Santander Private Banking

Santander Asset Management

Market Outlook 2021

Recovery and Disruption

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Recovery and Disruption

Dear Client,

The past year has felt like an eternity as the world has been overwhelmed by the COVID-19 outbreak infecting every aspect of our life. It has left a permanent imprint on how we see our health, finances, politics and social interactions, and dealt **an immense blow to the global economy.** Though lockdowns have proven effective in curbing the spread of the virus, they have also required a huge economic sacrifice.

On the positive side, **policymaking to mitigate the damage of lockdowns has never been more impressive and coordinated.** Central banks and governments have reacted swiftly and forcefully to stabilize the financial system, support firms and households, and protect jobs, with measures that would once have been deemed off-limits. As the **world awaits the distribution of vaccines to return to normal life,** unprecedented stimulus and hopes of a sharp recovery in 2021 have already caused the market to rally in the face of the worst and fastest economic crisis since the Great Depression.

The cost of the cocktail of financial medicines needed to treat the pandemic dwarfs the impact of the 2008 crisis; while **recovery is a reality,** the growth we are beginning to experience will pose challenges to many parts of the economy, especially financial markets. Traditional investment strategies will also be put to the test, as **no single asset class provides a comprehensive solution** to our clients' myriad financial needs.

Every crisis brings risks and rewards, and achieving returns above inflation in this **environment of recovery and disruption** requires a dynamic strategy. **Interest rates are extremely low and will remain so for a long time,** increasing the need to consider potential riskier investments with positive yields. We recommend investing according to your financial plan, with a balanced approach to equity based on **innovative companies (where we are providing advice under the Future Wealth initiative)** and coupled with **cyclical stocks** that have suffered from the pandemic but are beginning to benefit from the recovery.

The pandemic has accelerated the **need of a more circular, resilient, inclusive and sustainable economy.** We also recommend ESG (Environmental, Social and Governance) investments as the top 50 economies set out to commit USD862 billion to boosting green efforts. At Santander Wealth Management & Insurance we have made **sustainable investing our preferred solution** for private banking clients globally. **Alternative investments, structured products and risk-based strategies,** can also provide new avenues of profitability in client portfolios.

Our efforts continue to be centered in providing our clients with the best advice and the expertise that our global teams can offer. As physical lockdowns are just temporary solutions, we believe that, **by working together with our clients we can balance the risks of investing and manage the economic reopening with prudence and discipline.**

Thank you very much for your trust,

Víctor Matarranz
Global Head
Santander Wealth Management & Insurance Division

Key Messages 2021

On the Road to Recovery

Vaccine Relief

The virus continues to spread across the world, but a second round of hard lockdowns has been avoided due to more targeted restrictions and preventive measures.

Unprecedented progress in vaccines has provided comfort to the markets along with the expectation that full immunization will be achievable by the second half of 2021.

Activity is slowly recovering and there is discussion about the shape of the recovery but not about the recovery itself.

License to Spend

The scale of coordinated fiscal and monetary stimulus there is global consensus requesting for government support programs to be maintained until there is a solid economic recovery.

Central banks are not "thinking about thinking about raising rates". Asset purchase programs will continue to provide ample liquidity to the markets.

Cash and highly rated bonds will continue to yield negative real returns for a very long time.

Low for Even Longer

Search for Yield

Low or negative interest rates punish conservative investors but provide a boost to risk assets.

Investors have no alternative but to explore assets with a positive yield.

We recommend a hedging against potential future increase in inflation as central banks signal a higher tolerance for short term inflation in the future.

In the short term, the risk of inflation seems to be centered on asset prices.

Unorthodox Times

Traditional investment strategies and sector allocations should be revisited in order to build portfolios that succeed in this new scenario.

The future is moving in fast-forward mode as a result of technology, demographics and behavioral changes. COVID-19 has accelerated these trends.

Volatility will continue as the world experiences new paradigms in fiscal and monetary policies.

Rethinking Investment Solutions

Green Shoots

Sustainable investing (ESG) is not a temporary fad. A growing number of investors want to see their money flowing towards investments that are both profitable and reflect their values.

For more and more investors, these areas are just as important as financial variables when it comes to deciding whether or not to invest their hard-earned money.

Higher risk-adjusted returns can also be achieved as ESG factors can influence value, reputation, and regulatory governance of companies and industries.

Rotation & Innovation

The world is recovering from COVID-19 and investment portfolios should reflect this positive environment. Stay invested.

Looking ahead to 2021, it is important that portfolios balance the competing themes of post-crisis normalization and continuous technological and environmental disruption. Combine cyclical recovery with future trends.

Strategies in private markets, risk based solutions, and structured products offer both growth and diversification potential.

01 On the Road to Recovery

Vaccine Relief

The virus continues to spread across the world, but a second round of hard lockdowns have now been avoided due to more targeted restrictions and preventive measures.

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In 2020, the world has tested uncharted waters in many fronts and is still looking for a definitive way to come back to what used to be normal some months ago. The global economy is climbing out from the depths to which it had plummeted during the Great Lockdown in March. According to World Bank forecasts in its June 2020 Global Economic Prospects, the global economy will contract by 5.2% this year. Its long ascent back to pre-pandemic levels of activity remains prone to setbacks.

Social Distance "Vaccine": lockdowns and reduced mobility

COVID-19 crisis put the world in jeopardy in such a fast and unpredicted manner, that a whole set of measures had to be put in place in order to contain worse outcomes. We could conceptualize the life cycle of a **pandemic-induced crisis as having four components: sanitary collapse, liquidity, solvency and immunity.** In this process of both, recovery of economic activity and financial markets we have identified **four "vaccines"** that have been key to tackle each of those problems.

Monetary stimulus: at USD8 trillion in this crisis, is four times the stimulus put in place back in the Great Financial Crisis

In order to address **sanitary collapse** and contain the progress of the pandemic, **lockdowns and drastic social distancing** were put in place. The rapid spread of the virus caused a health emergency that, due to the lack of knowledge on its evolution, could only be solved by forcing confinement to try and avoid contagions. It meant suspending all non-essential activities and reducing mobility. Later on, countries have been able to fine-tune lockdowns with less dramatic measures. So far, mobility has recovered from -50% to -20% compared with the worst levels seen in April.

The world economy came to a halt, a provoked recession kicked in and **liquidity** became an issue. **Central banks applied all the monetary stimulus** prescriptions that were effective in the previous financial crisis and innovated with even more unorthodox measures defying all those claiming the monetary toolbox was already empty.

Fiscal stimulus: USD11 trillion in fiscal response, an amount equivalent to 12% of global GDP[1]

A third set of measures was implemented to avoid **solvency** problems. **Governments adjusted the legislative mechanisms to approve emergency fiscal measures.** This made possible the conduction of major aid to families and businesses in order to avoid insolvencies that would otherwise have been immediate.

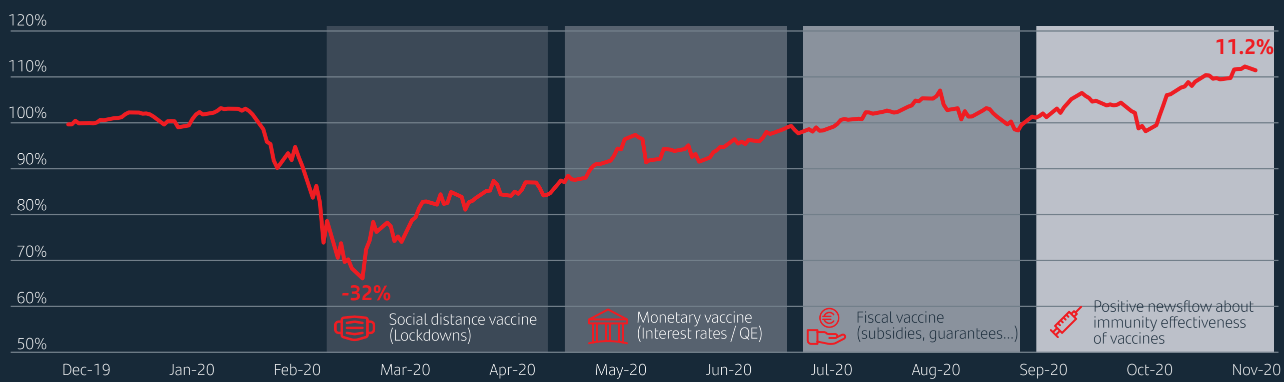
From day one the world began a multimillion-dollar race for a vaccine as normality depends on having **immunity.** This seems to be the last ingredient of the recipe for the recovery. Global stock markets regained pre-pandemic levels thanks to the progress made in phase 3 testing of several of the **vaccines that are in an advanced stage of approval.**

Immunization: over USD14 billion invested in R&D in the search for a vaccine

World stock market (MSCI World) recovery and "vaccines" in 2020

Source: Bloomberg and Santander Private Banking. Data as of 30 November 2020

A combination of social, monetary, fiscal and scientific vaccines led to the stock markets' recovery



(1) Sources: National authorities and IMF staff estimates.
Estimates as of September 11, 2020. Numbers in U.S. dollar and percent of GDP are based on October 2020 World Economic Outlook unless otherwise stated

Lockdown and Mobility

Countries around the world are still working in **"flattening the curve" of the pandemic.** Flattening the curve involves reducing the number of new COVID-19 cases from one day to the next. This has prevented healthcare systems from reaching full capacity. At the beginning, the only way to stop the virus spread was by wearing masks, travelling less and limiting contact with other households.

Authorities were **able to flatten the curve of virus contagions but created a ripple effect in the economy with a loss in mobility.** During all this period, real-time mobility data has been key to tracking the public's adherence to comply with stay-at-home orders and social distancing regulations, helping therefore predicting the spread of the disease. It has also served as a proxy for economic activity. We can see the effect in the graph below that shows Google mobility data in some of the most relevant economies (with the exception of China). Lockdowns were so severe that **mobility was almost reduced by half** with a significant cost in most sectors of the economy leading to the **sharpest economic contraction in history.** Restriction measures became widespread and had a dramatic impact on the growth figures for the second quarter. Among the major seven economies, the United States recorded quarterly annualized growth of minus 31.4%, while the **United Kingdom recorded the sharpest quarterly fall (-19.8%) in the second quarter of the year.**

These containment and mitigation measures, as well as public awareness and the fear of contracting COVID-19, had an immediate dampening effect on mobility patterns in all G20 countries. Based on smartphone locations, movements to places of work decreased markedly as of early March, falling by between 30 and 70 per cent to a low point in mid-April. A **pickup in mobility subsequently occurred as lockdowns and other containment measures began to be eased in** most countries.

The third quarter was focused on reopening from the March-April lockdowns. **Mobility regained track at an uneven pace.** Social distancing stayed in place, whereas lockdowns are

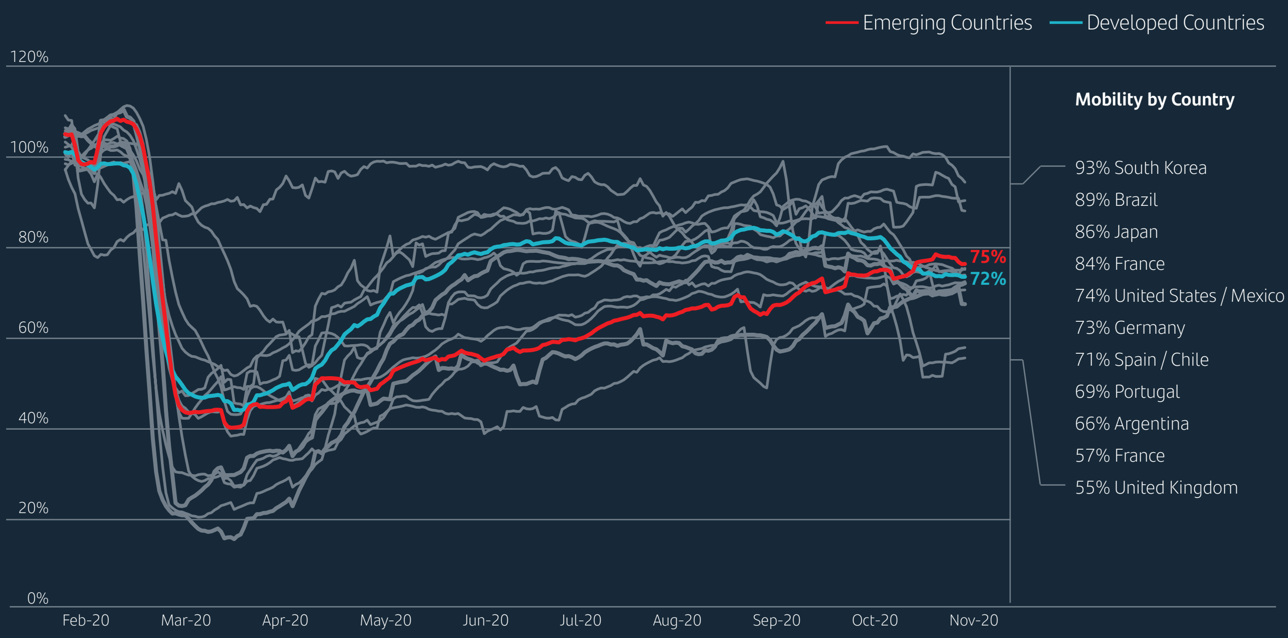
The world has been able to implement middle-ground measures that have prevented the disease from overwhelming hospitals while lifting some of the toughest restrictions

Full economic recovery will only be regained with massive vaccination as overall mobility has only recovered to around 75%

Google Mobility local reports - Country breakdown

Source: Google Mobility. Data as of 24 November 2020

Relaxation of lockdowns has led to an incomplete recovery of activity



no longer absolute, they now work as a fine-tuning exercise aimed at controlling outbreaks. The world's major economies recovered strongly, albeit unevenly by sector, as the pandemic receded in intensity.

From the deepest point of the economic decline, **Asian countries have been able to keep a steady reopening** as systems and technology put in place have proven effective in keeping the virus contained. China has regained pre pandemic levels of activity while Japan and South Korea are very close to achieving full recovery. On the flip side, **European economies and the United States have returned to more restrictive measures in late Q3 as a second wave of contagions emerged** and, as a consequence mobility has again diminished although it is far from the levels seen in Q2. Full recovery seems to be extremely difficult to achieve for most major economies and therefore mass vaccination is needed to reach a comprehensive normalization of activity.

Only some sectors of the global economy and some countries in Asia are exhibiting traditional signs of a V-shaped recovery from the pandemic-induced collapse

Under social restrictions, most industries can still run their activity with new procedures, although some economic sectors highly related to mobility such as travelling, entertainment and leisure will continue to suffer most significantly

The **pandemic has massively disrupted key services sectors,** especially tourism, hospitality and retail. Restrictions have clearly increased the risk of weakening economic activity, at least in parts of the services sector. At the same time, however, the manufacturing sector keeps some of its positive momentum, given its lagged start after the lockdowns and the continued strength of the Chinese rebound. There's a growing likelihood that we'll see a K-shaped recovery, where certain sectors will rebound strongly while others stagnate. From the demand point of view, consumption of goods has fared well, while areas deemed as discretionary services are likely to continue lagging until life normalizes.

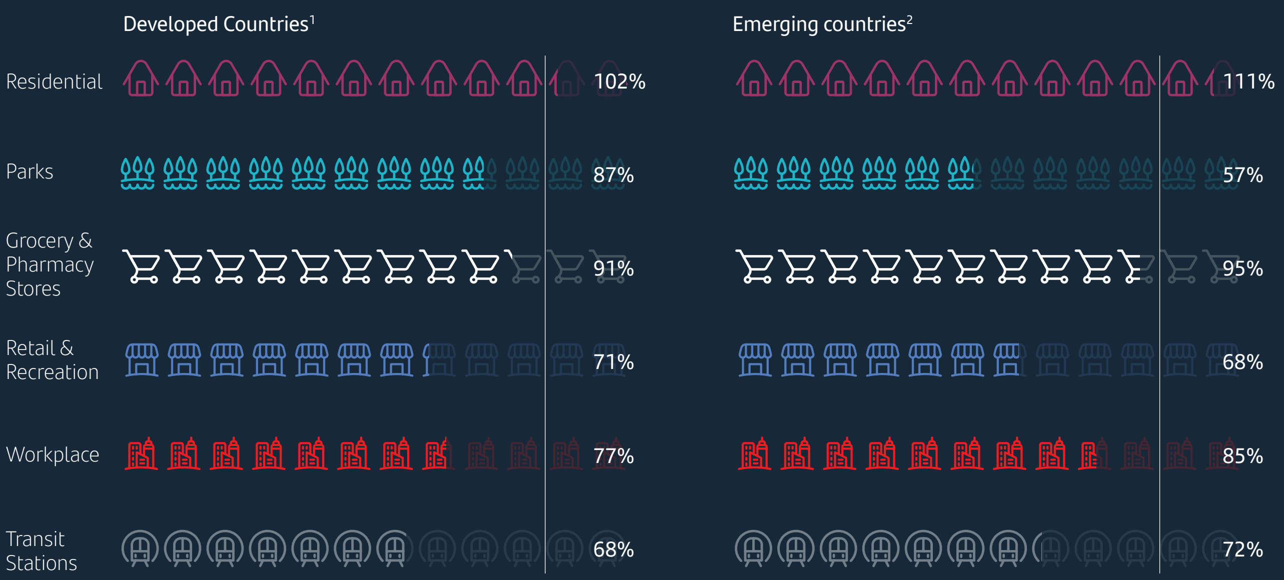
Recovery in mobility has been unequal across different types of activities with service sectors and leisure & entertainment bearing the largest impact

Social distancing, in short, was a **necessary shock treatment but with a very high cost.** Fortunately, other vaccines of a financial nature were administered to counteract this shock to the world economy.

Google Mobility local reports - Sector breakdown

Source: Google Mobility. Data as of 24 November 2020

Uneven recovery of activity with a strong impact on the services sector



[(1)] Mobility average of Germany, Spain, Japan, South Korea, France, US and UK.
[(2)] Mobility average of Argentina, Mexico, Brazil and Chile.
Mobility reports show the relative level of visitants at the different locations (parks, grocery and pharmacies, retail, workplaces and transit stations) vs. normal levels.

Monetary Vaccine

Governments, central banks and supervisory authorities have responded boldly, decisively and imaginatively to limit the consequences of simultaneous sudden stops in spending, economic activity, funding and financial markets functioning. In particular, it took **massive and unprecedented policy actions from central banks and other authorities to prevent a financial collapse** that would have compounded in the drop of real activity.

Central banks played a critical role as a market stabilizer and financing intermediary between the fiscal authorities and financial markets

The actions of central banks have again highlighted their central role in crisis management as they **swiftly cut policy interest rates** and launched large-scale balance sheet measures This brought central banks to the forefront again as they can mobilize financial resources faster than any other authority providing credit support for firms and households (funding-for lending schemes, purchases of corporate debt, and support provisions for small and medium-sized enterprises). The main objective was to **prevent liquidity strains** that could lead to bankruptcies of solvent firms and leave long-lasting scars on growth potential. These extraordinary actions were designed precisely to **flatten the mortality curve of businesses.**

Low interest rates and easing monetary policies are the underlying biggest factors behind the market recovery

The initial interest rate cuts were limited in their soothing effect. In the table below, we can observe the policy rate reactions of the main central banks in both the developed and emerging economies. Only the central banks that had already placed their intervention rates below zero were not able to lower rates.

The interest rate cuts have been so extreme that they have placed the overall central bank intervention rates at historical lows on a general level (only China, Turkey and Mexico have levels above their minimums of the last 20 years). Additionally, almost all monetary authorities complemented rate cuts with **measures to ease banking regulatory framework in order to facilitate credit access** to economic agents.

Interest rate cuts were aggressive, but they had very limited effect since interest rates were already low and had been so for some time

Furthermore, large-scale government bond purchases were implemented, aimed to lower interest rates and to help liquidity and functioning of the sovereign bond markets. This comes in the context of huge borrowing needs by governments as fiscal deficits rise and debt levels surge. In general, **central bank purchases of securities have kept markets liquid when assets were otherwise difficult to sell.** Purchases also injected cash into the economy, and conveyed to the public that the monetary authority was standing ready to prevent the collapse of the financial system.

Summary of global interest policy rates changes

Source: Bloomberg and TradingEconomics

Global interest rates are now at all time lows

	North America & Dev Asia					Emerging Markets								Eurozone					Rest of Europe				
	USA[1]	CAN	AUS	JPN	KOR	CHN	IND	TUR	RUS	POL	BRA	MEX	CHI	GER	FRA	ITA	SPA	POR	GBR	SWE	NOR	SWI	DNK
Policiy Rate as of Dec 31, 2019	1.5	1.8	0.8	-0.1	1.3	4.2	5.2	12.0	6.3	1.5	4.5	7.0	1.8	0.0	0.0	0.0	0.0	0.0	0.8	0.0	1.5	-0.8	0.1
Policiy Rate as of Oct 31, 2020	**0.0**	**0.3**	**0.1**	**-0.1**	**0.5**	**3.9**	**4.0**	**10.3**	**4.3**	**0.1**	**2.0**	**4.3**	**0.5**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**-0.8**	**0.1**
Policy Rate Cut	**-1.5**	**-1.5**	**-0.7**	**0.0**	**-0.8**	**-0.3**	**-1.2**	**-1.8**	**-2.0**	**-1.4**	**-2.5**	**-2.8**	**-1.3**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**-0.7**	**0.0**	**-1.5**	**0.0**	**0.0**
Highest policy rate in last 20 years	6.7	5.9	7.9	0.9	7.3	7.5	14.5	25.0	17.0	24.0	26.5	9.3	8.2	4.8	4.8	4.8	4.8	4.8	6.0	4.8	7.0	3.5	5.7
Lowest policy rate in last 20 years	0.0	0.3	0.1	-0.1	0.5	1.1	4.0	4.5	4.3	0.1	2.0	3.0	0.5	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	-0.8	0.1
Percentile of current rate over 20 years	**1%**	**1%**	**1%**	**1%**	**1%**	**43%**	**1%**	**28%**	**1%**	**1%**	**1%**	**20%**	**1%**	**1%**	**1%**	**1%**	**1%**	**1%**	**1%**	**1%**	**1%**	**1%**	**1%**

[1] Fed Funds lower bound of policy rate target range.

The graph below summarizes the **size of the monetary response to pandemic by plotting the increase in size of the balance sheet from G4 Central Banks** (Fed, ECB, Bank of England and Bank of Japan) as a result of the purchases of securities and lending facilities implemented. In just a few months, the effect of this massive intervention outsizes the combined effort from the 2009-2017 period. In the table below, we have summarized the various unorthodox monetary policies implemented.

We can see how over the last decade, **traditional monetary policy measures have radically expanded with actions that a few years ago would have seemed off-limits.** As far as interest rate actions are concerned, the borderline of intervention rates into negative territory has only been crossed by the Bank of Japan and the European Central Bank. On the contrary, the Bank of England and the Federal Reserve do not consider this an effective measure. There is a broader consensus instead on the convenience of extending the framework of securities purchases to instruments considered risky (such as non-investment grade corporate bonds or "high yield") if the circumstances of lack of liquidity warrant it. Regarding changes in Central Bank mandates, a **progressive relaxation of inflation targets to facilitate growth** can be expected, but without a much more aggressive stance such as the advocated by the supporters of the Modern Monetary Theory (MMT). The whole exercise of **innovation in monetary policy instruments and actions has surprised markets for its effectiveness, exerting a role of monetary vaccine against the problems of lack of liquidity** and collapse in the financial markets.

