Santander

The end of LIBOR and interest rate benchmark reform

In July 2023, the global financial industry marked a significant milestone as the long-anticipated transition away from LIBOR, the London Interbank Offered Rate, successfully concluded. LIBOR, once a widely used benchmark interest rate for various financial products and contracts, has been replaced with alternative risk-free rates (RFR)[1] worldwide as considered more robust, efficient and transparent as derived from deep liquid underlying markets. This transition has been a comprehensive and collaborative effort involving market participants, regulatory authorities and industry bodies.

The main replacements for LIBOR include the Secured Overnight Financing Rate (SOFR) for US Dollar, the Sterling Overnight Index Average (SONIA) for Sterling Pound, the Euro Short Term Rate (€STR) for the European Euro, the Tokyo Overnight Average Rate (TONA) for Japanese Yen, and the Swiss Reference Rates (SARON) for the Swiss Franc. These rates, which are based on actual transactions, provide a reliable foundation for pricing and valuing financial instruments and contracts. Additionally, in some other markets, different authorities and market participants are working on further benchmark replacements to their Interbank Offered Rates (IBORs) by reforming, strengthening or ceasing to be published with the aim of enhancing the interest rate benchmarks.

As part of the LIBOR transition process and as a temporary solution to enable the continuity of certain legacy contracts reliant to LIBOR after its cessation and mitigate market disruptions, regulatory authorities also permitted the publication of a Synthetic LIBOR [(2)] for US Dollar and Sterling Pound. This synthetic methodology has now ceased to be published for both currencies.

Key difference between IBORs and RFRs is that while IBORs represents the banks 'cost of funding derived from an average of submissions by panel banks and are known at the start of the interest period (forward-looking), RFRs are calculated based on actual transactions in the overnight funding markets -without an interbank credit premium- and being published after the interest period begins (backward-looking). Whereas LIBOR was published across multiple tenors (O/N, 1W, 1M, 2M, 3M, 6M and 12M), RFRs are overnight rates with no term element.

Due to its backward-looking form, RFRs might not be optimal for certain products classes. Therefore, forward-looking term rates have been developed in the market facilitating not only the transition away from LIBOR -measuring the forward expectation of the overnight RFR over a designated period or term- but to provide in advance market participants with a certainty of their interest rate obligations. Notwithstanding, given that overnight RFRs are considered more robust compared to term rates, they are a better reference rate choice than term rates in markets where participants do not need forward-looking rates [(3)].

In the market, relevant forward-looking term rates like LIBOR are:

Currency	RFR Index	Term Rate
USD	Secured Overnight Financing Rate (SOFR)	CME Term SOFR
GBP	Sterling Overnight Index Average (SONIA)	Refinitiv Term SONIA / ICE Term SONIA
EUR	Euro Short-Term Rate (€STR)	EFTERM by EMMI / Refinitiv Term €STR
JPY	Tokyo Overnight Average Rate (TONAR)	Tokyo Term Risk Free Rate (TORF)
CHF	Swiss Average Rate Overnight (SARON)	-

These Term Rates have been mainly developed in those currencies where the relevant derivatives markets are deep and liquid enough as they are based on derivatives transactions or executable quotes (futures or OIS swaps) and with a limited use cases across lending and markets business activities with the aim to preserve the most robust overall market structure. Therefore, supervisory authorities have also published a rationale and guidance on best practice when using Term Rates such as Term SONIA and Term SOFR setting limits in their use favouring consistency with the relevant guidance on best practice. For sterling markets, the Working Group guidance along with FICC Markets Standards Board (FMSB) provide guidance on the appropriate use of Term SONIA [(5)] and the Alternative Reference Rates Committee (the ARRC) provides best practice recommendations on the scope of use for Term SOFR [(6)]. The Working Group and ARRC guidance are in line with guidance issued by the Financial Stability Board (FSB). Other Term Rates published follow the ARRC´s recommendations.

[1] *RFR is an overnight rate based on actual transactions and reflects the average of the interest rates that certain financial institutions pay to borrow overnight from other financial institutions and other institutional investors in the wholesale markets. RFRs do not include a credit risk premium.*

[2] *Synthetic LIBOR settings were developed and published for a limited period to facilitate the transition away from LIBOR to those markets' participants requiring an additional time to complete the contracts transition.*

[3] *Interest rate benchmark reform – overnight risk-free rates and term rates, Financial Stability Board, July 2018.*

[5] *Standard on use of Term SONIA reference rates.*

[6] *Term SOFR Scope of Use Best Practice Recommendations.*

Summary of robust rationales for using GBP and USD Term Rates are:

<u>Term SONIA</u>

- Trade and working capital products which require a forward-looking interest rate for discounting and Islamic finance products which can pay variable rates of return if the variable element is pre-determined.
  There may be a robust rationale for using alternatives to SONIA backward looking including mid corporate/private banking and retail and export finance/emerging markets lending.
- For use in derivatives only if issued to end-users to hedge cash products which reference Term SONIA rate.

<u>Term SOFR</u>

- As a fallback rate for legacy LIBOR cash product.
- For new use in business loans, and certain securitizations that hold underlying Term SOFR assets.
- For use in derivatives only if issued to end-users to hedge cash products that reference the Term SOFR rate.

The use of Term Rates, however, gives also rise to some other broader risk considerations:

- Because Term Rates are based on derivatives, their robustness will depend on derivatives market depth and liquidity. If derivatives volume is not consistently as large as in overnight funding markets, Term Rates cannot be as robust as overnight RFRs.
- Term Rates are expected to be higher than overnight RFRs.
- As they are based on single observations, they may be affected by spike in derivative prices on that day.