we believe our diverse organization must adapt to the needs and characteristics of its teams.

We redesigned our global flexiworking framework to address where, when and how much we work:

- 'Where': Possibility of home/remote working.
- 'When': Intensive day, flexible start/end and break times and alternative shifts.
- 'How much': Part-time working, special leave, flexible holidays, job sharing and other measures.

Because we enabled managers to take charge of deciding where their people can work, each area and business has implemented new ways of working based on the characteristics of the team and its needs.

The corporate FlexiWorking policy, applicable to Santander S.A. and the entire Group, encompasses a wide range of measures so that employees can benefit according to their personal needs and professional situation. These measures refer mainly to:

In addition, the Banco Santander has measures aimed at facilitating the work-life balance of its employees through the different agreements signed with the relevant unions´ representatives. Santander has committed to promoting a rational management of working time and its flexible application, as well as the use of technologies that allow a better organisation of the work of our professionals, specifically addressing the employees´ right to digital disconnection.

c) Health and safety

The health of its employees is a priority for the bank.

In 2021, we appointed a global head of health and well-being to help draw up a strategy and implement it across our footprint.

We drafted our Global health and well-being policy, which will be available to the public in 2022. We also began work on global guides that will set standards on mental and emotional health, digital balance and other priority areas to be implemented by subsidiaries

The BeHealthy initiative aims to make Banco Santander one of the healthiest companies in the world and to offer employees health and wellbeing benefits.

As part of our Covid-19 response, we continued to enforce these prevention measures to make sure our employees stayed healthy.

Banco Santander has a plan for the prevention of workplace risks that is available to all employees on the corporate intranet.

Banco Santander also **promotes a healthy work/life balance through flexible work policies and services** to satisfy employees' personal and family needs. The general code of conduct highlights our ethical principles, including the importance of encouraging a working environment that is compatible with employees' personal and family life.

Also, as part of the "**Our way of working**" initiative, the bank has assessed its new work spaces and equipment, both from an ergonomic and safety perspective.

d) Labour relations

Banco Santander has made **a formal commitment to foster workforce labour** relations in its code of conduct.

The code of conduct stablishes the obligation to respect the internationally recognised rights of unionisation, association and collective bargaining, and the activities carried out by the unions that represent employees, in accordance with the functions and areas of responsibility legally attributed to them.

In addition, the human rights policy describes Banco Santander's principles and commitments with respect to relations with the Bank's employees. These commitments are fostered through social dialogue and include:

- Preventing discrimination and practices that are harmful to people's dignity.
- Rejecting forced and child labour.
- Respecting freedom of association and collective bargaining.
- Protecting employees' health.
- Offering decent work

Also, in meetings of the European Works Committee, various declarations have been signed together with legal representatives of employees in the main European countries in which the Group Santander operates (Spain, Portugal, Germany, the UK, Italy, Poland and Nordics).

- 2008: equal treatment in Santander Group companies.
- 2009: basic labour principles and rights that should govern the framework of labour relations in Santander within the scope of the European Union.
- 2011: framework of labour relations for the provision of financial services.
- 2016: joint declaration on the restructuring of workforces in the European area.

In addition, the collective labour agreement for the banking sector, negotiated and signed by the bank, contains various declarations about promoting labour dialogue.

The dialogue with employees' representatives is maintained through numerous bilateral meetings and specific committees, including:

- The Health and Safety Committee
- The Employment Committee
- The Training Committee
- The Pension Plan Oversight Committee
- The Equal Opportunities Committee
- The Committee for the Solidarity and Social Assistance Fund
- Bilateral meetings with Santander Group companies, such as Openbank and Santander Consumer

These specific meetings with the unions are held to inform them about significant Banco Santander projects and to obtain their feedback, in the understanding that their support is necessary and is directly related to the satisfactory implementation of these projects.

In Spain, practically 100% of the workforce is covered by a collective labour agreement.

In 2021, we began to reduce our workforce on organizational, production-based and economic grounds. Following informal discussions with workers' legal representatives to explain our reasons, we entered into formal negotiations that ended with an agreement with most trade unions. All of the measures agreed with the European Works Council to align workforce restructuring with socially responsible practices were in the restructuring agreement. The alternative measures we proposed included geographic and in-company relocations to lower the number of potential lay-offs. On top of considering employees in vulnerable situations to protect their jobs

e) Training

We value continuous learning so our employees can adapt to an ever-changing environment and help accelerate our transformation.

Our global learning and development policy sets the standards for designing, reviewing, launching, overseeing and enhancing training and development programmes to:

- support our business and cultural transformation in accordance with Santander's governance standards; and,
- foster innovation, knowledge sharing and transfer, and the skills employees need to perform their duties successfully as part of global talent management.