Global financial conditions have improved swiftly as a result of the effective impact of the massive quantitative easing

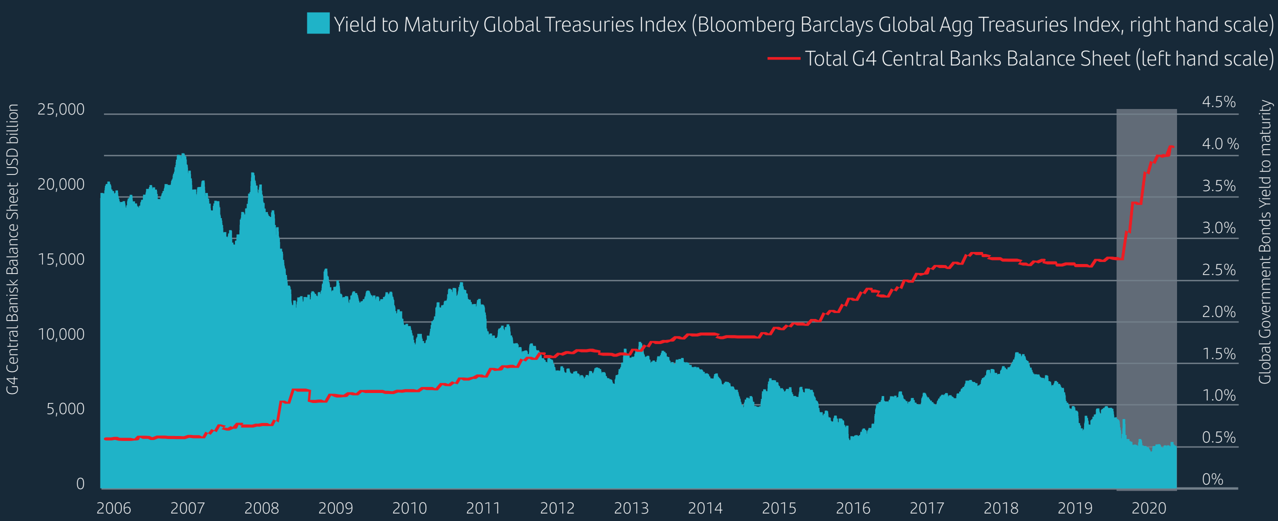
The most effective measures were the ones providing general support of corporate liquidity

The monetary policy toolbox was expanded with innovative programs and initiatives to provide liquidity

Monetary policy swift response to pandemic

Source: Bloomberg and own elaboration. Data as of 30 November 2020

Purchases of USD8 trillion securities have lowered yields in sovereign bonds to all time lows



✓ Implemented ? Considering implementation

	Interest Rate Policy				Lending / Liquidity		Quantitative Easing (QE)				Policy Framework Changes	
	Forward Guidance	ZIRP (Zero Interest rates)	NIRP (Negative interest rates)	Yield Curve Control	General Liquidity Provisions	Specialized Lending Provisions	Government Bonds	Commercial Paper	Corporate Bonds (IG)	High Yield and ETFs	Average Inflation Targetting	Modern Monetary Theory
Federal Reserve	✓	✓			✓	✓	✓	✓	✓	✓	✓	
ECB	✓	✓	✓		✓	✓	✓	✓	✓	✓	?	
Bank of Japan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Bank of England	✓	✓	?		✓	✓	✓	✓	✓			

Fiscal Vaccine

The severity of the health situation and the social impact of confinement led to a consensus on the **need to deploy massive fiscal resources.** While the last decade was dominated by monetary policy, 2020 will be remembered as the year fiscal stimulus became fashionable again. Government measures have had to swiftly **support large parts of the economy** to maintain financial stability, protect household economic welfare, and help companies survive the crisis. Direct transfers were focused on jobs, the unemployed and households more generally. Furlough schemes have been quite popular, taking over a certain share of the wage bill to keep people employed. There is evidence, from policies implemented in the wake of the global financial crisis, that keeping people in work through such schemes is an effective way of providing income support and limiting job losses, while avoiding costly search and matching processes as recovery progresses. In addition, governments have tended to escalate their interventions as the crisis increased in severity and lockdowns persisted.

Fiscal incentives amount to over 10% of global GDP so far and represent the largest fiscal response ever put in place

Fiscal response to the crisis is unprecedented: **near USD11 trillion announced just in the first months, which is three times more than the response to the 2008–09 financial crisis.** Western European countries alone have allocated close to USD4 trillion, an amount almost 30 times larger than today's present value of the Marshall Plan.

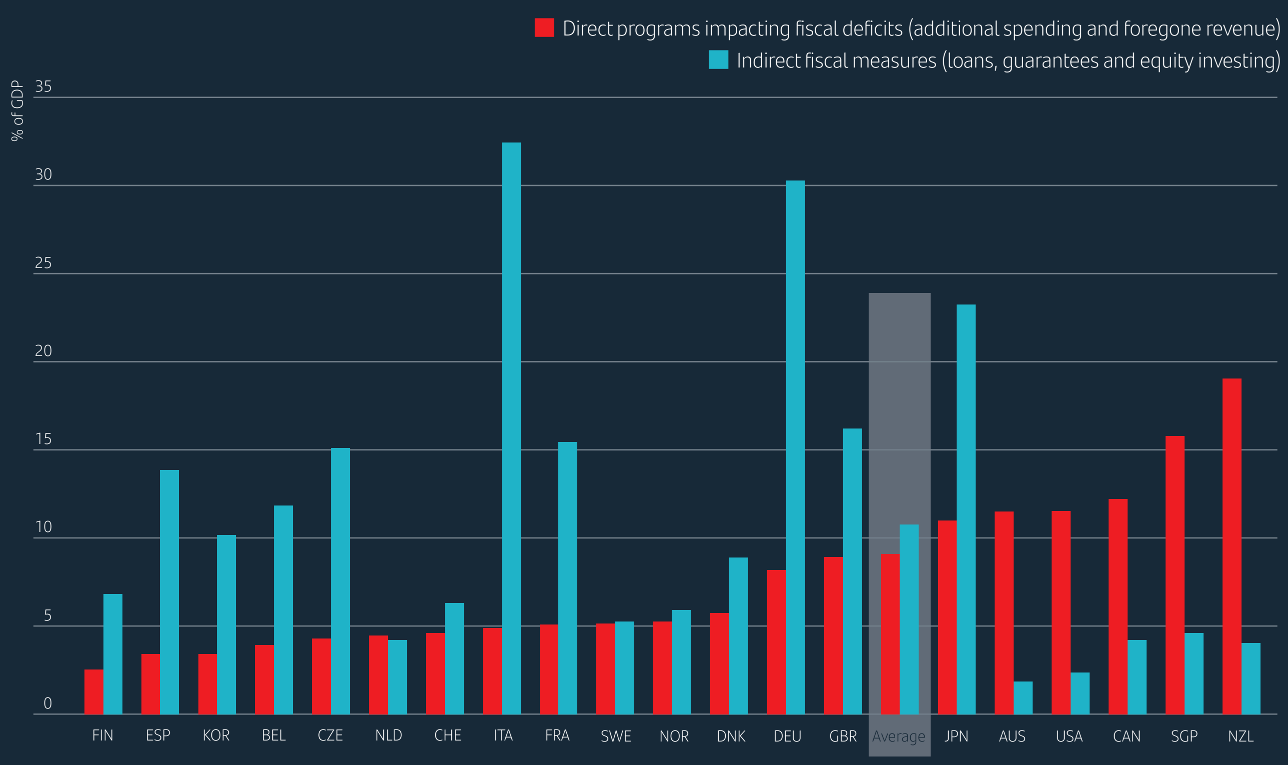
Governments' measures to cushion the blow from the pandemic total a staggering USD11 trillion globally

The **graphs below show the breakdown of the announced measures as a percentage of GDP,** differentiating between measures with a direct impact on budget deficits and measures with an indirect impact (loans, guarantees and liquidity injections).

Size of fiscal incentive packages as a % of GDP - Advanced Economies

Source: IMF Fiscal Monitor October 2020

United States, Japan, Germany and UK have approved comprehensive and expansionary fiscal programs



We can observe in the graphs the different impact on developed and emerging economies, showing how the size of the fiscal stimulus in **most developed countries doubles, in relative terms, that which emerging economies have been able to implement.** Despite experiencing similar GDP losses and undergoing in-line lockdowns (both in stringency and duration), most emerging-market countries' stimulus packages have been smaller.

There are large variations in the size of fiscal packages, but **some countries have taken unprecedented action.** The size of fiscal packages varies across countries. The graph shows that particularly significant packages have been introduced in Germany, the United Kingdom and the United States. In the emerging block, the most significant stimulus policies have been implemented by Brazil and Chile, while Mexico is an example where the policy effort has been less relevant.

In most European countries the monetary and fiscal support packages to fight COVID-19 crisis range between 30% to 45% of GDP, while countries in Latin America and Asia have adopted packages of around 20% and 10%, respectively.

Perhaps the most worrying economic legacy of the public health crisis is that it leaves the world even more deeply mired in debt. Relative to GDP, the median debt load of developed economies now stands at 120% – the highest since the Second World War.

Higher debt levels will be a drag on growth over the long run, even if interest rates remain low. There is a risk that government borrowing might crowd out private investment. It could decline as well if companies opt to strengthen their balance sheets rather than allocate capital to large projects.

COVID-19 has not been an equal opportunity virus affecting disproportionally different ages, sectors and geographies

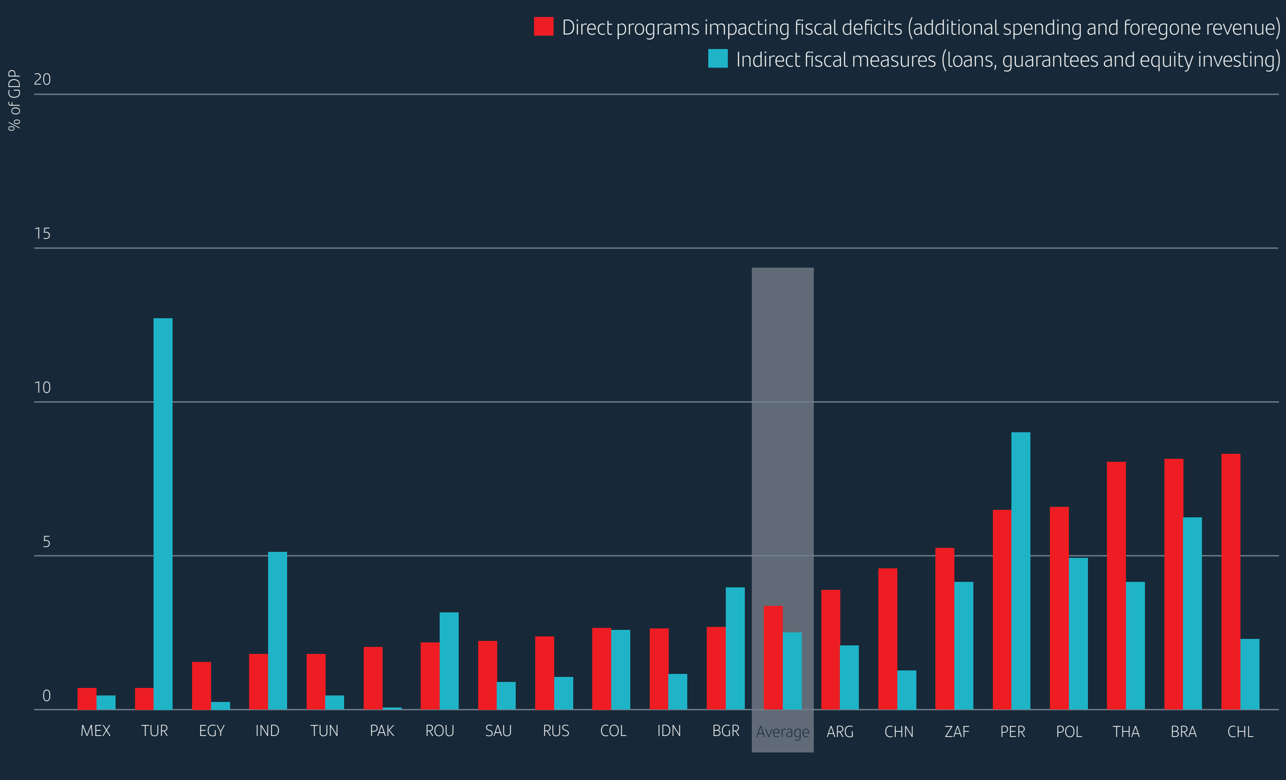
New political leadership in the US and European cooperation provide support for further stimulus

Emerging economies have a comparative disadvantage in financing the recovery

Size of fiscal incentive packages as a % of GDP - Emerging Economies

Source: IMF Fiscal Monitor October 2020

Chile and Brazil are the two emerging economies with the most comprehensive fiscal response to the pandemic



Higher debt and lower growth might be a trade-off society accepts in return for more responsible forms of capitalism. Right now, investors are entirely focused on the near-term economic damage from virus disruptions, which means **markets are applauding every new stimulus program announced.** However, we will eventually reach a tipping point where the consequences of all this policy stimulus will have to be weighed.

However, **even as governments are increasing debt at unprecedented levels, they are paying less in interest even as they borrow more due to the record low interest rates.** And that is the main reason why investors appear comfortable about funding another leg of stimulus. As an example, interest payments in the US federal budget declined about 10% in the first 11 months of this fiscal year, while the country was running up its biggest deficit since World War II.

Although there is a lot of concern about the mounting debt, it hasn't caused the problems that anticipated by the more critical voices, as **it is not just a question of how much outstanding debt there is but rather more about the cost of servicing that debt.**

Ed Yardeni coined the term **"bond vigilantes"** in the early 1980s. It described investors who were supposed to exert power over governments by selling their bonds, or merely threatening to, leading to higher bond rates and thus making deficit-spending more expensive. At some point in the future, this pressure for greater fiscal orthodoxy by the "bond vigilantes" will manifest itself, but for the moment, **the presence of the central banks flooding the markets with liquidity and keeping low rates generates great tranquility for the markets.**

With interest rates at zero in many countries, the boundaries of increasing debt have expanded

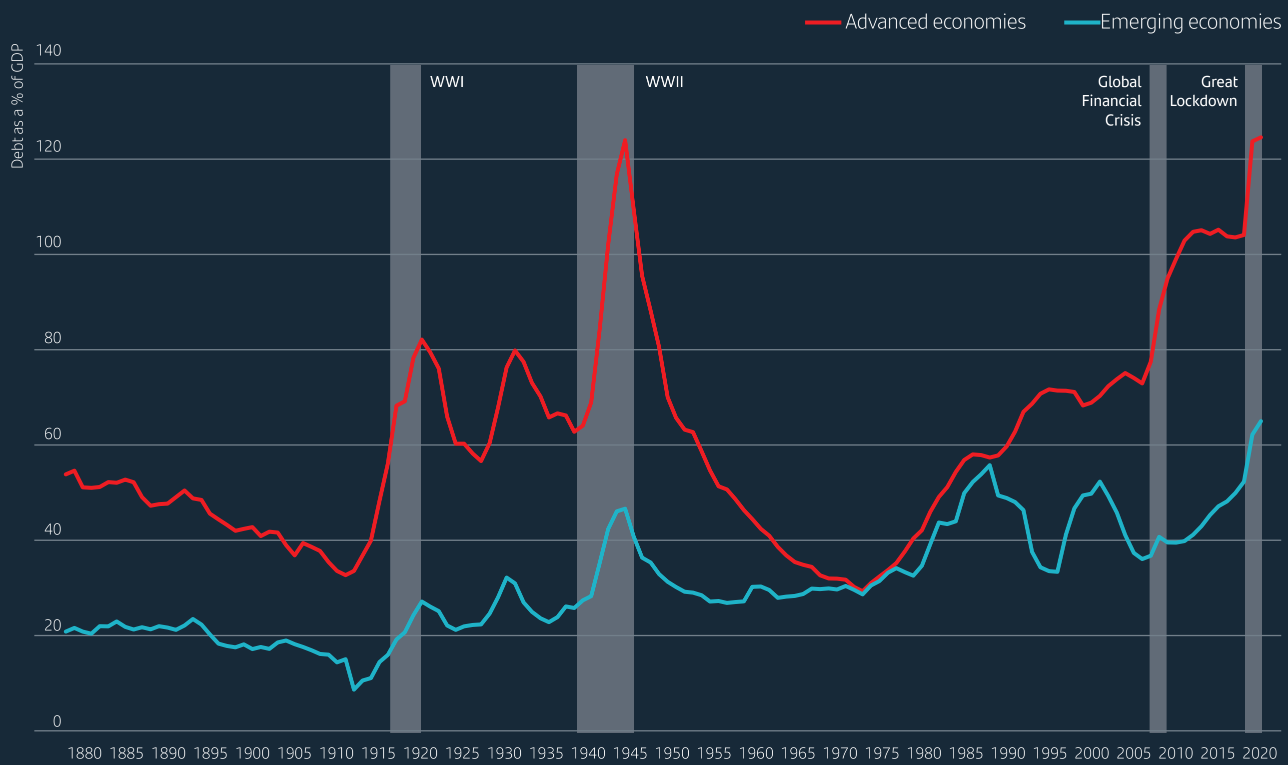
Borrowing costs are not a constraint for spending

As long as the interest rate-growth differential is negative due to ultra-low rates, public debt seems sustainable and "bond vigilantes" remain dormant

Global government debt as a % of GDP

Source: IMF Fiscal Monitor October 2020

Debt levels have surpassed those reached after World War II



Note: The aggregate public-debt-to-GDP series for advanced economies and emerging market economies is based on a constant sample of 25 and 27 countries, respectively, weighted by GDP in purchasing power parity terms.

There are **significant risks in the fiscal scenario** which has occurred since COVID-19. **An economic deterioration** (with a significant probability until an effective vaccine is available) or an eventual tightening in global financial conditions in a highly indebted world, where investors might lose confidence and demand a higher return on their money putting fiscal accounts at risk. In addition, these factors affect central banks as quantitative easing and quasi-fiscal measures could lead to a deterioration of their balance sheets as they may be exposed to the default of the bonds of the companies they hold debt from. All of the above is also related to **debt sustainability** and the question on whether future public revenues will be sufficient to cover the payment of the service and the principal of the debt, since it depends to a great extent on the long awaited economic recovery.

There is also the **risk that some countries start withdrawing fiscal support prematurely** and lead the economy into a further slowdown that will require renewed fiscal support.

The fiscal vaccine provided by the innumerable stimulus programs approved by governments is offsetting the negative effects of mobility restrictions in the short term. Economic recovery is being made possible by this enormous fiscal effort for which there is a global consensus from all of society about its urgency and justification. We believe that this support will be maintained until 2021 and the austerity and fiscal adjustment measures will be extended over time to not jeopardize the recovery process. **Investors perceive that the support of monetary and fiscal policies immunizes them against the risks in the short term while a definitive solution of the COVID-19 vaccine arrives.**

Debt arithmetic will only stay manageable as long as real interest rates remain low

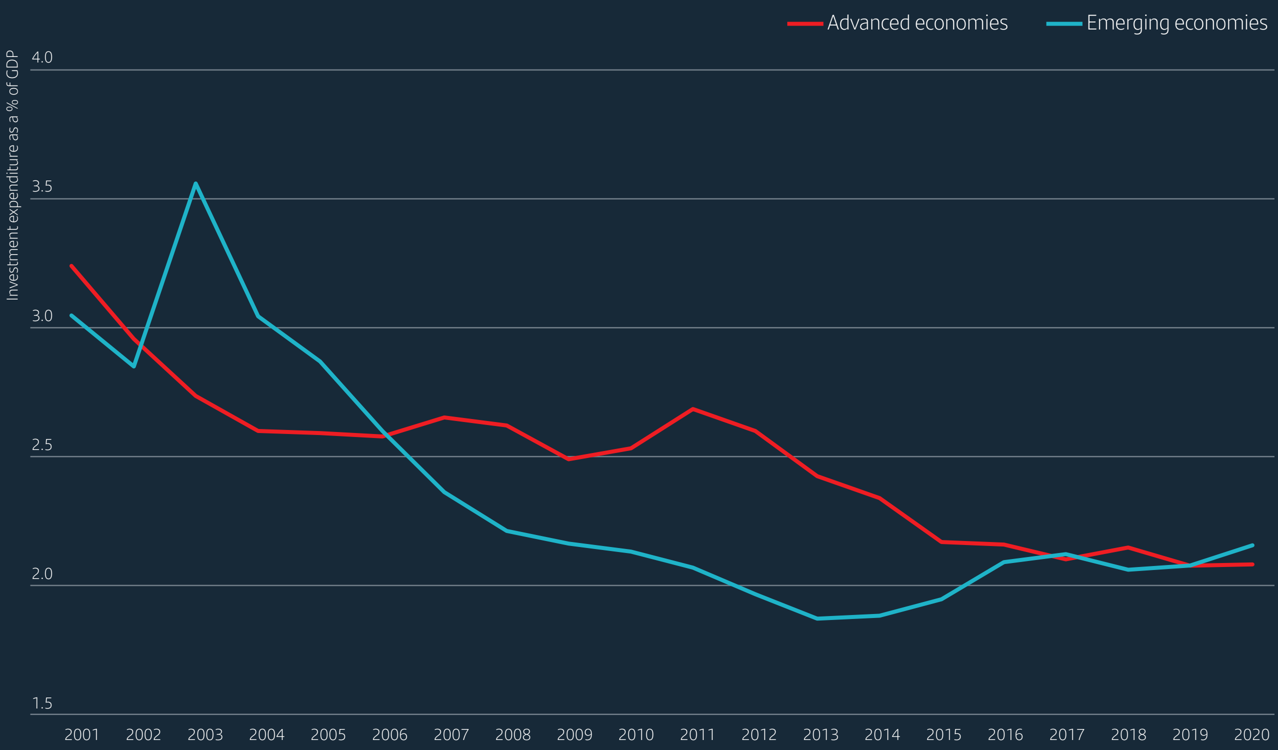
Fiscal rules are being rewritten and ultra-low interest rates are giving governments license to spend and help economies recover from the pandemic

The novel notion that the government needs to preserve firms, jobs and workers' incomes at all cost may endure for some time

General government interest expenditure-to-GDP ratio, 2001-20

Source: IMF Fiscal Monitor October 2020

Quantitative Easing has allowed advanced economies to lower the cost of financing debt



On the Road to Immunization

Episodes of the virus spreading in second and third waves in many countries have reinforced the idea that **a complete return to normality will not be possible until there is an effective vaccine against the virus.** Controlling the pandemic, without access to a comprehensive capacity to monitor the mobility of citizens (as in China), is proving to be a virtually impossible task in most developed and emerging countries. The normalization process demands effective vaccination measures and this requires success in two critical processes: verification by health care authorities of the safety of the vaccines and manufacture/distribution of the vaccine worldwide.

Vaccines usually take years to develop, but progress in the approval process is being made at an unprecedented pace. The World Health Organization (WHO) recognizes about 150 projects for the COVID-19 vaccine, and several of them are already in advanced testing. Currently, 87 are in pre-clinical stage, and 55 are already in clinical trials. **The best positioned to obtain approval from the health authorities for distribution are Moderna, Pfizer, and AstraZeneca, which have already concluded phase 3 of clinical trials with 94.5%, 95%, and 70% efficacy,** respectively. These vaccines are finally demonstrating their effectiveness and regulators are giving the approval for emergency use. For a global recovery to take place, all countries must have access to the vaccines. This is why pharmaceutical companies are focusing their efforts on producing as many doses as possible. AstraZeneca and Novavax (also in Phase 3) have stated that their total annual vaccine manufacturing capacity, if approved, will be three billion and two billion doses, respectively. **In parallel to the race to discover and produce the vaccine, there is the race to acquire it.** In this fierce competition, the European Commission has closed contracts

Research labs and pharmaceutical companies are rewriting the rulebook on the time it takes to develop, test and manufacture an effective vaccine

Very promising newsflow on vaccine efficacy with progress in production and distribution capacity

COVID-19 Vaccines - Research and Development

Source: New York Times, WHO, Racap, John Hopkins University, Duke Global Health Innovation Center and own ellaboration
Data as of 3 December 2020

Producer	Research center(s)	Type	Phase 1	Phase 2	Phase 3	Approval [1]	% Efficacy	# of Doses	Price per Dose (USD): 5-10 / 10-15 / 15-20 / >20
Moderna USA		**Gene-based**	✓	✓	✓	**Dec. 2020**	94,5%		
Pfizer/BioNTech USA / Germany		**Gene-based**	✓	✓	✓	**Dec. 2020**	95%		
AstraZeneca UK		**Viral vector**	✓	✓	✓	**1Q 2021**	70%		
Johnson&Johnson USA		**Viral vector**	✓	✓	✓	**1Q 2021**	n/a		
CureVac Germany		**Gene-based**	✓	✓		**3Q 2021**	n/a		n/a
Sanofi / GSK Francia / UK		**Subunit**	✓	✓		**1H 2021**	n/a		
Novavax USA		**Protein-based**	✓	✓	✓	**1Q 2021**	n/a		n/a

[1] Estimated approval date by health authorities

with five pharmaceutical companies for the acquisition of 1,225 million doses, plus 580 million in reserve, and is negotiating with more companies for the acquisition of around 200 million additional doses. The total figure would potentially allow the administration to provide each inhabitant of the Union with up to two times the two doses required to achieve complete effectiveness of the vaccine. On its part, the US has been more aggressive than Europe in closing deals, totaling 2.6 billion doses including reserves, twice as many doses per inhabitant as Europe. Thanks the coordination of Brussels, non-existent at the beginning of the pandemic to buy tests, respirators, and masks, Europe has had greater bargaining power resulting in a lower per-dose price than the US.