The three pillars of our employee upskilling and reskilling are strategic workforce planning (SWP), our current skill model and a single skills catalogue to meet strategic business needs.

We put training modules on our digital ecosystem, Dojo, which turns them into study plans and "roadmaps" for learning. Dojo facilitates informal, interactive and structured ways of learning, combining many formats, settings and tools so every employee can choose what, when, how and how much to learn.

Furthermore, each subsidiary's Learning and Development team pinpoints specific learning needs relating to its geography and designs training courses consistent with Dojo's standards.

f) Accessibility

Improving access to our products and services is a key aspect of Banco Santander's commitment to be a bank that is Simple, Personal and Fair.

The corporate works manual includes minimum accessibility criteria based on Design for All (DfA) principles. These criteria, which refer to office architecture, furniture, lighting, signage and the functional allocation of spaces, are applied by default in new offices and in those upgrades in which this is technically possible.

Banco Santander also wants to provide maximum accessibility for all the users of its various websites. In this respect, both in the development and maintenance of its websites, the bank applies the accessibility guidelines established by the Web Accessibility Initiative (WAI) working group of the World Wide Web Consortium (W3C), at level AA.

g) Equality

Banco Santander believes that diversity enriches human capital, resulting in an inclusive and diverse work environment that achieves better solutions and offers added value.

The board of directors of Banco Santander is a clear example of diversity in all its aspects. It has diversity of gender (40% of board members are women) and nationality (Spanish, British, American and Mexican) and a broad industry representation (finance, retail, technology, infrastructure and academia).

In managing employee talent, Santander considers all existing sources of diversity, including gender, race, age, national origin, disability, culture, education, and professional and life experience.

In 2017, Banco Santander approved principles for promoting diversity that act as a benchmark for all the initiatives that are developed in this area. These principles, which are included in the corporate culture policy, envisage all the aforementioned sources of diversity, and they are applicable to all stages of talent management in the bank (recruitment, training, professional development, compensation, etc.).

Our commitment to a diverse and inclusive work environment is a cornerstone of our corporate strategy. Our global D&I executive working group and D&I expert network of local representatives perform a vital role in driving and cascading the importance of diversity and inclusion across Grupo Santander.

To recruit, manage and develop talent that reflects broader society, we developed a diversity and inclusion (D&I) strategy in 2020. It sets out to consolidate an inclusive workforce in terms of gender, LGBTI, people with disabilities, and cultural diversity (age, ethnicity and race, nationality, educational and professional background, and international experience) by:

- encouraging leaders to get involved: their commitment to being open and inclusive and to promoting diversity will help consolidate our diverse and inclusive culture.
- increasing awareness: promoting diversity and shaping our culture through global standards and actions such as FlexiWorking, parental leave, training, employee networks and the celebration of international days.
- promoting balance: special focus on increasing the number of women in management and in development programmes.

In 2019, the bank has established various commitments with the objective of achieving equality between men and women.

- To have between 40% - 60% women members on our Group Board by 2021. We have closed 2021 with 40% women on the board.
- To have 30% women in senior leadership positions by 2025. We have closed 2021 with 26,3% women on senior leadership positions.

Banco Santander is one of the leading companies in the *Bloomberg Gender-Equality Index 2021*, We are the first bank, and the second highest rated company.

Information about Human Rights

In line with its corporate culture, Banco Santander undertakes to respect and promote human rights in its sphere of operations, and to prevent or minimise any violation directly caused by its activity.

Banco Santander has a specific policy that includes commitment to human rights, in accordance with the strictest international standards, especially the UN's Guiding Principles on Business and Human Rights of 2011.

This policy, driven by the Board of Directors, is applicable to Grupo and Banco Santander and is available at www.santander.com

Banco Santander's policy on human rights is in line with Banco Santander's General Code of Conduct and its other policies in respect of sustainability.

Information about the fight against corruption

Banco Santander is staunchly committed to fighting any kind of corruption in the public and private sectors alike. In order to comply with this pledge, Banco Santander has drawn up this Anti-Corruption Policy which lays down all the anti-corruption elements which the Grupo Santander must comply with.

Banco Santander considers it a strategic objective to have a system for the prevention of money-laundering and terrorist financing that is advanced and effective, permanently adapted to the latest international regulations and able to deal with new techniques employed by criminal organisations.

It also has a corporate framework that lays down principles for acting in this respect and sets minimum standards applicable to local units. The latter are responsible for directing and co-ordinating procedures for the prevention of money-laundering and terrorist financing, and for investigating and issuing alerts about suspicious transactions and responding to requests for information from the supervisors.