Markets are discounting that massive vaccination is likely to be achieved next year with significant progress in the first half

In any case, getting one or more vaccines through clinical trials for regulatory approval is only the first stage of the journey. The next is **convincing the population of the importance of receiving the vaccine.** According to a Harris survey on October 19th, 63% of American adults expressed concern about the safety of the coronavirus vaccine, and 40% of those surveyed were concerned about its fast development. Some people are still worried about possible side effects.

Our central scenario considers that, by the second half of 2021, a high percentage of the world's population will have access to vaccines that are effective enough to prevent new waves of mass infection. It is very unlikely though that we will completely eradicate the COVID-19 virus, with the probability of future mutations making it difficult to fully control it. Nonetheless, we believe that the scientific community will be successful in controlling this pandemic through the advances in vaccines and treatments under development. 2020 has been the year in which the world has suffered the effects of a global pandemic, but **unprecedented investment in research and a major collaborative effort at the institutional and global levels is moving forward to provide an effective solution to the pandemic in the coming months.**

The availability of vaccines and a wide-scale rollout in the first half of 2021 will pave the way for stronger growth in the short-to-medium term

Production and Procurement

Data in millions of doses

	Production per Quarter					Total Production Capacity until 2021	Procurement Agreements							Total procurement
	4Q20	1Q21	2Q21	3Q21	4Q21								COVAX[1]	
Moderna USA	50	150	250	250	300	1,000	●	●	●	○	○	○	○	265
Pfizer/BioNTech USA / Germany	50	115	115	165	215	660	●	●	●	●	●	●	○	466
AstraZeneca UK	100	450	400	550	600	2,100	●	●	●	●	●	●	●	1,492
Johnson&Johnson USA			400	300	300	1,000	●	●	●	○	○	○	○	160
CureVac Germany			50	100	150	300	○	●	○	○	○	○	○	225
Sanofi / GSK Francia / UK			150	150	150	450	●	●	●	○	○	○	●	660
Novavax USA		250	275	350	375	1,250	●	●	●	○	○	○	○	170
TOTAL	200	965	1,640	1,865	2,090	6,790								3,438

(1) COVAX is a collaborative initiative promoted by WHO for equitable access to vaccines against COVID-19

Economic Recovery Scenarios

Our **central scenario** considers that, as 2021 progresses, the **global economy will consolidate the recovery phase that began in the third quarter of 2020.** The reopening of the economy has three pillars and phases: easing of social distancing measures, government support through unprecedented monetary and fiscal stimuli and mass vaccination.

We expect a general but uneven recovery in 2021 based on the combined effect of immunization and economic stimulus

Financial institutions have been less stressed during this recession compared to the Great Financial Crisis (GFC) and the financial sector has played an active role in the recovery. The origin of this slowdown was a sanitary crisis, not an excess of leverage accumulated by lenders as in the past recession.

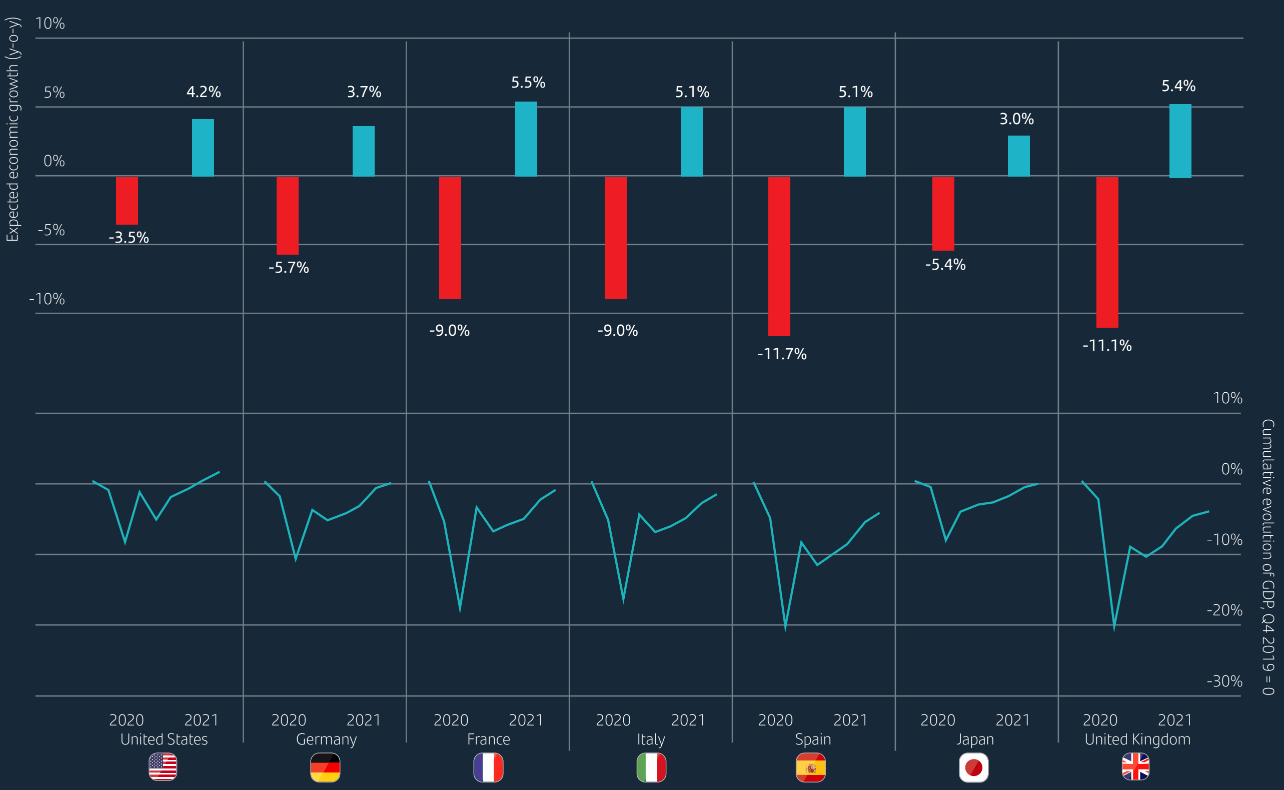
The strong response of governments and central banks to the coronavirus crisis has reopened the debate on the consequences that the numerous stimuli can have on the price stability of economies. In general, once the threat of the virus passes and activity stabilizes, the main concern will be weather the stimuli applied could lead to high rates of inflation. We believe the **economy is entering a reflationary phase but we assign a low probability of having a runaway inflation scenario.** We distinguish three phases in this reflationary process: the first one, where disinflationary pressure will still dominate; a second one, where the end of restrictions and the recovery in commodity prices favors a period of slow inflation recovery during 2021; and a third one in 2022, where inflation could exceed the objectives of some central banks without reaching the levels registered during the last three decades of the 20th century. **The global economy still has significant levels of idle capacity, lack of tensions in the labor market and in the monetary transmission mechanisms**.

Central banks will continue to offer monetary support as inflationary pressures are still far from being a problem

Quarterly GDP growth estimates - Advanced Economies

Source: Santander Private Banking estimates. Data as of 30 November 2020

The US economy might show greater consistency and regularity in the recovery phase



In short, our main scenario contemplates a moderate and not very worrisome increase in prices. On one hand, **central banks policies be more focused on prioritizing economic recovery over inflation.** On the other hand, some inflation would be even welcomed to help in the process of debt sustainability. Finally, a foreseeable twist in favor of deglobalization could lead to an uptick in inflation in the middle term.

Stimuli packages and vaccines will be the main market drivers of the recovery

Returning to the sphere of growth, the economic collapse caused by COVID-19 was synchronized, but **the recovery will, most likely, be uneven.** Significant gaps are opening up among the recovery paths of the different countries, and this could have consequences for the world economic order itself. Of the world's four largest economies, the US economy would only be able to recover its pre pandemic size by the end of 2021, while, by that time, China´s economy will be almost 10% larger. Europe would continue to languish below its pre-pandemic production level and could do so for several years, a fate that Japan might narrowly avoid, despite having to deal with adverse demographic growth trends. The **dispersion of growth rates across the top 50 economies is likely to be the widest we have seen in recent decades.**

The global economic recovery is dramatically uneven. China leads the way, while the rest of the world lags behind

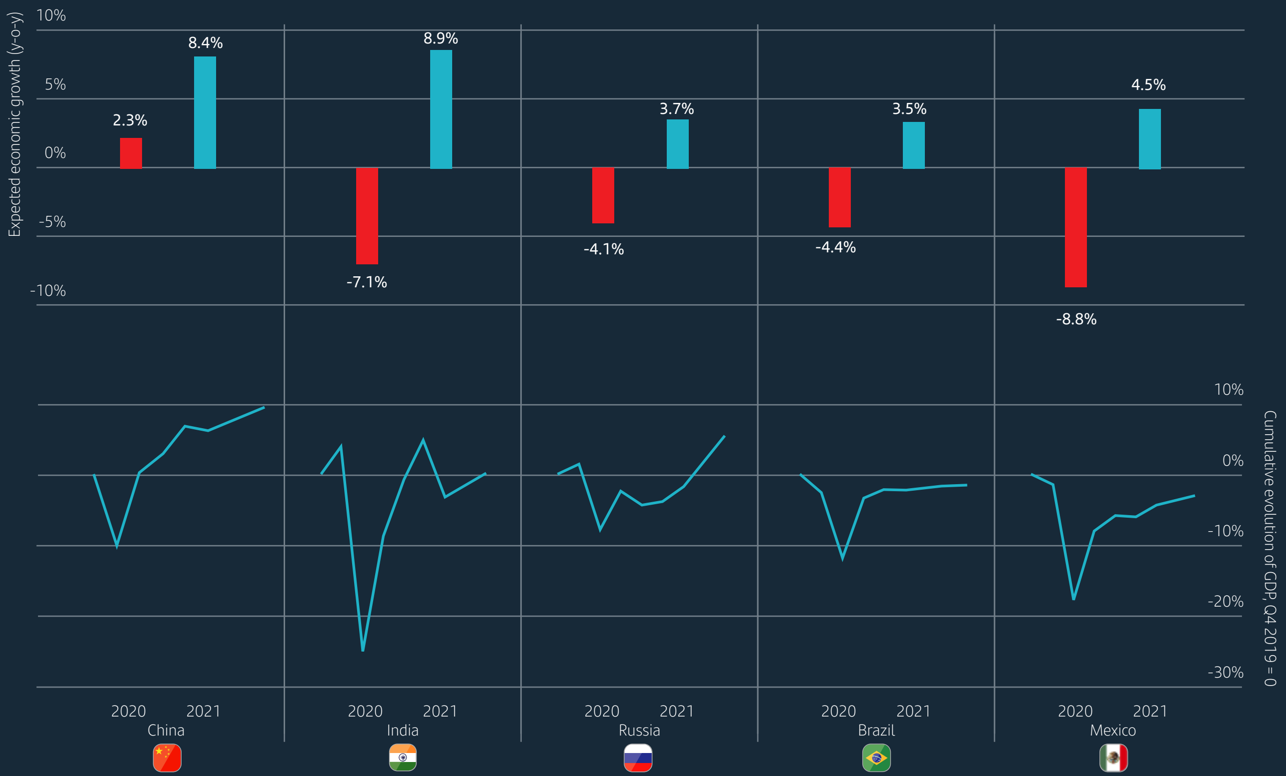
The Great Lockdown will probably leave several large economic consequences: **increased inequality, less globalization, higher debt levels and a more digital economy.** The shock on supply changes and the improvements of automation will force manufacturers to bring production closer to their natural markets of influence. On the other hand, high skilled workers are adapting to an environment where remote work is becoming more common, while less skilled workers are much more affected by the shift towards greater social distancing.

No government or central bank wants to remove economic support too quickly

Quarterly GDP growth estimates - Emerging Economies

Source: Santander Private Banking estimates. Data as of 30 November 2020

The Chinese economy has fully recovered from pre-pandemic levels and might have positive growth in 2020



As more activities and processes are carried out online, many industries will be dominated by companies with the most advanced technological capabilities and powerful online databases. In 2020, the accumulated appreciation of technology stocks or the digital boom of Fintech in the financial industry are signs of how the future is accelerating. **Quantitative Easing (QE) and low real interest rates could continue to inflate asset prices, even if the pace of economic recovery is slow.** This may continue to widen the dangerous gap between Wall Street (financial markets) and "Main Street" (real economy) that occurred after the financial crisis of 2008 and is contributing to increased political and social instability.

US economy will probably receive another fiscal stimulus after the race for Senate control in Georgia is finally decided

It has become evident that many of the changes caused by COVID-19 will be long-lasting. The pandemic has strengthened the dynamics that were already occurring in the global economy, accelerating changes in trade, technology, finance and economic policy.

We project the first world economy, the **United States,** to experience a solid rebound in 2021 thanks to a substantial recovery in private consumption (which represents 70% of GDP) and the expectation of **strong fiscal support coming from the Biden administration.** A potential gridlock, if Republicans maintain control of the Senate in January, should not be an obstacle for further fiscal stimulus as both parties and the general public are backing the need for government spending. Household spending is supported by strong wealth accumulation, as well as by the increase in savings due to the important government transfers and tight labor markets before the pandemic.

Regarding the **European economies,** we foresee a **slower take-off** compared to the other side of the Atlantic. As lockdowns have impacted more severely the services sector, the recovery process will be slower than in the industrial sector as services create less pent-up demand than consumer goods. Furthermore, the service sector is more employment-intensive, and its destruction in this crisis has generated an extensive contagion effect across all economies. Also, there is the risk of a temporary increase in the savings rate as Europe has suffered disproportionally in this second wave of contagions. Investment and durable goods consumption may be more muted in Europe until we reach widespread immunization. Therefore, the growth rates we project for the main economies of the Eurozone (Germany, France, Italy and Spain) are **modest in relation to the contraction registered in 2020.** Outside the Eurozone, **United Kingdom** would not differ substantially from its continental counterparts unless an agreement with the European Union is reached before December 31st and **clarity about the trade relationship post Brexit is achieved.**

European economic recovery will have to deal with the effects of Brexit negotiations and larger impact of lockdowns

In light of the latest data about infections, the fact that the Asian continent is well ahead of the rest in the pandemic cycle is more than a reality. Accordingly, the statistics also reveal that **Asian economies are recovering earlier than the rest.** From this more favorable dynamics in the region and from the recent signing of an agreement to form the world's largest trade association - the Regional Comprehensive Economic Partnership (RCEP), which will cover 2.1 billion consumers and 30 percent of global GDP - economies such as Japan, which is highly integrated into global value chains, could be nurtured to gradually exhibit growth rates slightly above their potential for the coming quarters.

Turning to the emerging markets, **China** was the first country in the world to register a historical contraction of its economy, but also the **first to return to normality,** being one of the few to achieve a positive growth rate in 2020. This is also reflected in interest rates, which are touching year-highs every day in anticipation of a **rapid recovery in economic activity, which will continue in 2021** thanks to the monetary and fiscal stimuli injected by the local authorities. With the boost of credit as the main vector of growth, our forecast is that in 2021 the "Asian giant" will return to normal in terms of GDP growth rates.

China has weathered the pandemic better than any other major country

From now on, it is foreseeable that China will follow the American model and opt for a more **"inward looking" policy.** To do so, it will have to (i) boost domestic demand, since foreign demand from Western economies will be less and less "reliable"; (ii) speed up its digitalization process, supported by increased spending on R&D; and (iii) gain a voice in the international debate. This will not be a quick process, but it does seem that, after the last plenary of the Central Committee of the Communist Party, China has changed its vision of the rest of the world, and will therefore encourage the application of policies with a much more domestic bias.

The Indian economy is expected to recover strongly after suffering disproportionally the damage of the COVID-19 lockdowns

We also anticipate that **India** will enjoy a strong rebound in its economy. It is true that it has been one of the countries hardest hit by the pandemic, but it is also true that its sectoral structure, heavily leveraged on technological services, and the implementation of far-reaching **structural reforms** approved by Modi´s government constitute levers on which to catapult economic growth.

Regarding **Latin America,** after a more erratic pandemic management that has led to a severe contraction of growth during 2020 in the region, we look forward to 2021 on a more positive tone. In the case of **Brazil,** the **economic recovery in the second half of 2020** is among the strongest in Latin America. Business confidence surveys are closing the year at their highest levels since 2006, thanks to a significant growth in durable goods orders, which eventually lead to a boost in employment. This recovery has been largely motivated by government support, where both monetary and fiscal policy have been markedly lax. However, the stimuli carried out to limit the impact of the pandemic has **significantly deteriorated the public sector fiscal health,** reaching an estimated fiscal deficit for this year of over 15% of GDP, with public debt possibly exceeding 100% of GDP. In short, the dynamics of high and increasing public debt, together with the fiscal deficit, leave the **economy vulnerable to adverse shocks.** Therefore, the debate for next year will once again be about the sustainability of government spending, something that has been left behind after the fiscal reform carried out by Bolsonaro´s government.

Pandemic persistence clouds Latin America recovery as a result of a larger share of activities that require close physical proximity

Mexico has moved away from mainstream economic policies and has maintained a **high degree of fiscal responsibility.** This policy has the drawback of not providing much support for short and medium term growth, but could be beneficial in the future in the form of greater long term stability. On the other hand, the export sector could be supportive for growth in 2021, especially if the United States confirms its recovery in 2021 and commercial and diplomatic relations between the two countries are renewed.

We expect the world economy to grow above 5% in 2021, thanks to vaccines optimism and stimulus maintenance

Economic growth and monetary policy estimates

Source: IMF World Economic Outlook October 2020 and Santander Private Banking for estimates

	Economic Growth (GDP)*				Policy rates as of December				
	2018	2019	2020e	2021e		2018	2019	2020e	2021e
	3.0%	2.2%	-3.5%	4.2%	(1)	2.50%	1.75%	0.25%	0.25%
	1.8%	1.3%	-7.2%	4.6%	(2)	-0.40%	-0.50%	-0.50%	-0.50%
	1.3%	1.3%	-11.1%	5.4%	(3)	0.75%	0.75%	0.10%	0.10%
	1.3%	1.1%	-4.4%	3.5%	(4)	6.50%	4.50%	2.00%	2.00%
	2.2%	-0.3%	-8.8%	4.5%	(5)	8.25%	7.25%	4.25%	4.25%
	6.7%	6.1%	2.3%	8.4%	(6)	4.35%	4.15%	3.85%	3.85%

*Average annual rate

(1) Fed Funds: Federal Reserve's federal funds target rate (upper part of the range)

(2) The interest rate set by the ECB on the Eurosystem's overnight deposit facility

(3) Bank of England base rate

(4) Banco Central do Brasil (Brazilian central bank) Selic rate

(5) Banxico (Mexican central bank) target rate

(6) 1-year preferred loan from the People's Bank of China

02 Low for Even Longer

Search for Yield

Low or negative interest rates punish conservative investors but provide a boost to risk assets.

Investors have no alternative but to explore any asset with a positive yield.

We recommend a hedge against a potential future increase in inflation as central banks signal a higher tolerance for short term inflation in the future.

In the short term, the risk of inflation seems to be centered on asset prices.

Unorthodox Times

Traditional investment strategies and sector allocations should be revisited in order to build portfolios that succeed in this new scenario.

The future is moving in fast-forward mode as a result of technology, demographic, and behavioral changes. COVID-19 has accelerated these trends.

Volatility will continue as the world experiences new paradigms in fiscal and monetary policies.

Our baseline scenario for 2021 is of consolidation of the economic recovery that kicked-off in the third quarter of 2020, under the premises of a continuation of the **extraordinary fiscal and monetary policy measures and, the success of the expected mass vaccination.** Historically, these episodes of economic recovery have been very favorable for investment in financial assets. However, **there are doubts regarding the shape and extent of the recovery due to the peculiarities of both the genesis of this contraction and the heterodox measures that have been put in place to overcome it.** As stated in previous section, the volume of fiscal and monetary vaccines that has been inoculated into global economies and the formula for the medicines administered is unprecedented.

Unorthodox polices will probably have unforeseen secondary effects on financial markets

In building their portfolios, investors are looking to meet one or more financial needs: liquidity and capital protection, income generation and/or capital growth. In the past, these needs have been largely covered by traditional investment solutions that, until recently, have generated reasonable and sufficient returns. However, **the combined impact of financial repression, reflation, QE, and growth disruption and inequality, makes the outlook of financial asset returns more complex.**

The legacy of the crisis caused by the COVID-19 poses great challenges for traditional investing: financial repression, QE and growth disruption

More conservative investors seeking **liquidity and capital protection,** who have typically invested in the Treasury curve (bills and bonds), **face zero returns in the short term and negative real (net of inflation) interest rates.** By 2021, and for the years to come, central bank rates are expected to remain at minimum levels, which implies that **cash as a refuge will continue to have a financial cost.** In addition, the shift towards higher inflation-tolerance mandates by central banks is an additional concern. In this sense, it will be very difficult for government bonds to act as, in the past, as a capital protection alternative that generates returns in line with inflation.

In targeting **income generation** investors with a moderate profile willing to prioritize yield over credit quality have traditionally opted for **corporate bond**s as an investment instrument. In this case, **the generation of returns above inflation levels is further complicated by the effects of massive purchases of bonds (QE)** that have provided relief for liquidity as well as a strong narrowing of the spreads of these bonds. Quantitative easing has been excellent news for indebted companies and a relief for markets but leaves a future scenario of low returns for fixed income investors.

Thirst for yields. Longing for past interest rates in fixed income

Capital growth, a financial necessity for more aggressive investors with a longer investment horizon, is traditionally done through **equity investment.** In the current scenario, investment decisions in this type of asset become more difficult because **two distinct realities have emerged: on the one hand, companies with high growth and very high valuations and on the other, many sectors and companies that are suffering the impact of the disruption with very depressed returns and valuations.**

As in monetary policy, investors need to find solutions out of the box and expand the toolkit of financial solutions

For all the above reasons, investors will have to learn to live with low rates for longer and are forced to seek other investment solutions that can meet their financial needs.

Post_COVID challenges for traditional investing

Source: Bloomberg

			10 Yr Annual returns (2009-20)		Current Yields (Nov-2020)		
Financial Needs		Traditional Investing Solutions	USD	EUR	USD	EUR	Challenges to traditional investing
Liquidity / Capital Protection	Liquidity	Deposits & money market	0.6%	-0.1%	0.2%	-0.5%	Financial Repression
	Protection	Sovereign bonds	3.3%	4.6%	0.6%	0.0%	Reflation
Income Generation		Corporate bonds	5.6%	3.9%	1.8%	0.5%	Quantitative Easing (QE)
Capital Growth		Equity	13.8%	6.7%			Growth and disruption

Capital Protection and Reflation

Liquidity Needs

As a result of the aggressive monetary policies implemented by central banks, savers around the world face the same problem. Bank accounts, money-market mutual funds and other short-term instruments are not providing a decent return anymore. In nominal terms, rates are lower than they were 30 years ago because of a long-term decline in inflation, but they are also lower in real terms. The pandemic has made this trend even more acute. This year **American, British and German nominal ten-year bond yields have all touched their lowest levels in history.**

As coined by Ronald McKinnon, the term **"financial repression"** describes various policies that distort the markets by artificially lowering interest rates and transferring resources from domestic savers to the public sector. Such policies include forced lending to governments, interest-rate caps, capital controls, and many more. Today, financial repression can be observed in much of the developed world where household wealth is eroded by historically low or negative interest rates and extensive bond buying programs from central banks. As a consequence, in many countries around the world, **cash-like investments no longer compensate investors for inflation.** In other words, savers are left with negative real interest rates.

Jerome Powell, Chair of the Federal Reserve, announced in June: **"We are not even thinking about thinking about raising rates".** The Fed's so-called "dot plots" suggest interest rates will remain at near **zero percent for at least until the end of 2023** as the economy slowly recovers from its coronavirus-triggered recession.

The **chances of higher short-term rates in the Eurozone and UK seem even slimmer.** The ECB has not cut the policy rate during the COVID-19 crisis simply because the benefits of lowering rates from -0.5% appear limited.

We expect the current low-interest rate environment to prevail and as a result liquid and ultra-safe investments will continue to suffer negative real rates for a considerable period of time.

The economic shock of the pandemic has effectively extended the duration of ultra-loose monetary policies across the world

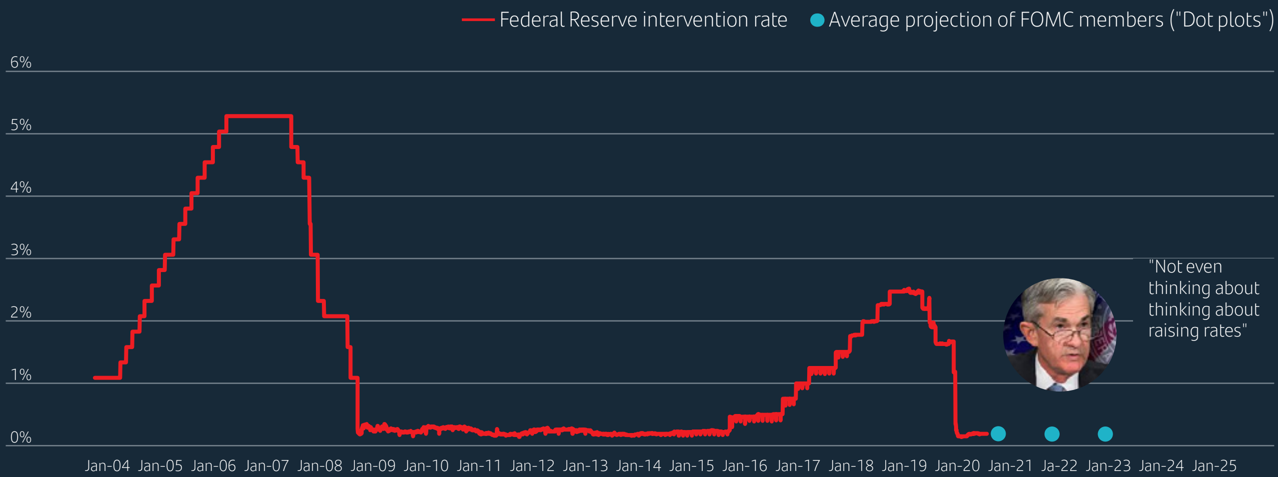
Cash holdings will continue to bear a financial burden for a long time

Financial repression is producing a transfer of wealth from savers to debtors by capping remuneration of low risk assets

Fed Funds Rate

Source: Bloomberg, Federal Reserve and own elaboration. Data as of 30 November 2020

FOMC Committee Projections do not foresee rate increases



FOMC: Federal Open Market Committee

Capital Protection

Market volatility has shaken investors' confidence, and they remain concerned about capital losses. **Preserving the value of investments** has, therefore, become priority of the first order. Anxiety about the pandemic pushed the **savings rate in developed economies to a record high** despite the lack of yield available on short term safe instruments. Fear has been a key ingredient in investment discussions and there is excess liquidity waiting for more clarity on both the pandemic and the economic recovery. The main concern of investors during most of 2020 has been safety of principal. If you are worried about your health or losing your job, then the return on your savings is a minor concern. Holdings of **government bonds** have historically been the key asset class for protecting capital and obtaining returns that matched inflation.

In the past decade, investing in government bond indexes has provided positive returns on both nominal and real terms against a backdrop of lower interest rates. In the following graph, we can observe how both European government bonds (4.6% annualized returns since 2009) and US Treasuries (3.3% annualized returns) have provided both profitability and capital protection during this period. Overnight liquidity has only provided positive returns in (+0.6%) USD while liquid positions in Euros generated negative nominal returns (-0.1%) over the past ten years.

But the future ability of government bonds to meet their objective of protecting capital in real terms runs an additional risk -to that of low nominal returns- it is the **threat of inflation** rebounding from current low levels.

Major **central banks are reviewing their monetary policy frameworks** and are in the process of adopting new ones. A key objective behind these reviews is to lift inflation -and inflation expectations- back to their targets. The Federal Reserve announced that it would embark on a **flexible average-inflation targeting** regime and that a tight labor market will no longer be a factor in determining policy stance. The European Central Bank is set to announce changes to its policy framework next year.

Sovereign debt has been a good investment in a low inflation environment

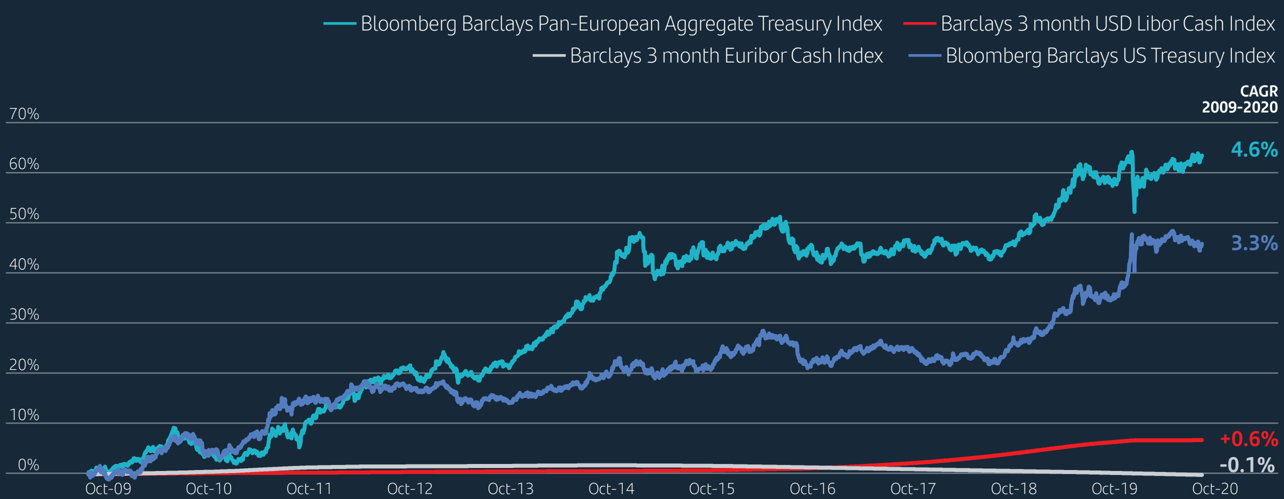
Investors should consider the risk of rising inflation when making investment decisions

Politicians in the future may lean on central banks to peg interest rates at zero to support government borrowing, even during times of economic growth and low unemployment

Sovereign debt and cash annualized returns

Source: Bloomberg. Data as of 30 November 2020

Attractiveness of government bonds on a low inflation scenario



The ECB's main objective is to achieve price stability, which it defines as inflation of close to but below 2 per cent. It has failed to hit this target for years, despite buying trillions of euros in bonds and cutting interest rates deep into negative territory. Now economists warn that it seems further away than ever before. The **ECB is stuck in a "stagflation trap"** since 2000, as average inflation has been only 1.36%.

Well-anchored expectations have been taken for granted for over 30 years – but this could change with the blurring of fiscal and monetary policy. The decision to start tightening monetary policy will be more politicized and more difficult for central banks to lean against higher inflation. When looking at the concrete impact of higher debt servicing costs due to tightening monetary policy, the less tangible – but no less real – risk of loosening the grip on inflation expectations will likely pale in comparison. Inflation dynamics at play, combined with perceived **constraints on central banks to raise interest rates** in an environment of rising and elevated debt, could put into question the credibility of inflation targets and confidence in central banks.

While the COVID-19 crisis has accelerated the long-running fall in discount rates, we think it has brought a **profound change in the policy response and hence in inflation.** An outlook of (eventually) rising inflation with low anchored rates locked low would be a change from recent decades where both inflation and real rates have fallen.

Overall, the reason to really believe in inflation has to do more with political economy than with macroeconomics. We are in an environment of macro and fiscal policies, where **these can be engineered to create inflation**. If politicians adopt this narrative it points to a much loser and more active role of fiscal policy, and brings other policies such as Universal Basic Income closer to being politically acceptable. **Inflation breakevens have risen sharply in recent months,** mainly as a consequence of undoing a worst possibility scenario of a deflationary shock. They have not started yet to price in a decisive shift in inflation. Current levels still provide time for the Fed to even think about becoming less accommodative.

Unorthodox monetary policy may cause unintended consequences in bond markets going forward

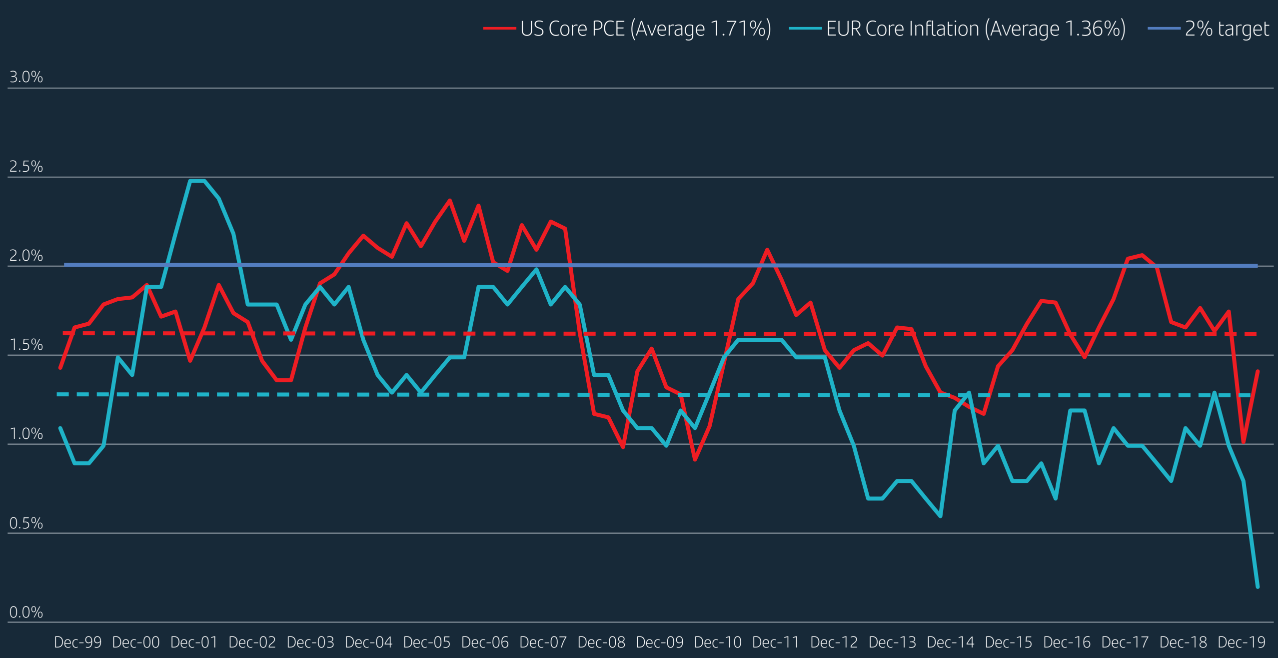
Bonds are at the mercy of financial repression. Over USD17 trillion of global bonds trade at negative yields

The risk of a spike in inflation is low in the short term but will increase in the future

Core inflation in the US and Eurozone

Source: Bloomberg. Data as of 30 November 2020

Central banks are unable to bring inflation close to 2% while leaning towards unorthodox tools



Another aspect that we need to take into consideration regarding the role of government bonds in portfolios is the risk of **low hedge effectiveness in times of market correction** as observed in the recent European bonds crisis. In the following table we see how the aggregate index of government bonds in the Euro zone experienced a decline of 3.0% during the last correction in March, while the US Treasuries did rise by 7.8% in that period. This is due to the different starting point of US Treasury bond yields compared to the Eurozone benchmark (Bunds issued by the German Treasury). While the US Treasuries had a yield of 1.56% before the start of the crisis and had room to maneuver in order to reduce their yields, the Bund's IRR was trading at practically zero returns (-0.25%) practically preventing any appreciation in value. The lesson is clear: **when bonds reach a yield to maturity of 0% or below, then the future path in bond prices is basically negative.**

Ultra-low yields affect bonds' effectiveness as a hedge

The recent fall in cash and bond yields for those developed countries that still had positive yields has left government bonds in a position where they cannot provide two of the basic investment services they have traditionally provided in portfolios – **meaningful income and a hedge against an economic disaster.** This leaves almost all investment portfolios with both a lower expected return and more risk in the event of a depression-like event than before. There is **no obvious simple replacement for government bonds that can provide those valuable investment services.**

Investors find it harder to hedge risk, as with yields near zero, bond prices have a limited upside

If rates stay where they are, bonds give little income but do at least outperform cash, given the positive slope of the yield curve. Only a mild increase in rates could destroy that outperformance as the yield cushion of bonds over cash might be overwhelmed by capital losses after a minor upward move in bond yields. Given that there is no single asset that can obviously fill the roles government bonds formerly played, we believe that fixed income still has an important place in an investor's portfolio. But investors would be well advised to think more critically about what investment services they truly need from their fixed income portfolio and how the rest of their investments will have to change given a realistic assessment of what the fixed income portion of their portfolios can deliver.

The lost ability of fixed income to preserve capital needs to be recognised by investors

Today's **low bond yields, create several challenges for investors:** how can we replace the income that bonds used to supply; how can we adapt portfolios for the loss of depression protection that comes from bond yields having little or no room to fall; and how can we protect our portfolios from the risk of rising inflation and rising interest rates?

Investors need to deconstruct traditional fixed-income diversification frameworks

Bond prices and yields performance during equity bear markets

Source: Bloomberg

Historical effectiveness of bonds as an equity hedge is challenged at zero rates

	Equity Bear Market			US Government Bond Index			Pan-European Government Bond Index		
					Yield variation			Yield variation	
	Beginning Bear Market	End Bear Market	MSCI World correction	Price change	Beginning	Change	Price change	Beginning	Change
First Gulf War	07/16/1990	09/28/1990	-21.3%	-2.4%	8.20%	0.40%			
LTCM (Long Term Capital Management)	07/20/1998	10/05/1998	-20.3%	10.7%	5.59%	-1.21%			
Dot.com (TMT)	03/27/2000	10/09/2002	-49.8%	21.9%	6.49%	-3.49%	19.5%	5.23%	-1.26%
Global Financial Crisis (GFC)	10/31/2007	03/09/2009	-57.8%	13.6%	4.23%	-2.19%	6.1%	4.43%	-1.20%
Euro Crisis	05/02/2011	10/04/2011	-22.0%	13.7%	1.90%	-0.51%	6.6%	3.56%	-0.66%
COVID-19 Crisis	02/09/2020	03/23/2020	-34.0%	7.8%	1.56%	-0.89%	-3.0%	0.25%	0.15%

Income Generation and QE

One of the fundamental financial needs of investors lies in the search for yield on excess savings by families and institutions. For this financial need, an investor's priority lies in **income generation** while capital protection continues to be important but becomes a secondary objective and more price volatility is assumed. This option is usually the financial preference of investors with a moderate risk profile as well as clients who no longer perceive a salary or professional income (e.g. pensioners) and therefore require a complement in income generation.

Investors with an income focus are willing to give up some credit quality in order to achieve higher returns. Historically, income generation has been obtained mainly by investing in corporate bonds of investment grade credit quality. In the graph below, we can see how **investing in good quality corporate bonds has allowed investors to earn average returns of 3.9% in euros and 5.6% in USD since 2010.**

Investment grade corporate bonds have provided average returns above 4% in the last decade and have been a safe source of income generation

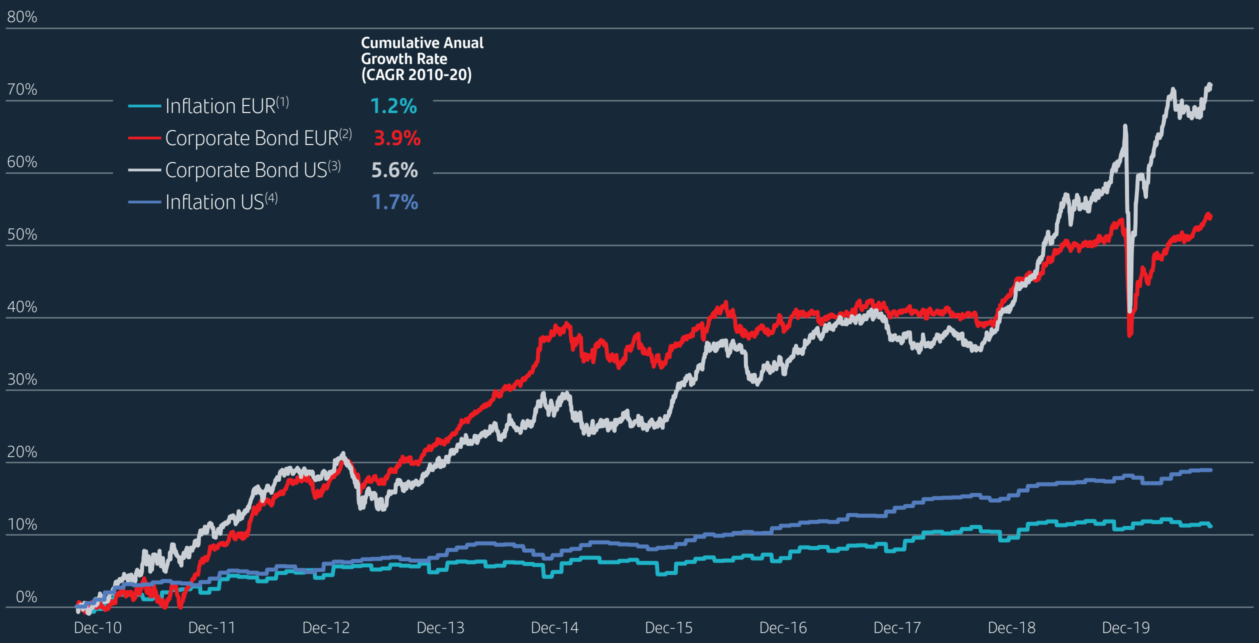
In 2020, a new institutional buyer (global central banks) entered the corporate bond market providing huge support and flows. **Corporate bond quantitative buying programs** have become a normal policy action for stabilizing markets. The Fed and ECB have now become comfortable in supporting the matched funding that the corporate bond market provides. Open-ended QE plus purchases of both primary and secondary market corporate bonds, and ETFs, for investment grade businesses have represented a huge support. **Corporate bonds spreads have tightened since the central banks began buying bonds and a clear drop has taken place in yields and risk premia** in global corporate debt. Thanks to Corporate QE the returns of investing in corporate bonds have been exceptional (9% globally) despite the world suffering one the most severe economic contractions in history.

Corporate QE has been very succcessful in providing cheap financing and has helped credit markets achieve spectacular returns despite the Great Lockdown recession

Cumulative returns of corporate bonds vs. inflation in the last decade

Source: Bloomberg Barclays. Data as of 30 November 2020

Investment in good credit quality corporate bonds (Investment Grade) has provided solid returns above inflation



(1) EUR HICP (2) Bloomberg Barclays Euro Aggregate Corporate Total Return Index (3) Bloomberg Barclays US Corporate Total Return Index (4) US CPI.

The table below shows **current yields** in the main fixed income categories both in USD and Euros and compares them with the range of the past decade. The only fixed income market segment that is not offering yields in the bottom quartile of the last 10 years is European High Yield where current income is still somewhat higher than the minimum level seen in 2017. As an example, corporate investment grade bonds in USD have offered yields between 1.8% and 4.6% since 2010, but current yields are very close to historic lows. Investors in European corporate bonds face even lower future returns as current yields are now a meager 0.49% when in the past 10 years these yields have been even ten times higher (maximum yield of 5.29%). **Spreads could tighten even further as there are more than USD17 trillion in debt instruments offering negative yields.** Investors' appetite for positive returns and central banks market interventions are the reasons why we chose “low for longer” as the title of this section.

Current yields available in corporate bonds are very close to all-time lows both in EUR and in USD

Investors looking for instruments that generate yield with low volatility are discovering how interest rates available in traditional segments of high credit quality corporate and government bonds are at rock bottom levels. Investment grade corporate bonds have narrowed their spread levels considerably and **higher rated companies are managing to finance themselves at interest rates not seen before.** Fixed income options with a higher component of credit risk, such as high yield bonds or bonds from emerging countries, have also seen a significant compression in yields. This poses a dilemma for the traditional investor who cannot find a simple way to obtain yields that compensate for the depreciation of capital due to the effect of inflation. **The monetary vaccine has solved the liquidity problems by alleviating the burden of debt service for the most indebted issuers but has reduced the availability of future financial returns** from fixed income instruments used by traditional investors.

Central banks intervention in markets has been a blessing in disguise for fixed income investors (boosted market returns so far but depressed future returns)

Current yields to maturity and historic ranges of fixed income categories

Source: Bloomberg Barclays. Data as of 30 November 2020

Future returns will be significantly lower than in the past as current yields to maturity are close to all time lows

(Date range: Dec. 2010 - Nov. 2020)

	Current	Minimum	Range	Maximum
				Fixed Income USD yield range
Aggregate US Fixed Income Index	**1.21%**	**1.02%**		**3.66%**
US Treasury bonds	0.63%	0.40%		3.12%
Corporate Investment Grade	1.84%	1.80%		4.58%
Corporate Speculative Grade *(High Yield)*	4.56%	4.56%		11.69%
Emerging Fixed Income USD Index	**3.91%**	**3.90%**		**7.88%**

	Current	Minimum	Range	Maximum
				Fixed Income EUR yield range
Aggregate Fixed Income EUR Index	**0.08%**	**0.04%**		**3.88%**
Eurozone governments	0.03%	-0.03%		3.69%
High rating (GER, NL, FRA, etc.)	-0.51%	-0.78%		3.13%
Low rating (POR, GR, ITA, ESP, etc.)	0.03%	-0.11%		5.93%
Corporate Investment Grade	**0.49%**	**0.45%**		**5.29%**
Corporate Speculative Grade *(High Yield)*	**3.55%**	**3.00%**		**12.67%**

Capital Growth and Disruption

The third major block of investors' financial needs is related to the search for instruments that allow an appreciation of the invested capital above inflation levels. **The objective of achieving capital gains must involve a longer term investment horizon.** This is because in order to achieve this objective it is necessary to invest in assets with higher volatility and risk of loss in the short term. The investor who aspires to obtain capital appreciation must assume greater volatility in the short term and therefore a very uncertain range of short-term returns.

The following table shows the **returns of the main assets over the last 10 years** with returns ranging from 11.2% annualized on equities (as measured by the MSCI World index) to -0.1% on EUR liquidity or -7% on broad commodity indices.