As a signatory of the ten principles of the UN's Global Compact, Banco Santander undertakes to work against corruption in all its forms, including extortion and bribery.

In addition, Banco Santander has whistle-blowers' channels for employees, which form part of the general code of conduct, and for suppliers, designed for reporting inappropriate behaviour by bank employees in matters regarding corruption and bribery that are contrary to internal regulations, to the compliance function.

In 2021, the main concerns were related to corporate values (SPF) and behaviours and to labour regulations, followed by internal fraud, workplace harassment, marketing of products and services, privacy and data protection.

In 2021, 79 equal opportunity and non-discrimination complaints were received in the Group, 6 of which resulted in disciplinary action, including 2 dismissals.

Information about society

a) The bank's commitments to sustainable development

Banco Santander contributes to economic and social development through initiatives and programmes that promote education, entrepreneurship, employability and social wellbeing.

Banco Santander has, as one of its priority lines of action to contribute to sustainable development, the financial empowerment of people. We help people to access financing, to create or develop micro-enterprises, and we provide them with the necessary skills to manage their finances through financial education. Our goal is to include and financially empower 10 million people by 2025. Three main focuses of action:

- We help unbanked, underbanked and vulnerable people to access and use basic financial services.
- We offer specific products and services to low-income people, people with financial problems, and vulnerable groups.
- We promote financial education programs

Through Santander Universities, a unique initiative in the world, we focus our efforts on supporting education, entrepreneurship and employment. Banco Santander developed the largest scholarship programme ever launched by a private entity.

Grupo Santander has over 1,400 agreements with universities and academic institutions in 31 countries. Banco Santander SA has agreements with 100 academic institutions.

During 2021 Banco Santander invested a total of EUR 106 million to support higher education. Of which 69 million was disbursed by Santander Spain and the Corporate Centre, and which supported more than 43,000 students and university professors.

The bank also supports the communities where it operates through numerous local programmes, encouraging the participation of bank employees as a way of promoting solidarity, motivation and pride in belonging, maintaining proximity and ties with their surroundings.

In total, in 2021, Banco Santander invested more than EUR 46 million, EUR 13 million in social programs in Spain, helping more than 500,000 people.

Also, through the Banco Santander Foundation, the bank carries out important work in cultural patronage and the protection and recovery of natural spaces.

b) Outsourcing and suppliers

Banco Santander has a supplier management model and policy that establishes a common methodology for all units about the selection, certification and assessment of suppliers. In addition to price, quality of service and other traditional criteria, it includes ESG factors, such as diversity and inclusion, human rights and sustainability. These include:

- Whether the supplier has obtained official certifications related to quality, environmental management, labour relations, the prevention of workplace risks, corporate social responsibility and similar.
- Whether they have subscribed to the Global Compact or have their own principles in respect of ethical, social and environmental questions and report about these on a regular basis.
- Or whether they have frameworks, policies, procedures, records of indicators and/or initiatives related to environmental and social matters.

The third-party certification policy include the responsible behaviour principles for suppliers. These principles lay down the minimum conditions that Banco Santander expects of its suppliers around ethics (ethics and conduct), labour matters (human rights, health and safety, and diversity and inclusion) and the environment.

Similarly, Banco Santander has a whistle-blowers' channel for suppliers through which suppliers who provide services to the Bank or any of its subsidiaries in Spain can report inappropriate conduct by Group Santander employees which does not conform to the framework of the contractual relationship between the supplier and the general principles of conduct of the Banco Santander.

c) Consumers

For Banco Santander a key characteristic of a responsible bank is that it manages and oversees the marketing and commercialization of products and services and consumer protection appropriately.

By placing our customers at the heart of what we do, we aim to win and keep their loyalty. To achieve that, we use a range of interactive channels to listen to and understand them better.

Our product, service and consumer protection framework sets out the principles that promote a strong SPF relationship with customers and establishes the basics for managing and mitigating conduct risk in design, sales, post-sales and services.

Our Product Governance & Consumer Protection function, is responsible for ensuring appropriate management and control in relation to products and services and consumer protection.

Within this function, the Product Governance Forum protects the customers by validating products and services and preventing the launch of inappropriate ones.

In addition, the corporate consumer protection policy establishes the criteria for the identification, organisation and implementation of consumer protection principles and the mechanism for the overseeing and supervising compliance.

In 2021, we worked on an instruction manual about our vulnerable customer and special case management model, and set a roadmap for its roll-out among subsidiaries, therefore ensuring a consistent, group-wide approach to identifying and managing vulnerable customers in such high-impact procedures as collections and fraud management. We offered monthly training courses and we ran an awareness campaign at the Corporate Centre and shared the manual across our footprint.