Investors in global equity markets have enjoyed 11.2% annualized returns achieving significant capital growth in the last 10 years

Main asset classes annualized returns - Last 10 years

Source: Bloomberg. Data as of 30 November 2020

											Annualised returns		
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	3 years	5 years	10 years
Liquidity (USD) [1]	**0.1%**	**0.1%**	**0.1%**	**0.1%**	**0.1%**	**0.4%**	**1.0%**	**1.9%**	**2.2%**	**0.4%**	**1.5%**	**1.2%**	**0.6%**
Liquidity (EUR) [2]	**0.9%**	**0.2%**	**0.1%**	**0.1%**	**-0.1%**	**-0.3%**	**-0.4%**	**-0.4%**	**-0.4%**	**-0.4%**	**-0.4%**	**-0.4%**	**-0.1%**
Global fixed income [3]	**5.6%**	**4.3%**	**-2.6%**	**0.6%**	**-3.7%**	**2.1%**	**7.4%**	**-1.2%**	**6.8%**	**7.7%**	**4.5%**	**4.6%**	**2.7%**
Fixed income (FI) USD [4]	**7.8%**	**4.2%**	**-2.0%**	**6.0%**	**0.9%**	**2.6%**	**3.5%**	**0.0%**	**8.7%**	**8.3%**	**5.3%**	**3.7%**	**3.3%**
Government FI (USD) [5]	6.6%	1.7%	-1.3%	2.6%	1.4%	1.1%	1.1%	1.4%	6.9%	8.3%	5.3%	3.7%	3.3%
Corporate FI (USD) [6]	8.1%	9.8%	-1.5%	7.5%	0.1%	6.1%	6.4%	-2.5%	14.5%	9.2%	7.0%	6.4%	5.6%
High Yield FI (USD) [7]	5.0%	15.8%	7.4%	2.5%	-2.0%	17.1%	7.5%	-2.1%	14.3%	5.1%	5.7%	7.5%	6.7%
Global emerging FI (USD) [12]	7.0%	17.9%	-4.1%	4.8%	2.7%	9.9%	8.2%	-2.5%	13.1%	4.9%	5.1%	6.3%	5.8%
Latam emerging FI (USD) [13]	10.7%	16.9%	-6.0%	4.2%	-2.2%	16.3%	10.6%	-4.9%	12.3%	1.7%	2.9%	6.4%	5.3%
Fixed income EUR [8]	**3.2%**	**11.2%**	**2.2%**	**11.1%**	**1.9%**	**3.3%**	**0.7%**	**0.4%**	**6.0%**	**4.0%**	**3.1%**	**2.6%**	**4.2%**
Government FI (EUR) [9]	3.4%	11.0%	2.2%	13.1%	2.7%	3.2%	0.2%	1.0%	6.8%	5.0%	3.8%	3.0%	4.6%
Corporate FI (EUR) [10]	3.2%	14.6%	1.5%	11.0%	3.3%	2.9%	1.9%	-1.5%	6.2%	2.7%	2.3%	2.7%	3.9%
High Yield FI (Europe) [11]	-2.4%	28.5%	9.9%	7.0%	5.6%	6.5%	6.2%	-3.6%	12.3%	1.0%	2.9%	3.8%	6.6%
Global Equities [14]	**-5.5%**	**15.8%**	**26.7%**	**4.9%**	**0.9%**	**7.5%**	**22.4%**	**-8.7%**	**27.7%**	**11.2%**	**9.9%**	**11.0%**	**9.8%**
US equities [15]	2.1%	16.0%	32.4%	13.7%	3.0%	12.0%	21.8%	-4.4%	31.5%	14.0%	13.4%	14.1%	13.8%
European equities [16]	-8.6%	18.2%	20.8%	7.2%	15.4%	1.7%	10.6%	-10.8%	26.8%	-4.5%	3.3%	3.1%	6.7%
Spanish equities [17]	-7.7%	2.8%	27.8%	8.6%	4.7%	2.6%	11.3%	-11.5%	16.6%	-13.1%	-3.3%	-0.9%	2.6%
Japanese equities [18]	-17.0%	20.9%	54.4%	10.3%	14.3%	0.3%	22.2%	-16.0%	18.1%	4.3%	1.6%	4.2%	9.5%
Emerging market equities [19]	-18.4%	18.2%	-2.6%	-2.2%	-13.0%	11.2%	37.3%	-14.6%	18.4%	10.2%	5.8%	11.0%	3.4%
Alternatives [20]	-8.9%	3.5%	6.7%	-0.6%	-2.3%	2.5%	6.0%	-6.7%	8.6%	4.3%	2.1%	2.5%	1.2%
Commodities [21]	-13.4%	-1.1%	-9.6%	-17.0%	-22.3%	11.4%	0.7%	-13.0%	5.4%	-8.1%	-4.8%	-1.5%	-7.0%

[1] Barclays Benchmark Overnight USD Cash Index. [2] Barclays Benchmark 3mEUR Cash Index. [3] Bloomberg Barclays Global Aggregate Total Return Index Value Un. [4] Bloomberg Barclays US Agg Total Return Value Unhedged USD. [5] Bloomberg Barclays US Intermediate Treasury TR Index Value Unhedged U. [6] Bloomberg Barclays US Corporate Total Return Value Unhedged USD. [7] Bloomberg Barclays US Corporate High Yield Total Return Value Unhedged USD. [8] Bloomberg Barclays Euro Agg Total Return Index Value Unhedged EUR. [9] Bloomberg Barclays Euro Agg Treasury Total Return Index Value Unhedged EUR. [10] Bloomberg Barclays Euro Aggregate Corporate Total Return Index Value Unhedged EU. [11] Bloomberg Barclays Pan-European Aggregate High Yield TR Index Value Unhedged. [12] Bloomberg Barclays EM USD Aggregate Total Return Value Unhedged. [13] Bloomberg Barclays Emerging Markets Latam Total Return Value Unhedged USD. [14] MSCI World Index Total Return. [15] S&P 500 Total Return Index. [16] Stoxx600 Net Total Return Index. [17] Ibex 35 Total Return Index. [18] Topix Total Return. [19] MSCI Emerging Markets Net Total Return Index. [20] Hedge Fund Research HFRX Global Hedge Fund Index. [21] Bloomberg Commodity Index.

Investing in stocks in a globally diversified basket has allowed for returns that are 5 times higher than global inflation levels, providing investors who have invested for a long time and with an international focus with a very high capital growth rates. In order to do so, they have had to follow one of the basic principles of investing in risk assets, which consists of not losing their temper during times of economic volatility and uncertainty. It is difficult to have a long term perspective when events of enormous impact on economies and markets occur and many investors sell risk assets in these situations with the consequence of not participating in the subsequent recovery. A very good example of how difficult it is to manage high volatility environments can be seen in the behavior of equities during 2020. At the end of November, the global stock market accumulated a 11.2% return since the beginning of the year, but this return is only available to investors who did not reduce risk positions during the worst moments of the pandemic crisis (the MSCI World had a negative return of 32% at the end of March). **Equities have been the best financial asset to generate capital appreciation but for this the investor has had to assume its highly volatile asset component and invest with a long term perspective.**

The effects of COVID-19 on the world economy have been very different depending on the sectors. The following graph shows the variation in market capitalization of the MSCI World by sectors and countries in 2020. We can see the **significant divergence of returns** from the 33% average appreciation of the technology sector to the -40% average fall of the companies in the energy sector. The change in behavior regarding social distancing and the greater concern for health has propelled the growth of revenues of technology and medical research companies. On the contrary, the cyclical sectors (due to lower economic activity), oil companies (due to the fall in oil prices), financial companies (due to lower interest rates) and companies related to tourism and transport have experienced a sharp drop in their cash flow generation.

The best way to ride out the volatility and capture the growth of the world economy is to invest in diversified global portfolios

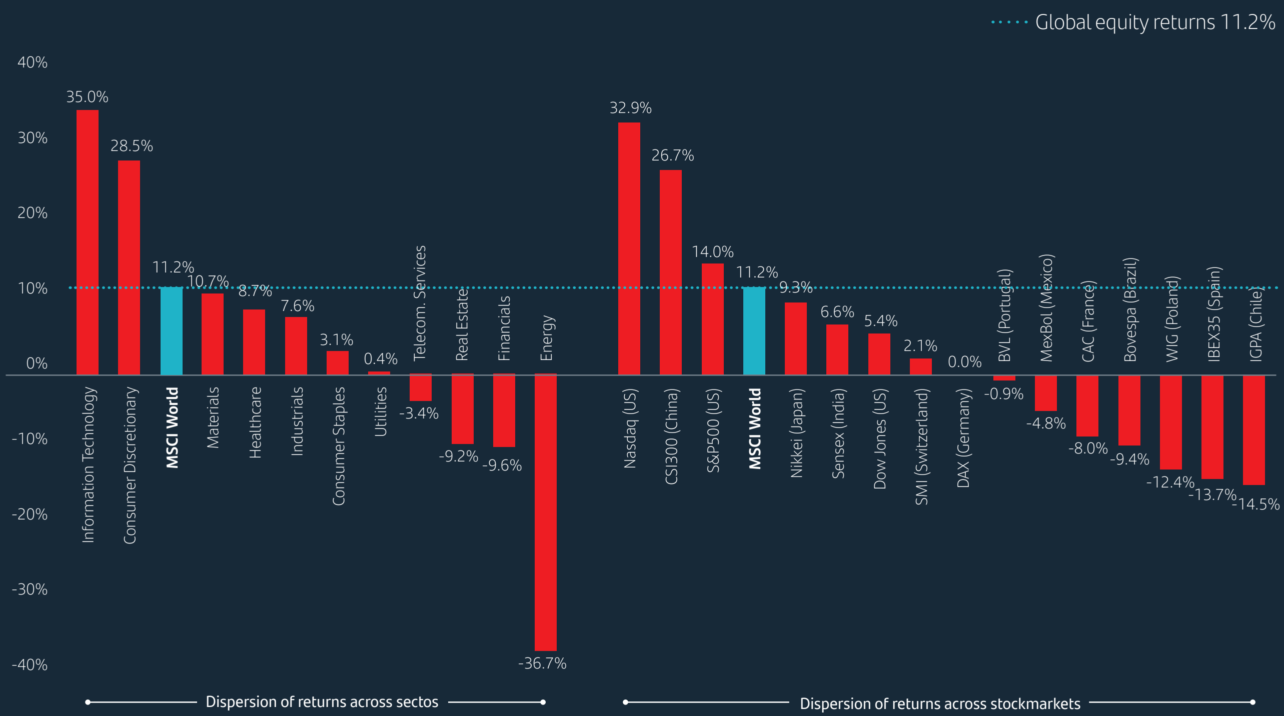
Investing with a long time horizon is the best way to deal with volatility and avoid emotional investing errors like selling at the market dip

"It was the best of times" (Technology and Healthcare), "it was the worst of times" (Financials and Energy)

Global equity returns (MSCI World) - Dispersion of returns by sectors and stock markets in 2020

Source: Bloomberg. Data as of 30 November 2020

Huge dispersion of returns across sectors with financial and energy stocks lagging behind



This enormous inequality at the sectoral level can also be seen in the behavior of the different stock market indices as a reflection of the different impact of the pandemic at a country level. In the previous graph, we can see how the **Chinese and technology-focused (Nasdaq) indices are the main winners of the change in scenario** brought by the pandemic. The Chinese stock market accumulated a 27% appreciation measured by the MSCI China index, while the Nasdaq technology index leads the COVID-19 recovery with a 33% gain in 2020 so far. In fact, the increase in the market capitalization of the Nasdaq surpasses that of the MSCI World. **The market has continued to reward the countries and sectors that have shown the greatest resilience and potential for recovery after COVID-19.** Other stock markets with great dependence on travel and entertainment, tourism, raw materials and financial sectors stand out on the negative side, in particular the Latin American and Spanish stock markets.

The rally appreciation has relied mostly on the appreciation of companies listed in Nasdaq and China

Such a disperse behavior has been also matched by very extreme levels of concentration at stock level, given that in the technology sector the **appreciation of the digital giants** (Google, Facebook, Microsoft, Apple) has been particularly relevant, as well as discretionary consumption values such as Amazon, Netflix, Alibaba or Tesla that have monopolized a large part (70%) of the increase in global market capitalization.

The post pandemic rally is extremely concentrated in 10 global stocks

In short, equities have continued to provide investors growth in capital, but the levels of volatility and the **great differences among stocks, sectors and geographies have made 2020 one of the most complicated markets in history** regarding asset allocation (both strategically and tactically). We do not know if this dispersion will continue to manifest itself in such a pronounced manner in the future, but there is a way to mitigate the risk of not having exposure to the market segments with the best returns. The formula is to

Reduce exposure to large caps as midcap earnings are more leveraged to the recovery

Breakdown of market cap gains in 2020 - Main stocks

Source: Bloomberg. Data as of 30 November 2020

Eleven stocks represent over 70% of global stock market appreciation in 2020

always have a high percentage of equity exposure through vehicles with a high degree of geographical and sectoral diversification, avoiding as much as possible the "home-bias" or concentration in local markets. **Dispersion and volatility can be reduced by diversifying and focusing on long term returns.**

In addition to the disruption of the post COVID-19 environment and the variability of returns by sector and geography, investors also face the paradigm of the levels of valuation in equity markets. In the graph below, we can see how the MSCI World index has recovered pre-pandemic levels and is now trading outside normal valuation levels (above 22x P/E ratios). However, it is necessary to take into account that global corporate earnings expectations have fallen by more than 20%. This significant drop in expected profits, combined with the recovery of stock price levels, has raised valuation of the global stock market to new highs not seen since 2000 dot.com euphoria. **The MSCI World is trading at profit multiples of 24x, and is clearly in areas of overvaluation relative to absolute historical ranges.**

These high valuation metrics may be justified in part by expectations that current levels of expected earnings are artificially depressed by the effects of the pandemic. **If investors believe that vaccination will be effective and the recovery in activity through 2021 is robust, the normalization of earnings could be well grounded.** In that case, it would be logical to value on the basis of expected earnings in 2020 and it might make sense to take a more long-term view and consider profit expectations from 2021 onwards. The reading of the recently announced results for the third quarter of 2020 and the promising results of the Pfizer/BioNtech vaccine support this positioning. In fact, analysts are revising to the upside the expected earnings figures for the following quarters. In the case of the S&P500 it is already expected that, by the end of 2021 earnings will recover to levels prior to the spread of the virus.

Many investors have struggled with the extremely high valuation levels of many stocks and indexes

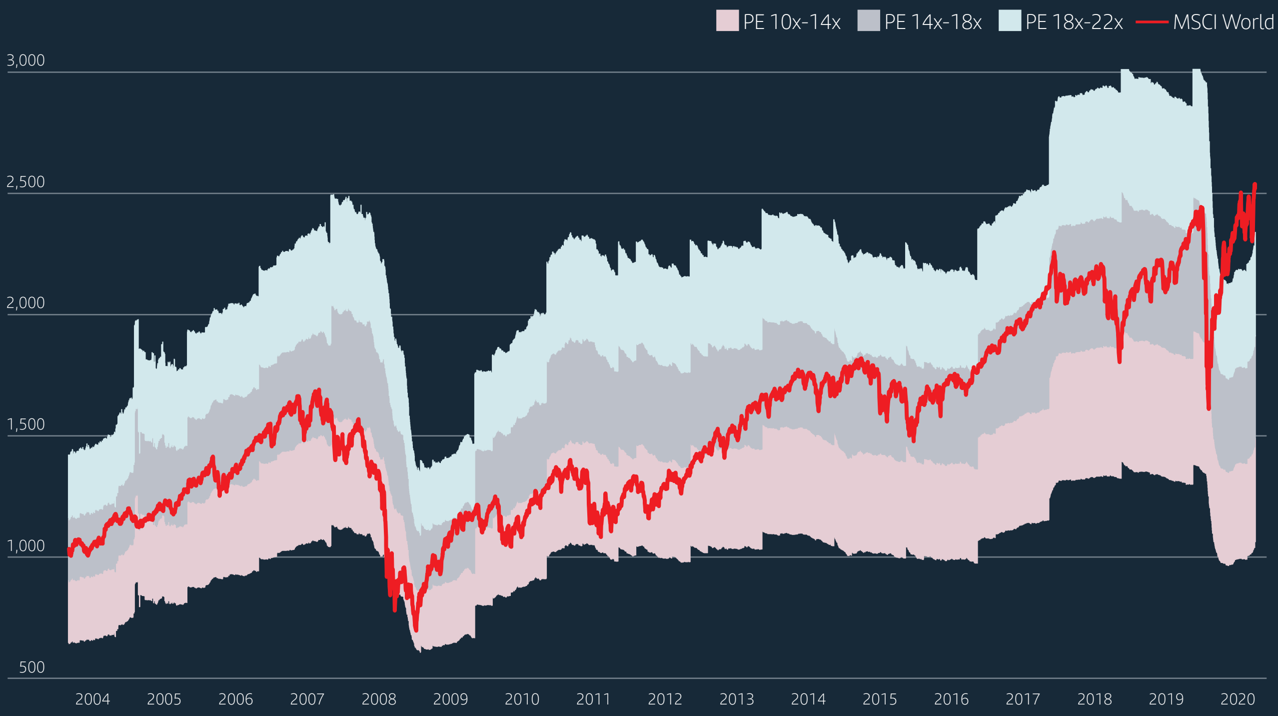
We expect a virtuous cycle of increasing consumer and business confidence that can boost investment and corporate profits

Valuation frameworks need to incorporate the new reality of ultralow rates

MSCI World - Index performance and earnings multiple valuation ranges

Source: Bloomberg. Data as of 30 November 2020

The global stock market is trading at unprecedented earnings valuation multiples



Another argument that supports the fact that investors can coexist with higher valuations is due to the comparison with available returns of fixed income instruments. The level of interest rates has a very direct effect on the valuation of risk assets and in particular on the valuation of shares. The discount rate at which analysts value future dividend flows is based on the risk-free rate (Treasury bond yield) plus a risk premium. As the global interest rate curves flattened out with widespread declines across all time horizons, the valuation of dividend flows from shares has appreciated greatly. **The future potential growth of equity earnings and dividends becomes much more valuable when discount rates drop significantly.**

The present value of the future cash flow increases exponentially with virtually zero interest rates. Yields on risk assets are at the lower end of historical ranges, but compared to bond yields, their valuation remains attractive.

Another way to analyze the reasonability of stock market valuations is to normalize profit levels using an average of the last ten years. This way, an attempt is made to neutralize the cyclical nature of profits by using a more stable measure. This valuation ratio is known as CAPE, which uses the acronym for cyclically adjusted price-to-earnings ratio, and was popularized by Professor Robert Shiller of Yale University. It is also known as Shiller's P/E ratio. In the following graph we can see how the **current CAPE ratio is above 30x, levels which have been only observed in extreme valuation circumstances prior to historical corrections** (Great Depression and Crisis Dot.com).

However, in the same graph we can see how the **current circumstances are totally abnormal in terms of interest rate levels.** The graph uses data elaborated by Professor

It is hard to be too negative on stocks next year with the Fed and ECB standing firmly on the sidelines

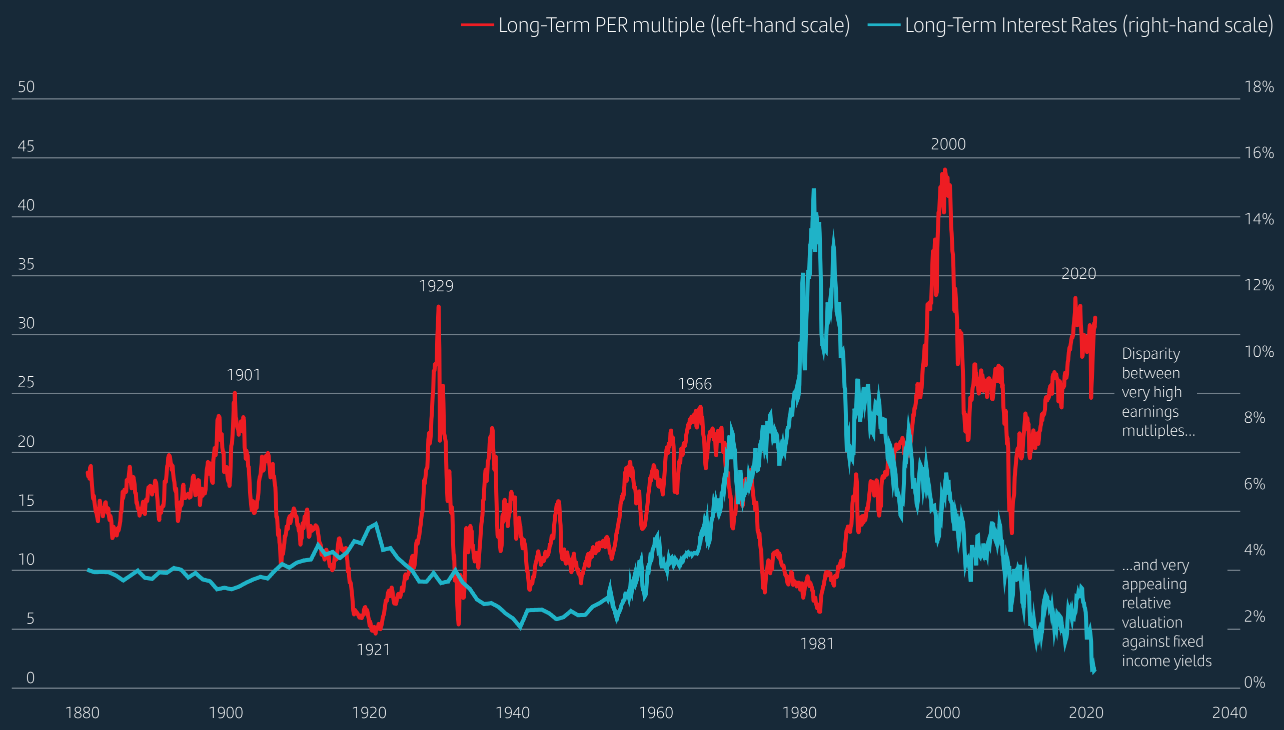
When interest rates are low, the arithmetic of discounting makes future income streams, and therefore risk assets, more valuable

Stocks are expensive on absolute terms but the monetary and yield backdrop provides a large enough buffer for now

S&P 500 Schiller PE ratio and long term US interest rates

Source: Robert Shiller and Duke University. Data as of 30 November 2020

There is no historical precedent on how to value stocks so close to zero interest rates



Shiller with more than two centuries of perspective and in it we can see how current interest rate levels are a historical anomaly. It is true that the valuation in absolute terms is high but investors have never faced such low levels of fixed income returns as a reference. We do not have historical references to value the future returns of risk assets with such low interest rates. **We are navigating uncharted waters in terms of valuation of financial assets.**

A reduction in interest rates is positive news of equal or greater magnitude than an increase in profits or dividends. As central banks continue to push the monetary policy pedal to the metal, valuation of stocks and other risk assets is supported.

One way of contrasting the perspective of absolute valuations (resulting from comparing valuation multiples with their historical range) with that of risk-free interest rates is presented in the following graph. It shows the CAPE Shiller ratio as an absolute and relative valuation measure by calculating the ratio between dividend yields and 10yr government bond yields. At the end of the 1990s, during the technology bubble, both measures showed very similar extreme levels of valuation: the CAPE shoot up reaching levels above 40 while the Rate/Dividend ratio increased to over 5x. However, in the current market situation the ratio Rates/Dividend is at the opposite extreme below 1x (stock market returns via dividends exceed those of long term bonds). **The US stock market is expensive if we consider only absolute metrics, but if we focus on relative valuation metrics we find one of the times when it has traded at more attractive levels.**

The greatest risk for stocks is an uncontrolled rise in bond yields

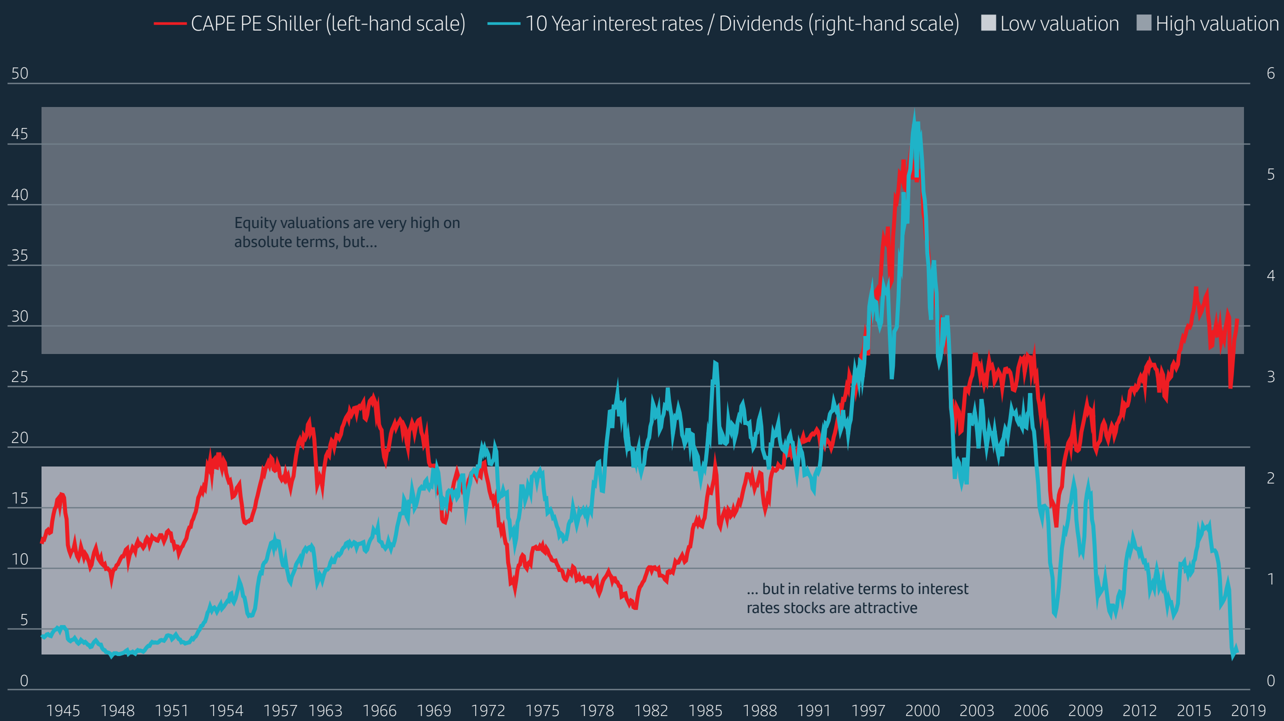
Stocks normally perform better in the early stage of a new business cycle upswing with potential for earnings recovery

Equities are benefiting from reduced risk premiums that can justify higher multiples

S&P 500 - Absolute and relative to interest rates valuation

Source: Robert Shiller and Duke University. Data as of 30 November 2020

Stocks continue to be attractive compared to to fixed income as a result of record low rates



03 Rethinking Investment Solutions

Green Shoots

Sustainable investing (ESG) is not a temporary fad. A growing number of investors want to see their money flow toward investments that are both profitable and reflect their values.

For more and more investors, these areas are just as important as financial variables when it comes to deciding whether or not to invest their hard-earned money into a company.

Higher risk-adjusted returns can also be achieved as ESG factors can influence value, reputation, and respective regulations of companies and industries.

Rotation & Innovation

The world is recovering from COVID-19 and investment portfolios should reflect this positive environment. Stay invested.

Looking ahead to 2021, it is important that portfolios balance the competing themes of post-crisis normalization and continued technological and environmental disruption. Combine cyclical recovery with future trends.

New strategies in private markets, risk based solutions, and structured products offer both growth and diversification potential.

Entering 2021, **traditional investing faces challenges never seen before.** Assets that until now used to be adequate to cover the basic financial needs of investors have lost the ability to offer the returns of the past. This has been triggered by the extraordinary monetary and fiscal policy measures that have been necessary to boost economic recovery, although they have broken paradigms in terms of investment. **Financial needs remain the same, but investment solutions must be redesigned** in such a way that they continue to meet the objective that investors require.

Stay invested but don't forget risk control

For those investment portfolios that have **capital protection as an objective, controlled risk solutions** that either offer a high percentage of protection or, that minimize risk scenarios and volatility hiccups are appropriate options. Another way to diversify, without putting too much capital at risk is by using **structured products** with partial capital protection. Our outlook for reflation in 2021 is positive, but we encourage considering some level of future inflation protection by having some exposure to assets such as gold, real estate assets and inflation-linked bonds (TIPs).

Explore the flexibility and protection of structured products and risk-based strategies

The objective of generating income above inflation is now more difficult due the effect of quantitative easing (QE) on the yields of all assets particularly in fixed income. Risk premiums are low and the recovery uneven; investors should remain selective and actively **manage their high yield and emerging bonds exposure.** While we continue to favor exposure to credit, we recommend investing in solutions that offer highly diversified income and sophistication in their ability to manage and monitor risk. Private debt, real estate, capital-at-risk structured products, or green bonds are interesting options to **diversify sources of income in the portfolios.**

Discover opportunities in credit, private markets and real assets

Integrate sustainable investment solutions in your portfolio

For those investors seeking capital growth we **recommend combining cyclical rotation strategies** (investing in sectors hit by the pandemic and with recovery potential) with portfolios and funds that maintain a **structural bias towards innovation (Future Wealth).** Sustainable investment strategies, far from being a fad, have gained importance and investors worldwide are **increasingly incorporating ESG criteria in their investment processes.** They should undoubtedly be part of the DNA of your portfolios. Alternative investment in **private equity** should also be considered as it usually offers very attractive returns in the years following recessions due to the greater number of restructuring opportunities.

Combine cyclical rotation with innovation (Future Wealth)

The environment of low interest rates and the possibility of a rise in inflation forces us to look for investment solutions different from the standard ones, to be selective. For any of the different financial needs it is essential to take into account three factors: **diversification, global focus and risk control.**

Expand your investment horizons to global opportunities

	Traditional asset classes	Post pandemic challenges	New Investment Solutions
Liquidity and Capital Protection	Money Market and Sovereign Bonds	Financial repression and reflation	Risk-control strategies and low volatility investment strategies
			Partial capital protection structured notes
			Inflation hedges (gold, real estate, TIPs)
Income Generation	Investment Grade Corporate Bonds	Quantitative Easing (QE)	Selective bets on high yield and emerging market bonds
			Diversified income generation strategies
			Private Debt and Green Bonds
			Capital at risk structured products
Capital Growth	Equities	Growth and valuation disruption	Rotation into cyclical sensitive sectors
			Future Wealth (Innovation)
			Private Equity
			Sustainable Investing strategies (ESG)

Risk Control Solutions

An investor with high liquidity and capital protection needs faces one of the most adverse environments in history due to the impact of low interest rates, high uncertainty about inflation and the future monetary environment.

The first option that investors consider when interest rates are very low is to stay in high credit quality paper (mainly issued by governments) but extending the maturity of the investment. This strategy of positioning oneself in long maturities allows capturing the additional returns that are normally associated with longer term investments. This duration premium rewards the risk that interest rates will rise in the future and there will be a negative change in the price of the invested bonds. In the following graph we can see how under current conditions this premium implicit in the slope of the curve is quite small compared to the historical average of the interest rate curve in EUR and USD.

The interventions of central banks with massive purchases of bonds have aggressively reduced long-term interest rates in order to encourage investment and risk taking by economic agents. In previous periods of economic recovery similar to the current one, the slope of the curve rebounded strongly, anticipating future interest rate rises and giving investors opportunities to improve their future returns. In this actual phase of economic recovery, central bank messages are being very cautious about future rate hikes and this is reflected in the slow rise of the slope in USD (and the negligible slope in the curve in EUR). We believe that **the solution to increase the duration of investments in government bonds is still not optimal due to the low remuneration of the interest risk assumed.**

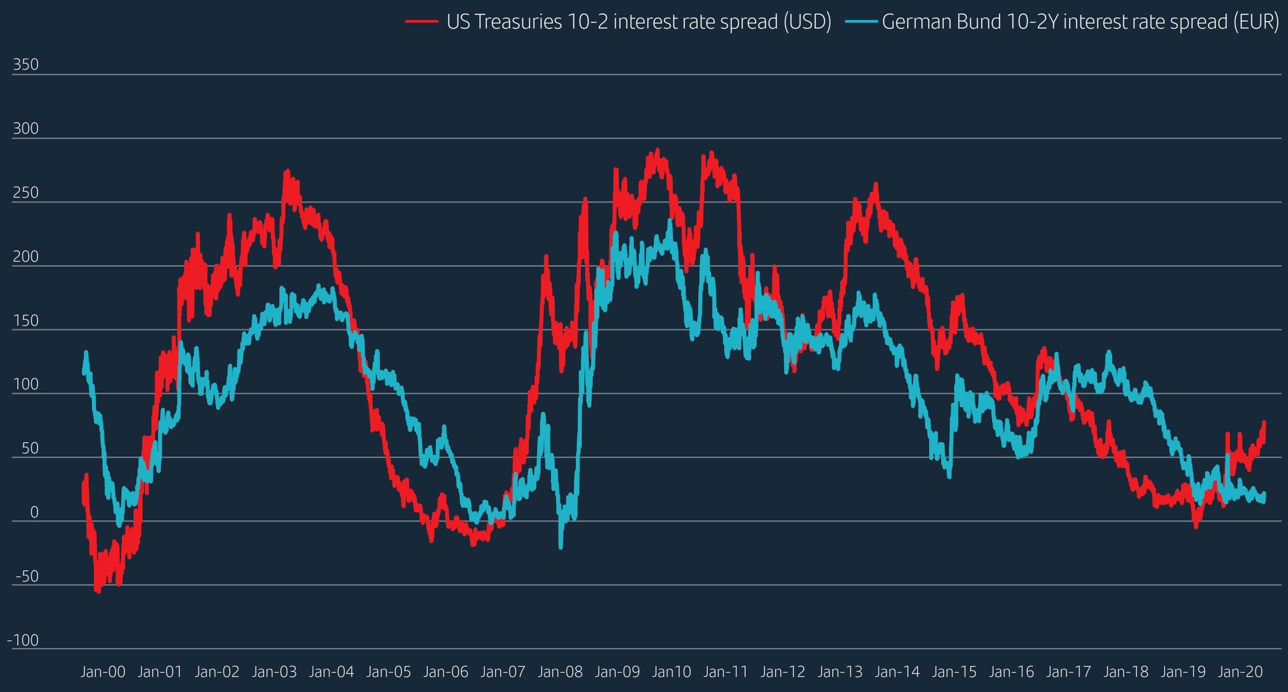
Long duration strategies carry low risk premium

Finding alternative sources of downside protection is imperative now that the Goldilocks conditions of the past – strong long-term bond yields and negative correlations – no longer exist

Sovereign bonds 10-2Y interest rate spread

Source: Bloomberg. Data as of 30 November 2020

Extending duration to longer maturities provides very little additional return



Another option for investors in the Eurozone has been to capture the spread between the interest curves of the different government issuers. In the graph below we can see the evolution of interest rates in some of these countries, and how the **differential in sovereign risk has been significantly reduced.** This has been possible thanks to the European Central Bank's asset purchase schemes, the progress made in fiscal consolidation (approval of the Next Generation EU economic recovery plan financed by the joint EU budget) and the current consensus on postponing fiscal austerity measures.

Deep-frozen interest rates should only rise modestly in 2021

The **interest rate differential between bonds issued by the German and Italian governments has narrowed to levels of around 1.0%,** which is close to the lowest spread it has traded in the last ten years. Arbitrage between the various sovereign risk premiums in the Euro zone currently does not provide clearly differentiated returns for the level of risk taken.

The return of inflation could, however, provide a boost to US Treasury Inflation-Protected Securities (TIPS)

Investors that prioritize minimizing capital at risk are forced to look for alternatives that complement the low expected return of traditional risk-free assets. Given the increased level of concern about inflation control stemming from central bank announcements regarding price stability mandates, many professional investors have taken **positions in inflation-linked government bonds (TIPS)**. Inflation breakevens embedded in the US curve protect investors from long-term inflation increases above 1.7%.

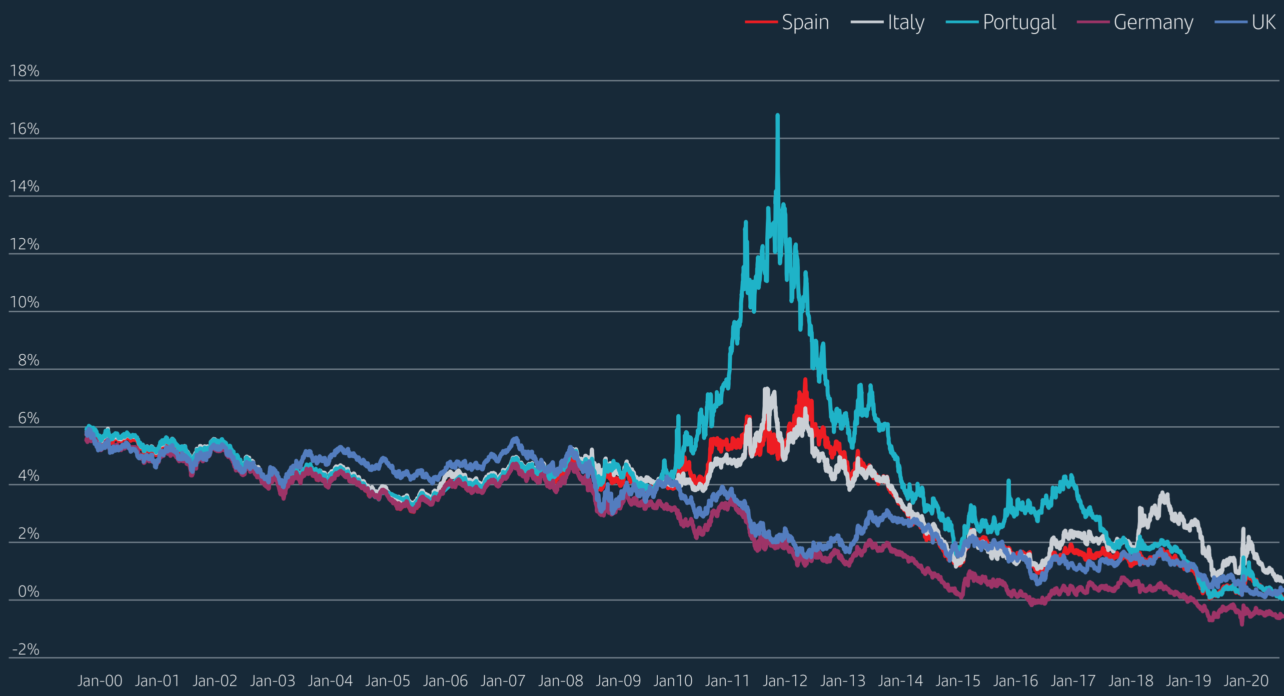
Diversify through structured products that allow for different levels of capital protection

Another way to seek some return but without putting much capital at risk is through the use of **structured products with partial capital protection.** Given the virtually zero return that is generated by buying high quality bonds, it is necessary to put some capital at risk in order to have the option of getting access to the return of some asset or market. This vehicle has the advantage of the high number of existing options to structure the upside and that allows to complement and diversify the investment portfolio.

10 Year Government bond yields

Source: Bloomberg. Data as of 30 November 2020

Less opportunity for arbitrage among European sovereign bonds



Traditionally, **gold has also played an important role in the composition of portfolios that have a strong bias towards security and is one of the key holdings in central banks' balance sheets.** The imbalances and uncertainties that exist in global monetary policies and fiscal imbalances have propelled the acquisition of gold as a store of value since the Global Financial Crisis and we do not believe that these could change in the short term. The main drawback of gold as an investment asset has been its lack of yield (it does not generate interest) but given the scenario of negligible or even negative yields on government bonds this factor is no longer relevant. The price of gold in the last 2 years has risen in parallel with the volume of bonds trading at negative yields at a global level (at present this volume is at historical maximums and reaches the figure of USD17.2 billion). But perhaps the greatest attraction of gold, and the reason why we recommend its inclusion as a complement to investments in risk assets, lies in its **ability to absorb negative price shocks in portfolios during periods of crisis** as can be seen in the following table:

Gold has proven to be an effective hedge in market crisis

	Equity Bear Market			
	Beginning Bear Market	End of Bear Market	MSCI World Correction	Gold prices variation
First Gulf War	07/16/1990	09/28/1990	-21.3%	12.4%
LTCM (Log Term Capital Management)	07/20/1998	10/05/1998	-20.3%	0.2%
Dot.com (TMT)	03/27/2000	10/09/2002	-49.8%	14.2%
Global Financial Crisis (GFC)	10/31/2007	03/09/2009	-57.8%	15.8%
Euro Crisis	05/02/2011	10/04/2011	-22.0%	5.1%
COVID-19 Crisis	02/09/2020	04/23/2020	-34.0%	10.2%
Average			**-34.2%**	**9.6%**

Investment in corporate bonds is also an option although its role is more of an income generator and carries a credit risk that can put capital protection at jeopardy given the sensitivity of credit to the ups and downs of the economic cycle. **We are more inclined to recommend risk control strategies that incorporate and manage volatility levels to ensure a high degree of capital preservation.** This type of investment management strategies can only be implemented by professional management teams and SPB advisors that have sophisticated systems for measuring the individual risks of each investment and the aggregate risks of the portfolio. Santander Asset Management's management teams have the **quantitative tools to control the volatility levels of highly diversified portfolios** and have different options to invest in these strategies with differentiated risk levels. While the only way to achieve any kind of positive return is by investing in riskier assets, solutions where risk management is a priority are the best option if capital protection is the priority.

Navigate risk through risk-control strategies designed to manage volatility

Investors in developed markets have not feared inflation in the past two decades as the market has been navigating through disinflationary trends all along. However, this could change in the future as financial markets react more quickly to changes in macroeconomic behavior than in general, so investors may need to adjust portfolios well before changes appear in the data. Any strategic asset allocation decisions should be taken now rather than when inflation expectations shift.

As we have explained before, it is not clear that nominal government bonds will provide the portfolio balance they historically have, and we have discussed different alternatives to complement them in conservative portfolios. Therefore, **incorporating a wider range of instruments other than nominal government bonds should be considered in order to obtain capital protection and real returns during the next decade.**

Low-yield environment makes traditional portfolio stabilisers less efficient. We favour holding a diversified set of hedging strategies

Income generation solutions

In section 2.2 we have analyzed the scenario that investors -whose main financial objective is to obtain income- face in the future given the sharp decline in the yield to maturity of corporate bonds. Currently investment grade corporate bonds offer yields to maturity of less than 2% in the case of US issuers and 0.5% in the case of European issuers.

These yields may be insufficient to compensate for the level of future inflation, and therefore force investors to complement the core of their investment -in high credit quality bonds- with other types of investments that allow them to obtain an additional income in order to achieve their objective of generating returns above inflation.

An environment of economic recovery and low interest rates is traditionally favorable for investing in higher risk bonds and more indebted companies. Therefore, a strategy of moderate exposure to these types of bonds may be a source of additional return entering 2021. However, one must be very selective about sectors and types of companies when positioning in lower credit quality bonds given the sharp deterioration that is likely to have occurred in the balance sheets of many issuers during the pandemic.

We recommend a well-diversified corporate bond portfolio with moderate exposure to the lower credit quality segment within the High Yield category as an appropriate strategy for generating income. The search for higher yields in the fixed income universe entails taking greater credit risks but we believe that the **risk of default will remain moderate as long as the cost of funding stays low, central banks continue to provide liquidity and the economic recovery keeps its course.** The banking sector is showing very good signs in terms of capital so we expect narrowing spreads on financial sector bonds to continue.

Ultralow rates require higher doses of risk to maintain the same level of income

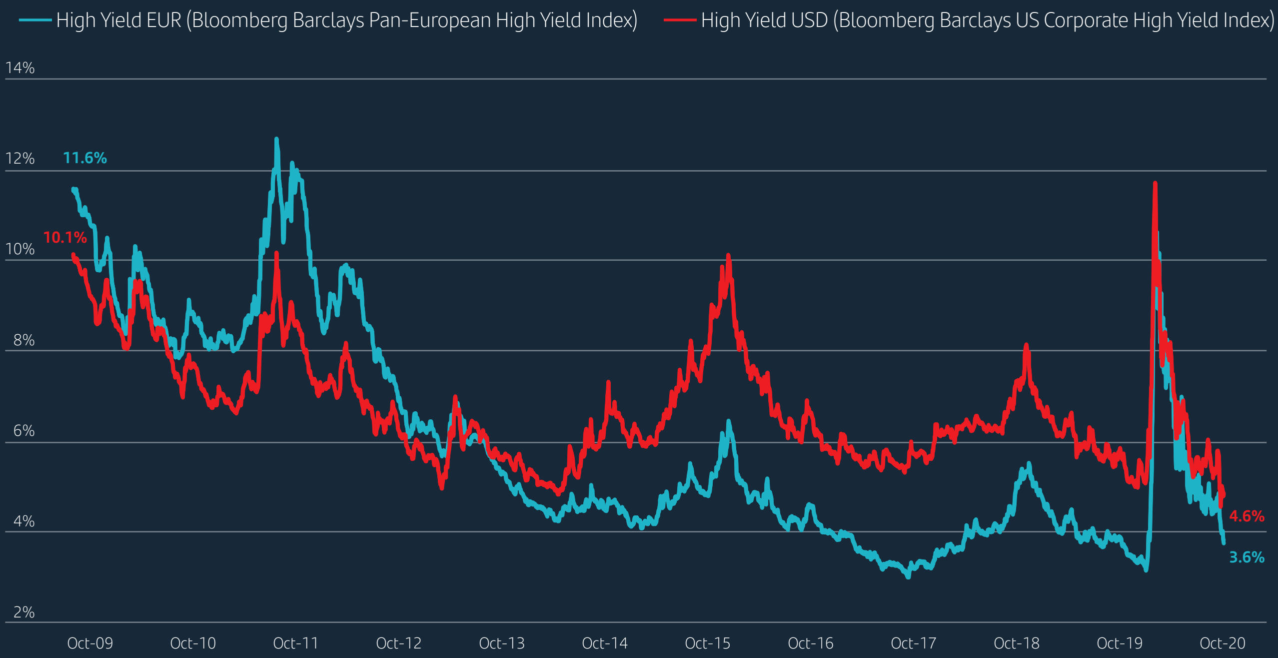
Credit continues to shine and investment grade offers a good risk/reward

Investment in High Yield is an option that generates additional income but it is advisable to make it through professionally managed vehicles

Yield to Maturity High Yield Bond Indexes

Source: Barclays Bloomberg Indexes. Data as of 30 November 2020

Central bank support and appetite for yield encourages tighter spreads



Emerging markets have benefited from the decisive action of the Federal Reserve and other central banks in the developed world. The injection of huge amounts of liquidity into the markets has helped to shore them up. In addition, although central banks in emerging economies tend to have more limited resources, they have also implemented measures to alleviate the consequences of the crisis.

Emerging markets had already received a major financial hit since the end of February. **Emerging economies have faced a perfect storm from both the health and financial sides.** In addition to the cost of health care, they have had to cope with the loss of activity caused by domestic containment measures, the plummeting of external demand, the collapse of commodity prices and a sudden interruption in capital flows.

In their initial stages, emerging markets have suffered from what BIS (Bank of International Settlements) and others have called a "sudden stop" in capital inflows. Not only did capital stop flowing, but in many cases it began moving in the opposite direction. In addition to capital outflows, there has been **a sharp depreciation of emerging market currencies.** However, at least in the financial markets, the situation has improved considerably from the difficult weeks of March with a **recovery in capital flows and investor confidence levels.**

We believe that, in a context of cyclical economic and commodity recovery, investing in a emerging country bonds brings portfolio diversification and a much-needed improvement in income generation levels.