Appropriate management of complaints is another important aspect of a responsible banking strategy. Banco Santander has a procedure for complaint management and root cause analysis whose objective is to issue standards to all the units for proper complaint management, ensuring compliance with the local and industry-wide regulations applicable in each case, and offering the best possible service to customers. In 2021 Banco Santander received a total of 120,953 complaints, 19.3% lower than in 2020..

Banco Santander also constantly monitors its customers' opinions and their experiences. This information reveals how the range of services offered can be improved and helps to measure customer loyalty. To measure customer loyalty and satisfaction, Banco Santander uses the Net Promoter Score (NPS). In 2021 we have performed well, maintaining our 2nd position in Spain, and being top 3 in 8 of the main markets in which we operate at a group level..

d) Tax information

Banco Santander pays its fair share in taxes in every jurisdiction where we operate. Our tax strategy, which has been approved by the Board, sets out the principles by which the entire Group Santander operates. It is published on our website.

Banco Santander contributes economically and socially to the countries in which it operates by paying all taxes borne directly by the Grupo Santander (taxes paid by the Group[4]) and collecting or withholding taxes from third parties generated through business activity, cooperating as required with the local tax authorities (taxes from third parties[5]).

The total taxes collected and paid by Banco Santander in Spain in 2021 amounted to EUR 3,048 million, of which 1,707 million were the bank's own taxes and EUR 1,341 million were third-party taxes.

[4] Including net corporation tax payments, VAT and other non-recoverable indirect taxes, employer's social security contributions and other withholding taxes, as well as other charges and tariffs.

[5] Including net payments for salary withholdings and employees' social security contributions, recoverable VAT, tax deducted at source on capital, non-resident taxes and others.

6. Research, development and innovation

Research, development and innovation activities

Innovation and technological development are strategic pillars of Grupo Santander. We aim to respond to fresh challenges that emanate from digital transformation, focusing on operational excellence and customer experience.

Moreover, the information from our new technological platforms will help us better understand our customers' journey and enable us to design a more accurate digital profile to generate more confidence and increase customer loyalty.

As well as competition from other banks, financial entities must watch out for new financial system entrants, whose differentiating factor and competitive advantage is their use of new technology.

Developing a competent strategic technology plan must provide:

- greater capacity to adapt to customers' needs (customized products and services, full availability and excellent service across all channels).
- enhanced processes for Grupo Santander's professionals to ensure greater reliability and productivity; and
- proper risk management, supplying teams with the necessary infrastructures to support the identification and assessment of all business, operational reputational, regulatory and compliance risks.

As a global systemically important bank, Santander and its subsidiaries face increasing regulatory demands that impact system models and their underlying technology. This requires additional investments to guarantee compliance and legal security.

As in previous years, the latest European Commission ranking (2021 EU Industrial R&D Investment Scoreboard, based on 2020 data) ranked our technological effort first among Spanish companies and we are the second global bank for investment in R&D.

The equivalent investment in R&D&I to that considered in this ranking amounted to EUR 1,325 million.

Technological strategy

To meet business and customer needs, we must integrate new digital capabilities such as agile methodologies, public- and private-Cloud-based products and core systems development. We must also broaden our data and technological capabilities (APIs - Application Programming Interface, artificial intelligence, robotics, blockchain, etc.).

Our technological strategy aligns with the three pillars of the group's strategy: One Santander, PagoNxt and Digital Consumer Bank. Our technological pillars (Cloud, Agile, Data, Core evolution and Deep tech skills), a flexible and common architecture and a global operating model, as well as better management of risk and associated costs, help us achieve this.

In order to ensure the alignment of the technology strategy in all Group units, the SARB (Santander Architecture Review Board) holds monthly meetings that bring together the Chief Technology Officers (CTOs) of the different units and businesses to actively participate in key architecture decisions. The SARB oversees everything, the analysis of potential assets, the migration to cloud or the review of datalake reference architectures.

The use of a single technology stack and reference architectures are key to achieving Santander Common Architecture. Based on simplification, the recycling of components and the principle of Composable Architecture, the SARB also guarantees the use of technologies that matches the business of the future.

Our implementation of this strategy is based on our set of rules, a committed and experienced organization in relationships with our country units, and a governance model that articulates projects and initiatives that help crystallize the strategy in all our markets.

The development of our technology and operations (T&O) model will help us cultivate new business, focusing on global products and digital services. Almost 5,000 Santander Global Tech professionals in Spain, the UK, Portugal, Poland, the US, Mexico, Brazil and Chile are gradually incorporating the global product portfolio agreed by the country units, our global businesses and the T&O division, guaranteeing the quality of digital services and products, and also their security.

Technological infrastructure

Grupo Santander has a network of high-quality data centres (CPDs) interconnected by a redundant communications system. The CPDs are spread across strategic countries to support and develop Grupo Santander's activity and combine traditional information technology (IT) systems with the capabilities supplied by an on-premise private Cloud, which thanks to its swift adoption enables integrated management of the business areas' technology, accelerates the digital transformation and allows significant cost savings.

Santander has currently migrated more than 75% of its technology infrastructure to the cloud and expects to complete the roll-out by 2023. Our Cloud strategy enables us to improve processes, swiftly innovate and improve service quality. Thanks to the Local Cloud Centres of Excellence (local CCoEs), coordinated under the Global CCoE, we can guarantee consistent and rigorous adoption of the Cloud across our entities. This minimizes risks in accordance with the Public Cloud policy. This process is also expected to reduce the energy consumption of the Bank's technology infrastructure by 70%, which contributes to Santander's responsible banking goals.

Cybersecurity

Cybersecurity is one of Grupo Santander's main priorities and a crucial element in supporting our mission of 'helping people and businesses prosper', as well as offering excellent digital services to our customers.

New cyber services and capabilities created during the Cybersecurity Transformation 3-year Plan have been completed in 2020 and moved to business as usual (BAU) operation in line with the Group's Cybersecurity Framework. This has allowed us to set the organisational foundations and governance for cyber security globally, establish global cyber services within the group, strengthen defences in line with existing best practices and latest technology tools, and help drive a security aware culture for employees and clients. During the transformation, Santander established a Global Cybersecurity Centre in Madrid which provides services to protect all Group entities, systems and customers by taking a proactive approach to identifying, monitoring and responding to cyber threats 24/7.

At the same time, as cyber threats and attack techniques continue to develop, continuous evolution of cyber defences is essential. In 2021, the following key strategic cyber security pillars and initiatives were established to help Santander evolve its cyber defences in line with emerging threats and technologies:

- Level the "battlefield": The current threat landscape is increasingly challenging with new vulnerabilities, techniques and procedures reported on a daily basis. It is crucial to take actions that make attacks more difficult through deterrence, deception and automation techniques.
- Defend the (hyper-connected) Bank of the Future: The banking ecosystem (platforms, cloud and supply chain) is increasingly hyper-connected and interdependent. Cybersecurity teams have been working on implementing new defence paradigms such as "Zero Trust" and other innovative solutions.
- Generate Value & Trust: Helping customers stay safe online is key to continue building trust and helping everyone prosper in the digital world. Additionally, promoting public-private partnerships and collaborating to tackle cyber crime is key to protect customers and society as a whole.

See more information in the Consolidated Directors' Report.

7. Customer service and customer defence

Customer Service Annual Report

In accordance with article 17 of order ECO / 734/2004 of March 11 of the Ministry of Economy on the departments and services of Customer Service and the Customer Ombudsman of Financial Institutions, the directors' report summarizes the Annual Report to be presented by the holder of the Service on the Board of Directors in March 2021.

Customer service and customer defence service

In compliance with Law 44/2002 on Measures for the Reform of the Financial System of the 734/2004 Order of the Ministry of Economy on Departments and Services of Customer Service and the Customer Ombudsman of Financial Institutions and in accordance with Article 37 Of the Regulations of the Customer Claims and Attention and Defence Service in Grupo Santander, below is a summary of the activity developed by the said Service during 2021, in relation to the management of complaints and claims.

This complaint and customer service department has managed during 2021 the claims of 18 companies of Grupo Santander in Spain, three less than in 2020 after the liquidation of Santander Brasil at the end of 2020, the adhesion of Caceis Bank to its own customer service and the sale of the Popular Vida 2020 business to Santander Generales Seguros y Reaseguros, S.A., a company not adhered to this service.

Also, note the name change from Santander Spain Merchant Services to Getnet Europe.

Global evolution of complaints and claims received by Banco Santander in 2021

In 2021, 131,029 claims were accepted in the complaint and customer service department. Of these, 2,071 came through the Customer Ombudsman, 2,814 through the Bank of Spain, 216 through the National Securities Market Commission (CNMV) and 125 through the General Directorate of Insurance and Pension Funds (DGSFP).