Emerging markets hard currency bond yields remain appealing on a relative basis

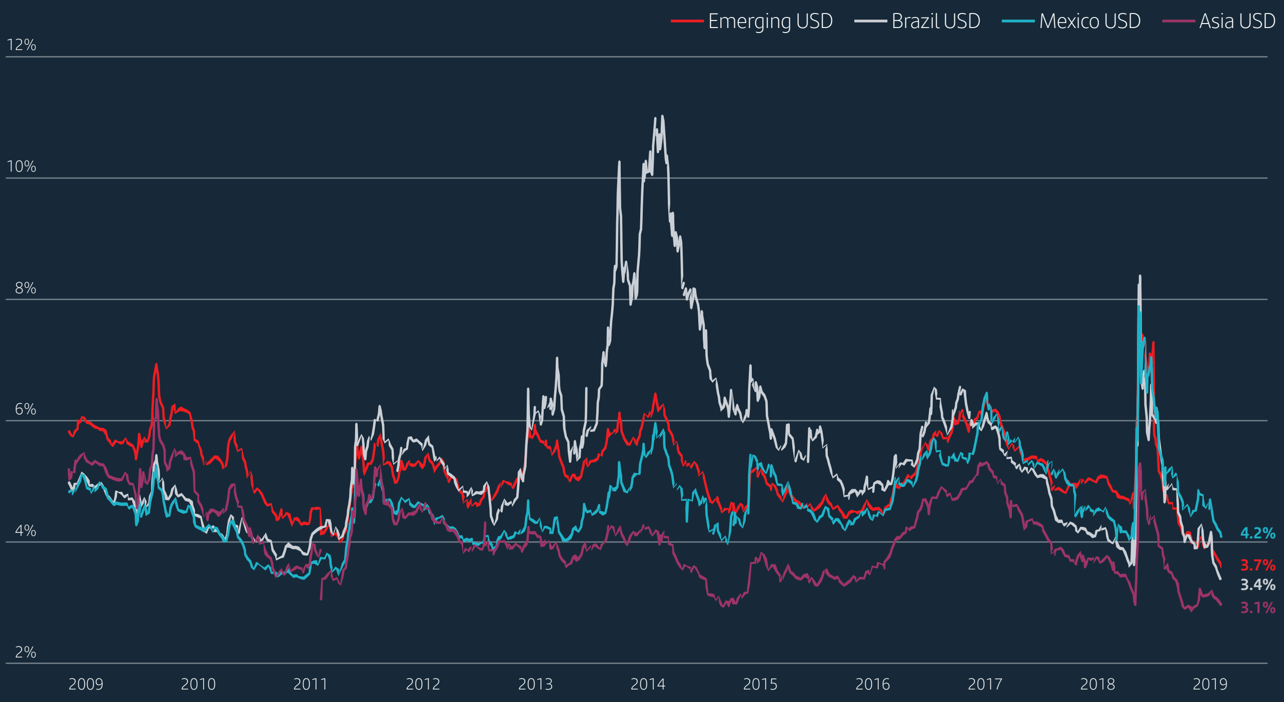
The improvement of emerging currencies against the USD, the cyclical recovery and higher commodity prices should favour emerging bonds

Asian bonds should begin to be considered as an element of diversification and additional income generation

Yield to Maturity Emerging Bond Indexes

Source: Barclays Bloomberg Indexes. Data as of 30 November 2020

Emerging country bonds still generate a differential yield to that of developed countries



Other alternatives outside the traditional niche of investment grade corporate bonds, that are also worth exploring include both **alternative assets and strategies such as systematic investment solutions, structured notes, private debt or alternative management.**

Structured notes have a great advantage because of their **flexibility in several fronts: the capital protection levels, the selection of underlyings and the directionality and leverage to that underlying.** In collaboration with capital market experts, our advisors will offer you structured products with the option of generating additional income as a response to **tactical opportunities of generating value** in all types of market and underlying situations.

Another possibility to invest in credit is through **the *private debt* markets.** Private credit is an asset defined by non-bank loans in which the debt is not issued or traded on public markets. These assets are less liquid than those of the listed markets so - in order to access their return potential- investors should rely on specialized investment professionals and to be conscious of the need to sacrifice liquidity. Private credit has been one of the fastest growing asset classes due to strong investor demand driven by the **excellent returns achieved over the past twenty years.**

The chart below shows the internal rates of return (IRR) -a methodology that measures the annualized return from the beginning of the investment to its end- of the private debt industry both at the upper quartile and median levels (more representative of the industry average). The obtained returns (average of 8.2%) have been similar to that of global equities with a high consistency over the years. We are talking about **investments that move away from the simplicity of quoted bonds -posing a significant premium on liquidity-** although they can generate a significant plus in returns and diversification.

Look for alternative sources of income through managed funds and alternative investment

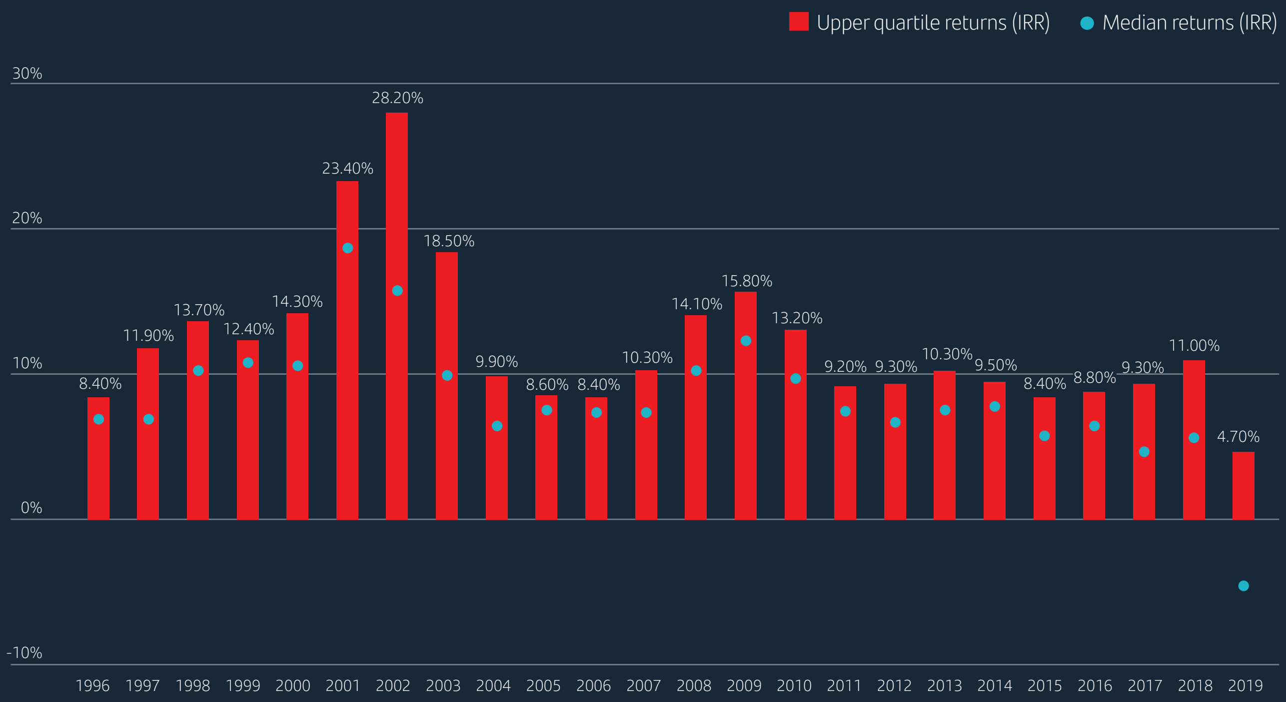
Structured notes can be an optimal vehicle for generating a higher level of income by assuming different levels of risk and exposure to multiple markets

Investment in private markets should be done by expert managers given the greater dispersion of returns of private debt

Historical returns (IRR) on private debt funds

Source: Hamilton Lane and Cambridge Associates

Median returns on *private debt* funds have compensated for their lack of liquidity



It is increasingly difficult to achieve the level of returns that investors have been able to obtain in the past. However, **a tactical approach -supported by professional investment managers that can pursue opportunities in a wide variety of asset classes- can help investors reach those additional return levels.** The chart below attempts to represent the level of returns generated by different types of financial assets by illustrating the level and type of risk assumed in order to generate those returns. A professional management team can access and combine all these instruments and -thanks to sophisticated investment platforms and systems- know and control the level of risk and adapt it to the profile of the investor.

At times of high uncertainty, markets are prone to mispricing assets temporarily and ignoring the potential for long-term returns. However, investment professionals can identify such valuation mismatches, and take advantage by investing on these assets generating additional returns. Taking these bets efficiently requires the **ability to value the risks that are incorporated into the portfolio,** calculate the marginal contribution to risk and have the freedom to explore a wide range of products and instruments.

Investors who aim to generate income need to realize that in the current environment **the traditional investment vehicles have to be complemented with new instruments and management methods.** The advisors and bankers of Santander Private Banking offer different product alternatives and advice to optimize the profitability of their investment portfolios while tailoring it to their risk profile.

We recommend diversifying income generation with an adequate mix of credit, duration, liquidity and volatility risks

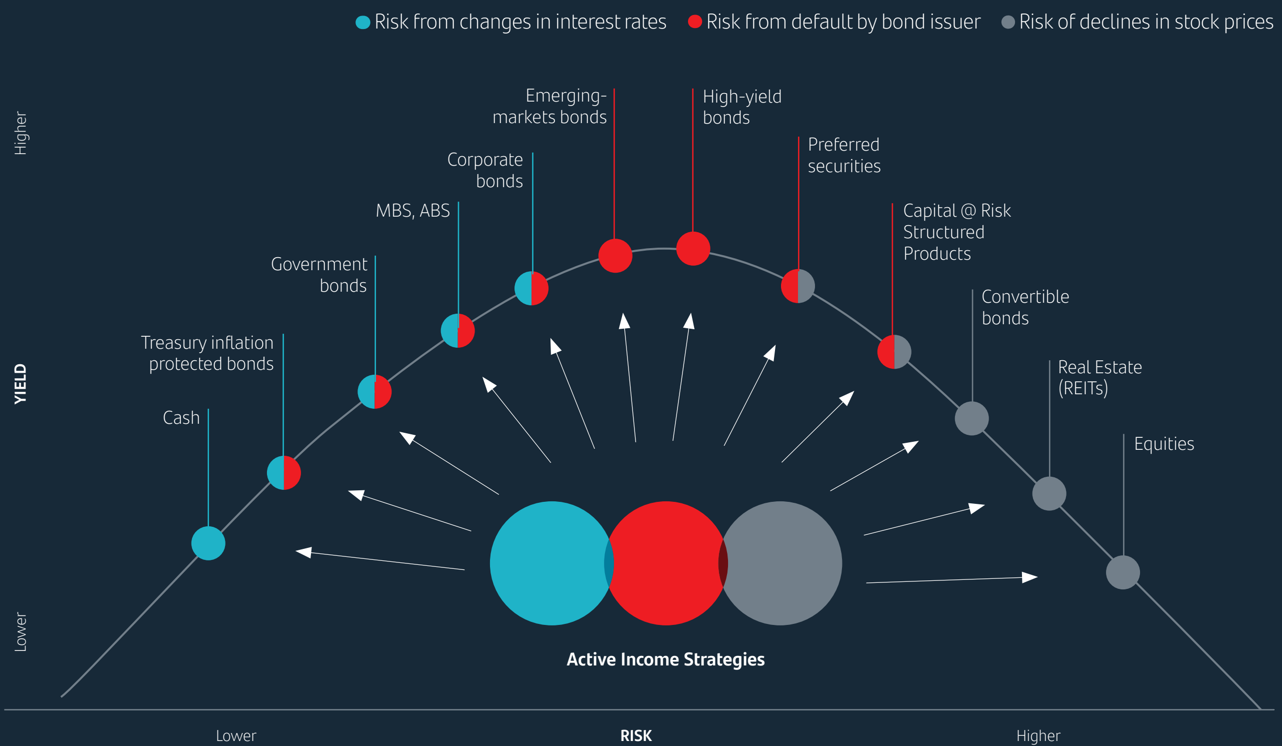
The natural tendency of investors when the return on assets decreases is to assume more risk, but this should only be done with the help of expert advice

More than ever, it is necessary to know and manage the global risk of the portfolios as a whole

Active income generation strategies

Source: Own elaboration[1]

The search for income-generating assets must be done with great diversification and risk control



(1) This classification of active income strategies is illustrative and dynamic, and is subject to change depending on objective variables (momentum, geography, etc.)

Diversified Growth Solutions

The scenario for investors is complex, but we believe that equities can continue to have value as a generator of income (dividends) and capital appreciation as long as the massive vaccination revives the economy and boosts cyclical sectors, as well as fiscal and monetary stimulus programs are maintained for -at least- the next twelve months.

We believe that in the coming quarters it will be necessary to have a more balanced portfolio between more cyclical sectors and sectors that have a more favorable strategic positioning in future growth trends. Our recommendation for 2021 is to position in equities at both edges of the valuation spectrum, maintaining, on the one hand, an exposure to stocks that benefit from new future trends, but rotating from stocks with the highest appreciation in 2020 towards less explored sectors and themes.

The changes that lockdown measures have brought about can be classified into two categories: temporary and structural. In temporary we find activities such as entertainment, leisure or tourism that have been severely affected, but which we believe will recover to a greater or lesser extent when normality returns. Those changes that we consider structural are those that are caused by permanent mutations in consumer habits: for example, in activities where the online experience is becoming more attractive to the consumer or where digitalization has demonstrated its capacity to drastically reduce costs.

At Santander Private Banking we have launched in 2020 a new set of advisory solutions to help our clients discover areas where disruption is more present and where the greatest opportunities to monetize innovation are. We have branded this service **Future Wealth** and it is based on a top-down analysis in which we have selected the investment themes that have the potential to reap incremental returns in the coming years. **We have grouped these trends into three major innovation blocks: Future Society, Future Tech and Future Planet.**

In ***Future Society*** we have selected the strategic changes that affect demographics and changes in consumption habits. The selected topics allow us to position investments towards the **consumer of the future** and to leverage the growth of **innovation in health** and consumption of the fastest growing demographics: the middle class in Asia, the Millennials and the aging population.

Future Tech focuses on applications derived from new technological discoveries with two main blocks of opportunities. The first one we call **Fourth Industrial Revolution** and groups together all the innovations that are allowing an exponential growth in the capacity of robots and objects to perform tasks that previously could only be performed by humans. The second

Despite the poor long-term outlook for real stock returns, equities should still outperform bonds

Rotate to the sectors most affected by lockdowns and mobility restrictions in order to benefit from their greater leverage in the recovery

Combine rotation with innovation. Upgrade "back-to-work" stocks and reduce "work-from-home" companies

Invest in life sciences disruptions, energy transition, digitalisation and the Fourth Industrial Revolution.

Outstanding returns of the selected innovation themes in Future Wealth

Source: Bloomberg. Data as of 30 November 2020

Santander future wealth **33.6%***

27.0% future society	47.6% Life Sciences	61.5% Health Tech	-2.0% Wellness	38.9% Millennials	-2.0% Ageing Population	18.3% Asian Consumers
39.7% future tech	62.8% Internet of Things (IoT)	29.4% Robotics	80.7% Artificial Intelligence	24.6% E-commerce	23.8% Fintech	16.9% Cibersecurity
34.0% future planet	131.6% Energy Transition	17.9% Climate Action	5.1% Scarce Resources	29.3% Circular Economy	13.9% Smart Materials	6.0% Future of Transport

* Year to date average returns as of Nov-30 of the funds and ETFs selected as benchmarks in each of the themes.
Past returns are not indicative of future returns.

area of opportunity is called **Next Digital,** where we select all the areas of innovation that are allowing humans to access services in a non-presential format thanks to digitalization.

In ***Future Planet*** we analyze the value creation options derived from a greater sensitivity of our society towards the conservation of the planet. In the topics of **Climate Change** we explore the technologies that are allowing the energy transition, the use of scarce natural resources or the fight against pollution. In **Smart Cities** we group together the opportunities for value creation in all fields of the circular economy, the transition towards the transport of the future and innovation in more energy-efficient materials.

All of these themes represent areas where innovation is enabling enormous investment opportunities. However, investors need to be aware that investing in innovative companies that are discovering the next new thing involves risks: overvaluation, higher costs, competition by established players or delays in the implementation. That is the reason why **Future Wealth's advisory framework has a long-term approach.** It is a way to invest in innovation and position oneself in future trends with a highly diversified and professionalized company selection philosophy.

As we mentioned before, it is necessary to be disciplined and avoid investment fads that normally occur when big changes cause excessive enthusiasm. As an example, we can mention the case of the company **Zoom Video** which has achieved great notoriety as one of the applications which its use has increased considerably as a result of lockdowns. The **growth of "work-from-home"** and the need to respect social distance has allowed an exponential demand in the number of video conferences through digital platforms such as Zoom. This has given Zoom's stock enormous notoriety and spectacular growth in the number of users, as well as a spectacular appreciation in the stock´s price. Zoom's stock market capitalization has multiplied by 6 during 2020 as shown in the following graph where we compare that stock with the combined capitalization of the main companies in the airline sector that have suffered the adverse impact of the pandemic.

Be mindful of secular trends having a positive bias towards disruption. Change will continue to accelerate

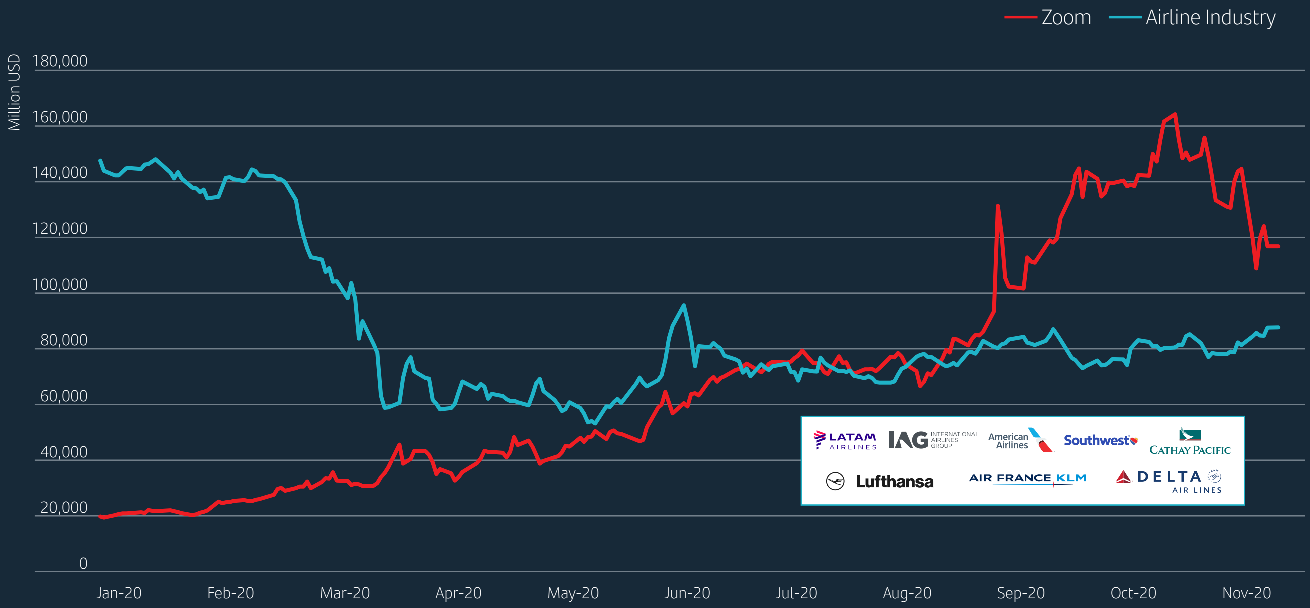
Invest in themes where long term growth can be monetized and rely on the advice advice of professional investment managers

Healthtech, genomic therapies, energy transition, fintech, and 5G are examples of areas of exponential growth

Market Capitalization Zoom vs. Airlines Industry

Source: Bloomberg and own elaboration. Data as of 30 November 2020

Going forward cyclical stocks should catch up versus growth stocks



The experience of the markets makes us observe this radical change in the valuation of companies with a certain amount of suspicion, given that history shows us countless cases where both negative trends (as is the case with airlines reverse to the mean) and positive ones (as is the case with Zoom as the maximum representative of "work-from-home" companies) have been overestimated. We believe that **a certain reversion to the average is to be expected, especially from the point of view of the cyclical values** that have suffered so much with the health restrictions. A return to normality will be probably due to the combined effect of the effectiveness of the vaccines and the government stimulus.

Difference in performance between growth and value stocks is at all-time highs

Therefore, we expect a certain degree of rotation towards companies that have experienced significant falls in their share price because they have been exposed to the most adverse aspects of the lockdown measures. Many of these companies are now considered value stocks because they trade at multiples well below the market average, and are largely in the industrial, energy, leisure and financial sectors. The graph below shows global value and growth cumulative returns since 1990 and the divergence in terms of performance of both indices. Growth has outperformed value in such a way that divergence is at the highest at present.

We maintain a preference for a barbell strategy of reasonably priced growth stocks with cyclicals that will flourish in the recovery

2020 has undoubtedly been the year of "stay-at-home" and pandemic-proof stocks ("COVID-19 proof"), but 2021 may be the year of recovery of the most representative stocks of the previous normality. Being underweight in "back-to-work" sectors and companies could be costly in terms of performance in 2021.

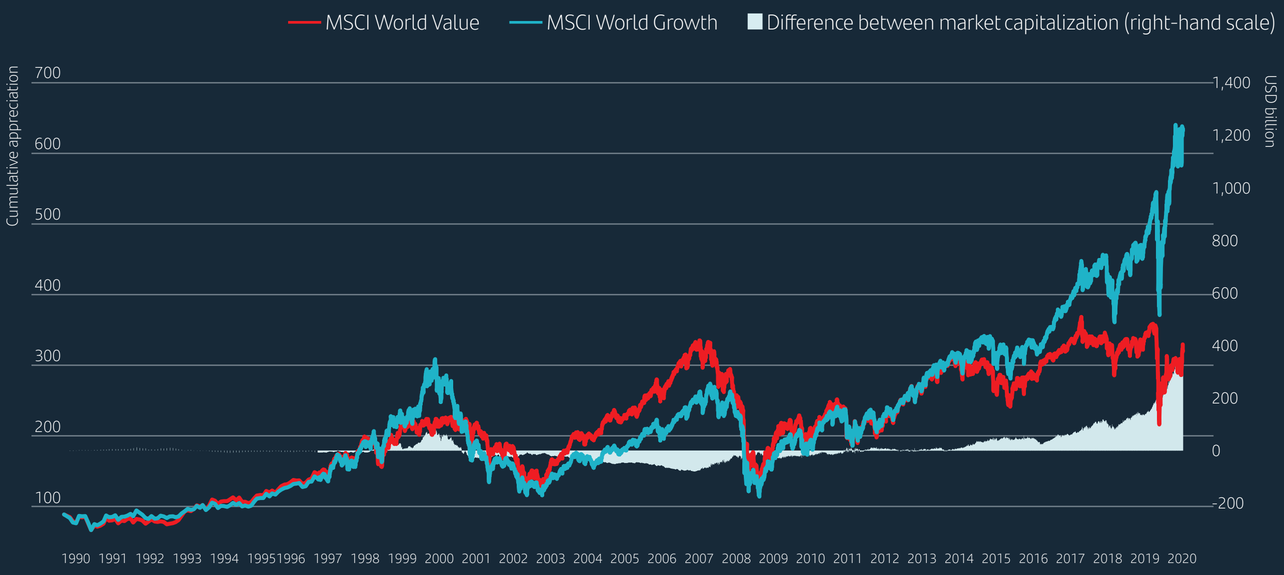
One way to get exposure to the cyclical recovery is by increasing the weight in European and Latin American equities

A clear example of this in 2020 are the **European and Latin American stock markets.** Both regions have a sectorial composition with a high cyclical bias (greater weight of financial companies, automobiles and energy), and with the health crisis and lockdowns they have suffered a significant fall in profits. Additionally, companies in these stock exchanges have high operating leverage, are more sensitive to economic changes, and therefore their earnings growth is extended upwards or downwards in times of strong or weak growth.

MSCI World - Value vs Growth cumulative returns since 1990

Source: Bloomberg. Data as of 30 November 2020

Extreme dispersion of returns between value and growth stocks



Looking ahead to 2021, we expect to see a more favorable outlook for both regions as the risk of further closures fades with the arrival of a vaccine and the monetary and fiscal stimulus plans remain in place. This situation may allow investment opportunities to emerge, given the desire of market participants to rotate to markets, sectors and/or companies that are far from their highest valuation point and that have been laggards behind in the early stages of economic recovery.

Don´t miss Asian equities. China is too large and relevant to ignore and is rising to core asset class status

Regarding emerging markets, **we recommend having exposure to the Chinese stock market given the strength of its economic recovery,** its success in the health crisis and the growth implications of the new five-year plan. The Chinese stock market already represents a percentage of over 40% in the capitalization of the MSCI Emerging Markets index. The size and strength of the Chinese economy and the growth and innovation of many of its companies entails a high opportunity cost if not included into a global portfolio. In our opinion, the stock market and the Chinese economy have a size and relevance that should not be ignored.