Analysis of claims by affected products

Complaints and claims

The following is the classification of complaints received in 2021 according to the type of product:

Number of complaints	2021	2020
Assets	47,442	47,806
Liabilities	31,314	33,948
Services	18,063	18,967
Insurances	2,178	1,901
Funds and Plans	1,407	1,922
Payment methods	23,503	24,024
Securities / Capital Markets / Treasury	5,326	25,384
Others	1,736	1,916
	131,029	**155,868**

Resolution of claims and complaints

As of 31 December 2021, 95% of the complaints and claims received had been resolved.

The average resolution time in 2020 was 34 calendar days. 67% of the complaints and claims resolved have required a processing time of more than 15 calendar days.

In 23% of cases, the resolutions have been favourable to customers.

Entities

The following are the companies adhering to the Regulation of the Customer Service of Complaints, Care and Defence of Grupo Santander and their corresponding number of complaints and claims received.

Entities	Admitted to processing	Non-admitted to processing
BANCO SANTANDER, S.A.	114,353	5,922
SANTANDER CONSUMER FINANCE, S.A.	10,076	417
OPEN BANK, S.A.	2,784	25
SANTANDER SEGUROS Y REASEGUROS CÍA. ASEGURADORA,SA	2,115	116
SANTANDER PENSIONES, S.A., E.G.F.P.	767	41
SANTANDER ASSET MANAGEMENT, S.A., S.G.I.I.C.	393	36
GETNET EUROPE, EP, SL	337	13
ALTAMIRA SANTANDER REAL ESTATE, S.A.	137	25
SANTANDER FACTORING Y CONFIRMING, S.A., E.F.C.	31	—
EURO AUTOMATIC CASH	24	—
SANTANDER LEASE, S.A., E.F.C.	12	—
TRANSOLVER FINANCE, E.F.C., S.A.	—	—
SANTANDER REAL ESTATE, S.A.	—	—
SANTANDER INTERMEDIACIÓN CORREIDURÍA DE SEGUROS, S.A.	—	—
LURI 6, S.A.U.	—	—
CACEIS BANK SPAIN, S.A.	—	—
SANTANDER INVESTMENT, S.A.	—	—
SANTANDER BRASIL E.F.C., S.A.	—	—
SANTANDER PRIVATE BANKING GESTIÓN, S.A., S.G.I.I.C	—	—
SANTANDER CAPITAL DESARROLLO, S.G.E.I.C., S.A.U.	—	—
Total	**131,029**	**6,595**

The network of branches and the different channels of relationship solve, in the first instance, the requests, disconformities or incidents that the clients communicate to Banco Santander, trying to avoid that they become complaints to other instances.

8. Risk management, solvency and capital

See notes 49 and 1.e) on risk and capital to the Bank Annual Accounts. See more information in the Consolidated Directors' Report.

9. Other relevant information

9.1 Treasury shares:

See note 30 to the Bank Annual Accounts.

The acquisition of treasury shares was last authorized at our April 2020 AGM, for five years and subject to the following provisions:

- Treasury shares held at any time cannot exceed 10% of Banco Santander's share capital, which is the legal limit set under the *Ley de Sociedades de Capital* (Spanish Companies Act).
- The purchase price cannot be lower than the nominal value of the shares nor exceed 3% of the last trading price in the Spanish market for any trades in which Banco Santander does not act on its own behalf.
- The board may establish the purposes for and the procedures through which the authorization may apply.

On 27 October 2020, the board approved the current treasury shares policy, which dictates that treasury share transactions may be carried out for these purposes:

- Provide liquidity or supply of securities in the market for Banco Santander shares, which gives this market depth and minimizes any temporary imbalances in supply and demand.
- Take advantage for the benefit of all shareholders of weakness in the share price in relation to its medium-term outlook.
- Meet our obligations to deliver shares to our employees and directors.
- Serve any other purpose authorized by the board within the limits set at the general meeting.

Among other things, the policy also provides for:

- The principles to uphold in treasury share trades, which include protecting financial markets' integrity and prohibiting market manipulation and insider trading.
- The operating rules on how treasury share trades must be carried out, unless in exceptional circumstances as per the policy. These rules include:
  - Responsibility for execution of these trades, which falls on the Investments and Holdings department, kept separate from the rest of Santander.
  - Venues and types of trades. Trades must generally be carried out in the orders market of the *mercado continuo* (continuous market) of Spanish stock exchanges.
  - Volume limits, which in general must not exceed 15% of the average daily trading volume for Banco Santander shares in the previous 30 sessions in the *mercado continuo*.
  - Price limits. In general, (a) buy orders should not exceed the greater of the price of the last trade in the market between independent parties or the highest price in a buy order in the order book and (b) sell orders should not be lower than the lesser of the price of the last trade in the market by independent parties and the lowest price in a sell order in the order book.
  - Time limits, including a 15-day black-out period that applies before each quarterly results presentation.
- Disclosure to the markets of treasury shares trading.

The policy applies to the discretionary trading of treasury shares. It does not apply to transactions in Banco Santander shares carried out to hedge market risks or provide brokerage or hedging for customers.

The full treasury shares policy is at Banco Santander's corporate website.

On 28 September 2021, the board resolved to execute a treasury shares buyback programme (First Buyback Programme) worth up to 841 million euros (20% of the Group's underlying profit for H1 2021) according to the Treasury shares policy and 2021 Shareholder remuneration policy. It had based its decision on authorization by the ECB, and by shareholders at the April 2020 AGM.

In the First Buyback Programme (from 6 October to 25 November 2021), we acquired 259,930,273 treasury shares —1.499% of Banco Santander's share capital— at a weighted average price per share of 3.2355 euros.

The purpose of the First Buyback Programme was to reduce Banco Santander's share capital by cancelling the repurchased shares, which the board put to a vote at the 2022 AGM.

Under the same AGM approval, on 24 February 2022 the board of directors resolved to execute another shares repurchase programme at a maximum of 865 million euros (approximately 20% of the Group's underlying profit for H2 2021) as part of shareholder remuneration charged against 2021 results (Second Buyback Programme).

The purpose of the Second Buyback Programme is to reduce Banco Santander's share capital by cancelling purchased shares (up to the agreed maximum), for which the board submitted a resolution for a vote at the 2022 AGM.

The Bank's shares owned by the consolidated companies accounted for 1.60% of issued share capital at 31 December 2021.

9.2 Dividend policy:

As required in Banco Santander's by-laws, each year the shareholder remuneration policy is submitted for approval by the AGM.

Distribution charged against 2021 results

ECB Recommendation of 15 December 2020, which asked banks not to pay out dividends charged against 2021 results (ECB Recommendation III), was in force for over half of 2021.

On 23 July 2021, the ECB believed the reasons underpinning ECB Recommendation III to limit dividend payouts were no longer valid and, thus, repealed it effectively on 30 September 2021.

On 28 September 2021, the board announced its 2021 shareholder remuneration policy to pay out an interim distribution from approximately 40% of the Group's underlying profit (half through a cash dividend and half through a shares buyback).

- Interim remuneration. Accordingly, it authorized the payment of an interim dividend of 4.85 euro cents per share (i.e. 20% of the Group's underlying profit for H1'21), in cash and charged against 2021 profits; it was paid on 2 November 2021. The board also voted to launch the First Buyback Programme worth 841 million euros (20% of the Group's underlying profit for H1'21) once the ECB approved it on 28 September 2021.
- Final remuneration. On 24 February 2022, within the 2021 shareholder remuneration policy, the board of directors voted to:
  - submit a resolution at the 2022 AGM to approve a final cash dividend in the gross amount of 5.15 euro cents per share, worth approximately 865 million euros (approximately 20% of the Group's underlying profit for H2 2021). If approved at the AGM, the dividend would be payable from 2 May 2022. The estimate of 865 million euros is based on the assumption that, once the Second Buyback Programme has taken place, the number of outstanding shares entitled to receiving dividends will be 16,804,353,202. Therefore, the total dividend may be higher if fewer shares than anticipated are acquired in the Second Buyback Programme; otherwise, it will be lower.
  - implement a Second Buyback Programme worth 865 million euros (approximately 20% of the Group's underlying profit for H2 2021), once the necessary regulatory authorization has been obtained.

If shareholders approve the dividend payout resolution and the ECB authorizes the Second Buyback Programme, it will result in a payout of approximately 40% of the Group's underlying attributable profit for 2021. If the buyback reaches the maximum within the programme period, remuneration will be split equally between cash dividends and shares buybacks. This final remuneration will enable Santander to meet the target set in the shareholder remuneration policy disclosed to the market on 28 September 2021.

9.3 Stock market information:

Banco Santander shares are listed on Spanish stock exchanges (Madrid, Barcelona, Bilbao and Valencia, under the trading symbol 'SAN'), the New York Stock Exchange (NYSE) as American Depositary Shares (ADS) under the trading symbol 'SAN' (each ADS represents one Banco Santander share), the London Stock Exchange as Crest Depositary Interests (CDI) under trading symbol 'BNC' (each CDI represents one Banco Santander share), the Mexican Stock Exchange under the trading symbol 'SAN', and the Warsaw Stock Exchange under the trading symbol 'SAN'.

The global economy came back strong. Vaccination programmes enabled a return to economic activity and mobility amid excess liquidity and expansionary fiscal policies. Despite uncertainties due to the surge of new covid-19 variants, positive trends drove a rise in commodity prices and inflationary pressures, which rebounded to the highest levels in a decade in the US and the eurozone.