The **highly disruptive and innovative environment can also generate many opportunities in the world of alternative asset management,** and in particular in investment in unlisted assets through private equity. As companies across geographies are reeling from the unprecedented shock of the pandemic, **private equity** can provide an exceptionally agile source of capital to help companies obtain financing, while at the same time putting liquidity to work in company acquisitions at favorable valuation multiples.

Explore private markets to tap the higher returns that more than compensate for the lack of liquidity

Given their long-term investment horizon, private equity firms can help companies that need financial oxygen to survive during the economic recovery, in an environment where investment opportunities are much more attractive. Investors' interest in such companies has steadily increased since the global financial crisis of 2008, as investors have sought strategies with a different risk-return profile than that of speculative equities and bonds.

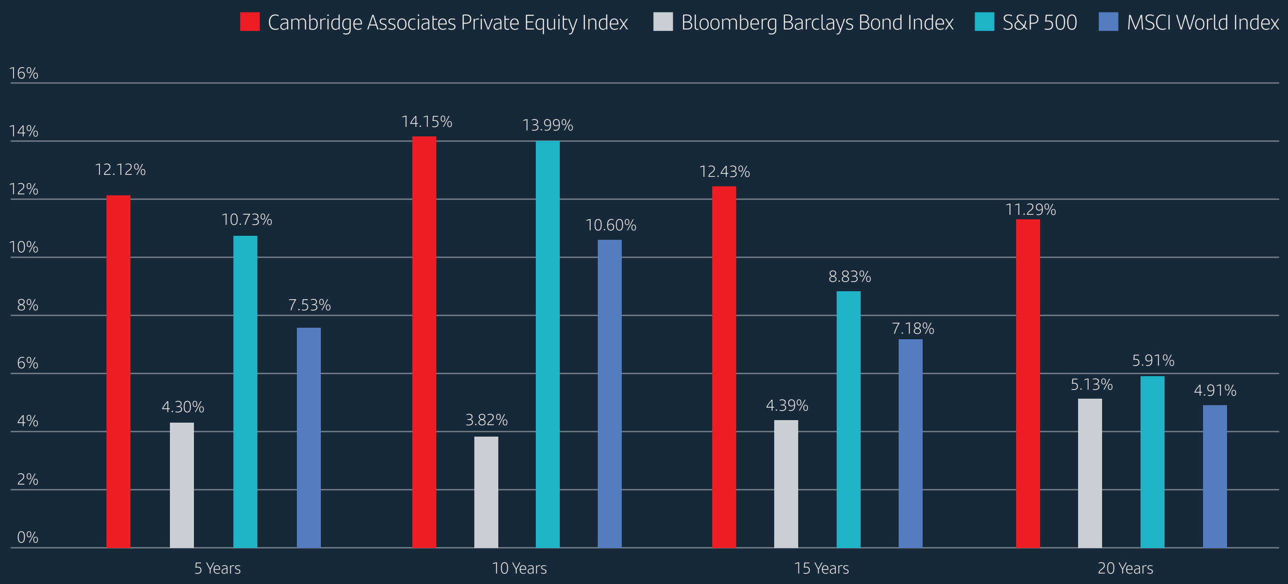
As the graph below shows, over the past 20 years private equity funds have generated a 11.3% return on an annualized basis, compared to 5.9% for the S&P 500 index.

Increasing need to bring more diversity into portfolios

Private Equity Performance vs Traditional Asset Classes

Source: Cambridge Associates. Data as of 30 June 2020

Long term investing in private equity has provided significant outperformance



Similar dynamics characterize previous cycles, which show that the **earnings of private equity commitments made in the wake of global crises exceed those of other periods**. Returns on private equity are measured on a vintage year basis, often defined as the year a fund begins to make investments in the underlying companies. Over the past two decades, funds that began investing in the immediate aftermath of a crisis (such as in 2001-2004, following the bursting of the dot-com bubble, or 2009-2012, following the global financial crisis) had a 68% higher return than funds whose investment years fell during the late-cycle peak of economic growth (such as 1998-2000 or 2005-2007). This may be largely due to the fact that private equity funds obtained more favorable prices during market recessions.

The **market distortions caused by the current global health crisis are likely to create a new set of private capital opportunities.** Because COVID-19 has impacted some industries and regions more than others, the returns of individual private equity funds may be more scattered than before the pandemic.

The crisis has also caused investors in private equity funds to be more demanding. That means differentiating among fund managers who create value for companies by supporting profitable growth -either organically or through acquisitions- professionalizing processes and systems and improving management teams and, funds that rely more on leverage to drive returns.

To the extent that the expected immunization and economic revival occurs **investment in growth-sensitive assets (equities, private equity, emerging markets, etc.) can provide differential returns.** In a scenario where interest rates leave very few return options in low risk instruments, monetary and fiscal policy will continue to support growth and light will be seen at the end of the health crisis tunnel. **A balanced and diversified investment in risk assets can continue to generate optimal returns, as has been demonstrated in recent months.**

Private markets have traditionally provided above-average returns following market dislocations and exposing investors to a different set of growth opportunities

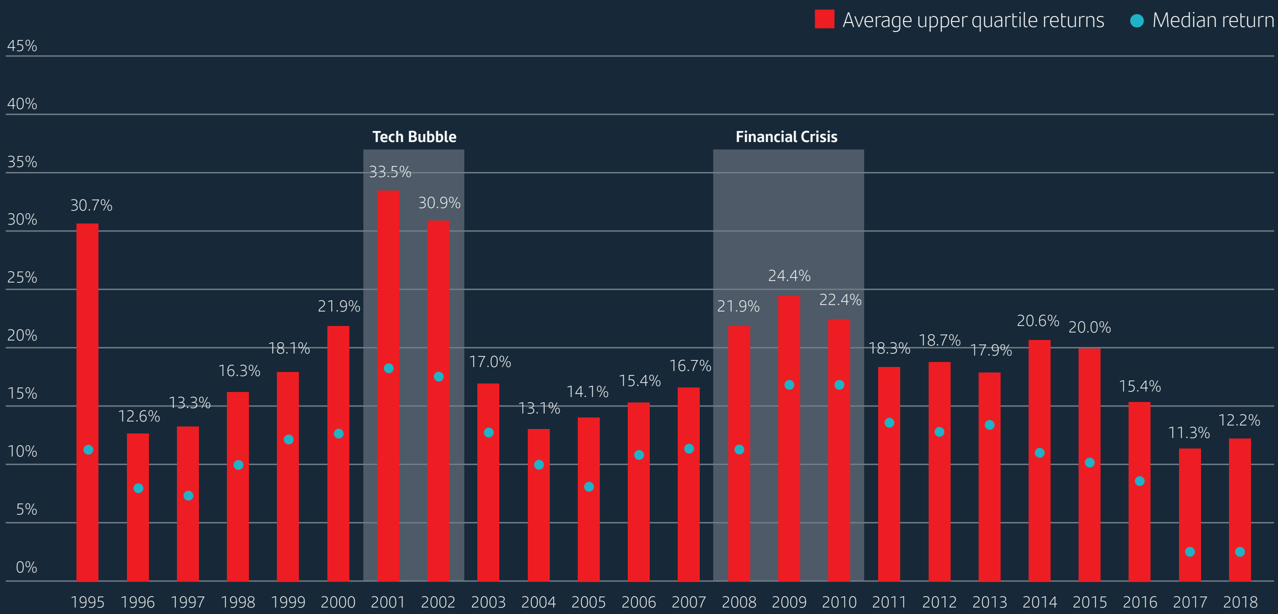
Infrastructure assets are poised to benefit from massive levels of government pandemic spending

Private equity requires a long term commitment but it is extremely valuable in a portfolio context for sophisticated investors

Private Equity Buyout Net IRR

Source: Preqin; data as of May 2020 for December 31, 2019 values.

The best vintages to invest in private equity are those after economic crisis



Sustainable Investment Solutions

The pandemic has accelerated the transition to a more circular, resilient, inclusive and sustainable economy. Government initiatives on climate change and other environmental issues, in the form of new regulations, carbon taxes, and public investment, have increased significantly in the last months. **Recently, China, the country with the highest carbon emissions to the atmosphere, has incorporated in its budget a significant amount (1% of its annual GDP) to achieve "carbon neutrality" in 2060.** Companies have started to do so, as climate policies and financing conditions will favor those that bet on green infrastructures and low-carbon technologies. Therefore, **investors will have to rethink their portfolios considering ESG investments (Environmental, Social and Government).**

Governments and businesses alike will place an increased emphasis on sustainability over the coming decade and beyond

Among the major government initiatives is the **European Green Deal,** launched in late 2019 by the European Commission (EC), **whose main objective is to achieve that Europe reaches carbon neutrality by 2050 and for which it has allocated about 1 Trn euros.** This agreement is considered an integral part of the Commission's strategy to implement the United Nations' Agenda 2030, and for the Sustainable Development Goals (SDA). In the **United States,** Joe Biden has announced a green transformation that will involve investing **USD2 trillion in green infrastructure projects over the next four years, renewing the U.S. commitment to the Paris Agreement, and reducing carbon emissions to meet carbon neutrality by 2050.** Together with China, the EU countries and the US, 30 countries have a commitment to carbon neutrality, with these countries themselves emitting about 43% of the world's carbon dioxide. The table shows the size of the initiatives of the major economies and the year in which they have committed to achieving carbon neutrality.

Commitment to reach carbon neutrality between 2050 and 2060 comes together with significant amounts of government money

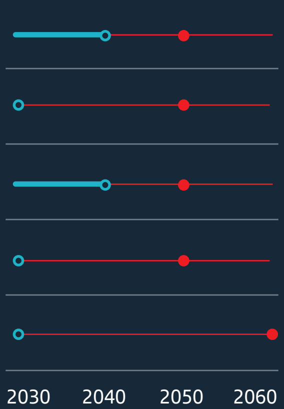
More and more investors are interested in sustainable investment as a solution that, in addition to offering interesting returns, also represents their social values. The

Greenhouse gases emissions and carbon neutral targets

Source: WEF and own ellaboration

Governments are commiting to carbon neutrality and funding green transition investments

	CO_2 and Greenhouse Gases		Carbon neutral target	Climate Change Programs	
	10-year Growth	Global Share	● Commitment ○ Petrol & Diesel ban	Investments	Comments
European Union	-11.9%	15.4%		1 trillion EUR	European Green Deal
UK	-30.4%	1.0%		12 billion GBP	Investments in Green Industrial Revolution
US	-8.6%	14.8%		2 trillion USD	Biden´s Clean Energy Plan
Japan	-5.7%	3.2%		60 billion Yen	Fund to promote renewable energies
China	36.5%	27.5%		1% annual GDP	Annual investment in Energy Transition



performance of companies is intrinsically linked to their ability to navigate the changes in the societies on which they are based. It has been seen that the risk profile of companies improves when they incorporate ESG criteria in their processes and that, this translates into a higher valuation and a better reputation in the market. In 2020, the strong correlation between high ESG scores and high-quality companies with resilient characteristics has been demonstrated. **Equity indices with an ESG approach were first tested in a recessionary market and have outperformed traditional indices in the last three years. The conclusion we can draw from this behavior is that an investor's financial goals of profitability are not incompatible with his goals of contributing positively to sustainability.**

To contribute to sustainability in a positive way is not at odds with getting financial returns

Investors' interest is also reflected in net inflows to funds that invest in accordance with ESG principles. **According to Morningstar's categorization, between January and June 2020, net inflows of USD71.1 billion were raised worldwide,** bringing assets under management in this type of product to a new high of more than USD1 trillion. The graph below shows that, in 2020, despite the market downturn in March, sustainable funds continued to increase their assets under management. **Despite this large increase observed, portfolios linked to ESG objectives are still a small portion (approximately 2.4%) of the USD41 trillion held by investment funds worldwide.**

ESG investment universe is expanding due to investors demand

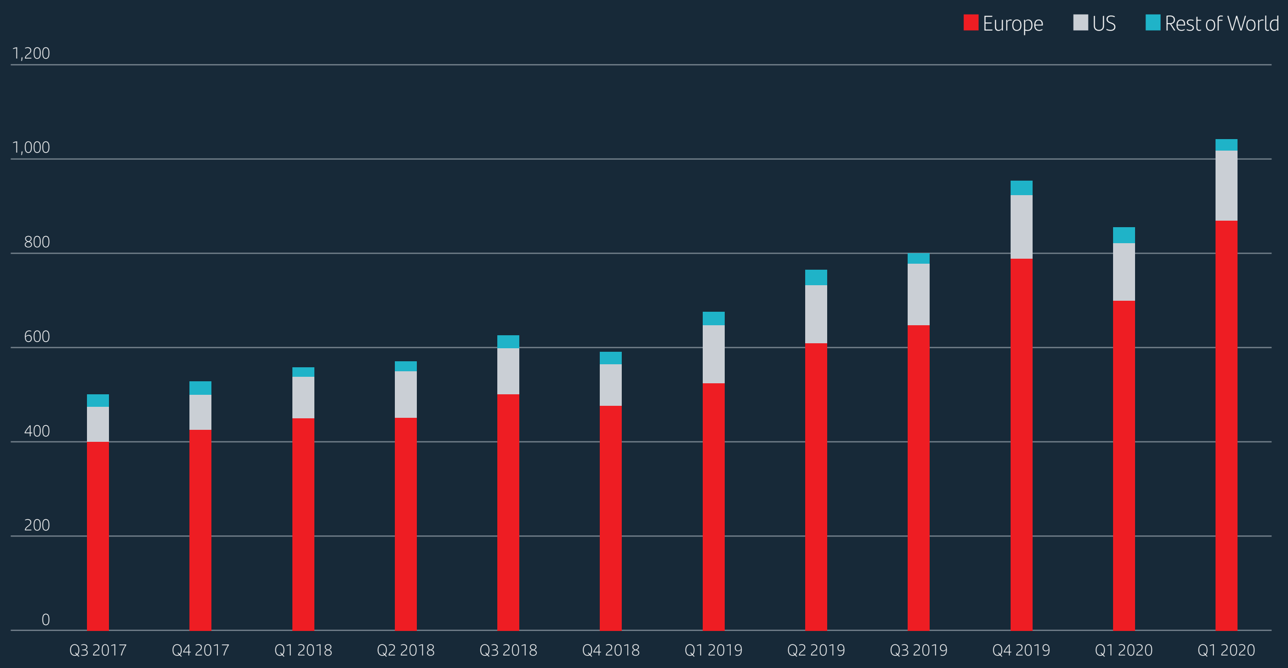
One area that is growing quite rapidly within the sustainable investment universe is **impact investing**. Its objective is to invest in companies, organizations and funds, which generate a **positive and measurable social or environmental impact,** as well as an attractive financial return. Sir Ronald Cohen, a pioneer in social impact investing around the world, highlights the importance of the financial system in addressing the social problems we face, stating that "companies will have to make an impact, just as they must show financial integrity if they are to succeed". Although this market is still relatively young, with a size estimated by GIIN (Global Impact Investing Network) of USD715 billion in 2019, it is one of the sustainable investment alternatives that will be gaining in importance in the coming years.

Impact investments are those that are made with the intention of generating social and environmental impact as well as financial return

Assets under management in ESG Funds (Morningstar categories)

Source: Morningstar Direct

ESG funds hit USD1 trillion as pandemic accelerates sustainable investment



In the debt market, an investment solution where its objective is well defined are sustainable bonds. The funds obtained through these debt instruments are used to finance projects that **benefit the environment, in the case of green bonds, society, in the case of social bonds, or a combination of social and environmental objectives,** the so-called sustainability bonds. Currently **the most developed market of the three is the green bond market.** These bonds must be aligned with the Green Bond Principles, which guarantee market integrity in terms of transparency, disclosure and performance reporting. Currently, European issuers represent about 50% of the world's volume. That said, it is worth noting the strong growth in Latin America, where emissions have increased by 57% in the first quarter of 2020. **Sustainability bonds, which combine social and environmental objectives can be more easily associated with the UN Sustainable Development Goals (SDGs)** as they are more suitable for a wider range of issuers, due to the greater eligibility of projects in which to invest the resources. Sustainable bonds are expected to reach USD425 billion by 2020, with the following distribution: 58% green bonds, 24% social bonds and 18% sustainability bonds, which, as can be seen in the graph, has been changing over time, with social and sustainability bonds gaining importance within this market.

A more recent addition to this market **is sustainability linked bonds (SLB).** These bonds provide a strong incentive for issuers to meet their impact commitment, as the cost of debt is directly affected by the achievement of some sustainability objectives. Our expectation is that sustainability bonds will continue to grow in the coming years as they offer the flexibility of other ordinary debt instruments while allowing companies to reiterate their sustainability commitments and objectives.

Growing social awareness of sustainability issues will continue to increase and companies will increasingly face scrutiny regarding environmental, social and governance themes. Therefore, investment solutions that consider ESG principles have good prospects for the future.

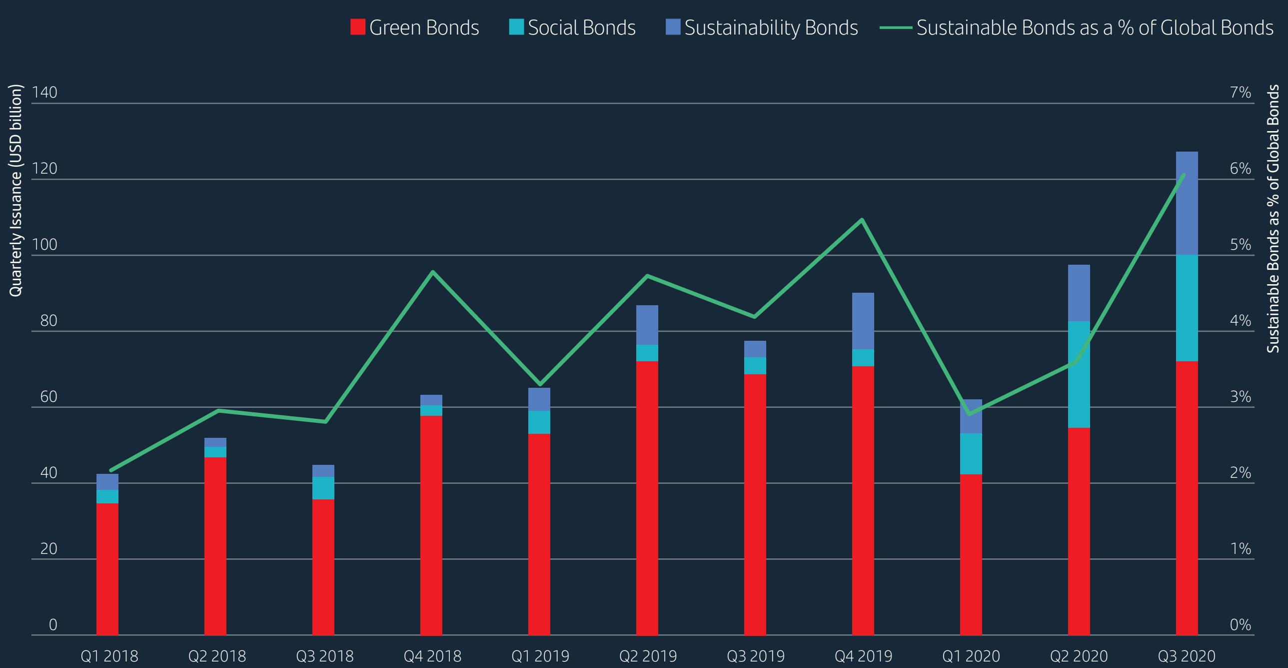
Sustainable bonds, whether green, social or sustainability, use the funds to finance specific projects that benefit the environment, society, or both

The pandemic will put more companies under scrutiny for decisions that impact employees, customers and society. Sustainable investing is about maximizing value for all stakeholders

Quarterly issuance of sustainable bonds

Source: Moody's Investors Service

Record sustainable bond volumes in Q3 2020 as green bond issuance recovers



"Periodic table" for asset returns

Asset Class	Reference Index	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Nov. 2020
		Calendar Year Returns										
US Equities	S&P 500 TR	18.88 Emerging Market Equities	38.3% Eurozone Government	28.1% Eurozone Government	54.4% Japan Equities	71.3% Eurozone Government	15.4% Europe Equities	14.8% Global High Yield	37.3% Emerging Market Equities	3.3% Spain Government	31.5% US Equities	14.0% US Equities
Japan Equities	Topix TR	17.6% Commodities	7.6% Spain Government	20.9% Japan Equities	32.4% US Equities	61.3% Spain Government	12.1% Japan Equities	12.0% US Equities	22.4% Global Equities	0.1% Eurozone Government	27.7% Global Equities	11.2% Global Equities
Spain Equities	Ibex35 TR	15.1% US Equities	2.6% Global High Yield	19.3% Global High Yield	27.8% Spain Equities	13.7% US Equities	1.4% US Equities	11.4% Commodities	22.2% Japan Equities	-0.4% Liquidity	26.8% Europe Equities	10.2% Emerging Market Equities
Emerging Markets Equities	MSCI EM TR	13.9% Global High Yield	2.1% US Equities	18.2% Emerging Market Equities	26.7% Global Equities	10.3% Japan Equities	-0.1% Liquidity	11.2% Emerging Market Equities	21.8% US Equities	-1.5% Europe IG	18.4% Emerging Market Equities	4.8% Spain Government
Europe Equities	Eurostoxx50 TR	12.5% Eurozone Government	2.0% Europe IG	18.2% Europe Equities	21.1% Spain Government	8.6% Spain Equities	-0.5% Europe IG	7.5% Global Equities	11.3% Spain Equities	-3.3% Global High Yield	18.1% Japan Equities	4.5% Global High Yield
Commodities	Commodity RB TR	11.8% Global Equities	0.9% Liquidity	16.0% US Equities	20.8% Europe Equities	8.3% Europe IG	-0.8% Global Equities	6.6% Eurozone Government	10.6% Europe Equities	-4.4% US Equities	16.6% Spain Equities	4.3% Japan Equities
Global Equities	MSCI World TR	4.8% Europe IG	-5.5% Global Equities	15.8% Global Equities	8.0% Global High Yield	7.2% Europe Equities	-3.6% Spain Equities	5.7% Spain Government	10.2% Global High Yield	-8.7% Global Equities	12.6% Global High Yield	3.7% Eurozone Government
Europe IG	ERL0 TR	1.0% Japan Equities	-7.8% Spain Equities	13.2% Europe IG	2.4% Europe IG	4.9% Global Equities	-4.2% Global High Yield	4.8% Europe IG	1.9% Europe IG	-10.8% Europe Equities	10.1% Spain Government	2.7% Europe IG
Liquidity EUR	Eonia TR	0.4% Liquidity	-8.6% Europe Equities	2.8% Spain Equities	0.1% Liquidity	0.1% Liquidity	-10.5% Spain Government	2.6% Spain Equities	1.7% Spain Government	-11.5% Spain Equities	8,1% Eurozone Government	-0.4% Liquidity
Global High Yield	HW00 TR	-2.8% Europe Equities	-13.4% Commodities	0.2% Liquidity	-2.6% Emerging Market Equities	-0.1% Global High Yield	-14.9% Emerging Market Equities	1.7% Europe Equities	0.7% Commodities	-13.0% Commodities	6.2% Europe IG	-4.5% Europe Equities
Spain Government	SPAIN 10 YR	-12.9% Spain Equities	-17.0% Japan Equities	-1.1% Commodities	-9.6% Commodities	-2.2% Emerging Market Equities	-16.3% Eurozone Government	0.6% Japan Equities	-0.2% Eurozone Government	-14.6% Emerging Market Equities	5.4% Commodities	-8.1% Commodities
Eurozone Government	GERMANY 10 YR	-37.1% Spain Government	-18.4% Emerging Market Equities	-3.8% Spain Government	-46.6% Eurozone Government	-17.0% Commodities	-22.3% Commodities	-0.3% Liquidity	-0.4% Liquidity	-16.0% Japan Equities	-0.4% Liquidity	-13.1% Spain Equities

\+ Returns -

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