Central banks in developed economies began a widespread withdrawal of monetary stimulus. The Bank of England raised interest rates to 0.25% on the back of a strong jobs market and high inflation. The US Federal Reserve announced its intention to start raising rates no later than mid-2022. The ECB is limiting the withdrawal of stimulus to liquidity by scaling back its purchase programmes.

Major global equity indices ended 2021 with significant aggregate gains. The banking industry registered better performance owing to the lifting of restrictions on dividend payments, favourable results of US bank stress tests, and better outlooks for most European banks.

The IBEX 35 in Spain increased 7.9%; the DJ Stoxx 50 in Europe by 22.8%; DJ Banks by 34.0%; and the MSCI World Banks by 22.7%.

By 31 December 2021, Santander's market capitalization of EUR 50,990 million was the second largest in the eurozone and 24th largest in the world among the financial institutions.

13,484 million shares traded in the year for an effective value of EUR 41,195 million and a liquidity ratio of 78%.

The Santander share closed 2021 at 2.941 euros.

At 31 December 2021 the total number of Santander shareholders was 3,936,922.

9.4 Average period of payment to suppliers:

The average period of payment to suppliers during 2021 is 10 days, term which is below the maximum established in applicable regulations.

10. Events after the reporting period

No significant events occurred from 1 January 2022 to the date on which these financial statements were authorized for issue, other than those described in these annual accounts.

11. Annual corporate governance report and Annual report on directors' remuneration

According to articles 540 and 541 of the Spanish Companies Act, Banco Santander, S.A. has prepared the annual corporate governance report and the annual report on directors' remuneration for the year ended 31 December 2021 (that are part of the directors' report of that financial year) with the contents determined by Order ECC/461/2013, of 20 March, and by Circular 3/2021, of 28 September, of the National Securities Market Commission (CNMV), that modifies Circular 5/2013, of 12 June, that defines the annual corporate governance report model for listed companies, and Circular 4/2013, of 12 June, that defines the annual report on directors' remuneration model for listed companies.

The annual corporate governance report includes a section that refers to the compliance of the corporate governance recommendations in Spain.

The annual corporate governance report and the annual report on directors' remuneration are included, as a separate section, in the individual directors' report in accordance with the provisions of article 538 of the Corporate Enterprise Act. The aforementioned reports are sent individually, as other relevant information, to the CNMV, and are included in the consolidated directors' report as a separate section. They are available on the Bank's corporate website (www.santander.com) and on the CNMV website (www.cnmv.es).

Pursuant to Article 253, section 1 of the revised Spanish Companies Act *(Ley de Sociedades de Capita*l), the board of directors of Banco Santander, S.A. draws up the individual financial statements (comprising the balance sheet, the income statement, the statement of recognized income and expense, the statement of changes in total equity, the statement of cash flows and the notes to the individual financial statements) and the individual directors' report for the 2021 fiscal year in eXtensible HyperText Markup Language (XHTML) format, which conforms to the single electronic reporting format required under Directive 2004/109/EC and Delegated Regulation (EU) 2019/815.

The directors of Banco Santander, S.A., listed below with an indication of their respective positions, declare that, to the best of their knowledge, the company's individual financial statements for the 2021 financial year were drawn up in accordance with the applicable accounting principles and give a true and fair view of the assets, liabilities, financial position and profit or loss of the company, and that the directors' report includes a fair review of the development, performance and position of the company, together with a description of the principal risks and uncertainties that it faces.

Boadilla del Monte (Madrid), 24 February 2022

ANA PATRICIA BOTÍN-SANZ DE SAUTUOLA Y O'SHEA

Chair

BRUCE CARNEGIE-BROWN

Vice Chair

JOSÉ ANTONIO ÁLVAREZ ÁLVAREZ

Vice Chair and Chief Executive Officer

MEMBERS:

HOMAIRA AKBARI

LUIS ISASI FERNÁNDEZ DE BOBADILLA

FRANCISCO JAVIER BOTÍN-SANZ DE SAUTUOLA Y O'SHEA

HENRIQUE MANUEL DRUMMOND BORGES CIRNE DE CASTRO

SOL DAURELLA COMADRÁN

SERGIO AGAPITO LIRES RIAL

GINA DÍEZ BARROSO

R. MARTÍN CHÁVEZ MÁRQUEZ

RAMIRO MATO GARCÍA-ANSORENA

BELÉN ROMANA GARCÍA

ÁLVARO ANTONIO CARDOSO DE SOUZA

PAMELA ANN WALKDEN