

BBVA Global Transaction Banking

IBOR Transition Information

March 2021

Disclaimer

The content of this document has been prepared by Banco Bilbao Vizcaya Argentaria, S.A. (hereinafter, together with its subsidiaries and affiliates, "BBVA") for information purposes only and reflects a summary of BBVA's current understanding of the IBOR Transition.

Please note that the overview provided here is not meant to be complete nor exhaustive and may be subject to change without prior notice. BBVA shall not be liable for failing to give notice of any such changes or for failing to update the contents hereof. BBVA has obtained the information included in this document from sources considered to be reliable. However, notwithstanding the fact that reasonable measures to assure that the information contained herein is not mistaken or misleading, BBVA does not represent or warrant, either express or implicit, its accuracy, integrity or correctness.

The content of this document does not constitute advice or recommendation and the information contained herein shall not be deemed to be considered in any case as financial advisor, investment advice, tax/legal advise or otherwise nor a personal recommendation to enter into any transaction nor should it be relied upon to make any sort of decision in any direction. The recipients of the content of this document must seek their own advice to evaluate the matters to which this document relates. BBVA accepts no liability of any type for any special, direct, incidental, consequential or indirect losses or damages arising from the use of the content of this document. Therefore, in no case BBVA and/or its directors, officers, employees and authorised personnel shall be held responsible for any damage, loses, claims, or any sort of expenses that could result from the use of this document or from its contents.

The content of this document does not, and shall not be deemed to in any way constitute an offer, invitation or solicitation to purchase or subscribe any securities or other instruments, or to undertake investments or divestments and they are therefore not intended to form the basis of any contract or commitment. Any denominations, designs, and logos of this document are registered trademarks of BBVA.

It is understood that the recipients of the content of this document accepts all of the warnings and conditions contained herein in its integrity.

01 – Introduction (1/2)

The purpose of this section is to summarise current market trends and latest developments of the industry regarding the IBOR transition. BBVA acts as a financial entity and does not provide financial, legal, tax advise or otherwise nor a personal recommendation

Timing Considerations



- The regulatory message is that banks need to transition all LIBOR referenced contracts (USD, GBP, CHF and JPY) to alternative reference rates such as the Risk Free Rates (RFRs), or include robust fallbacks in contracts that permit rate switch when LIBORs cease to be published or will no longer be representative, as soon as practically possible and at least before the relevant LIBOR cessation dates.
- On 5 March 2021, the FCA announced the dates on which all LIBOR settings will either cease to be published by any administrator or will no longer be representative. The following dates apply to each LIBOR currency and setting:
 - All GBP, EUR, CHF and JPY LIBOR settings will either cease to be published or will no longer be representative after 31 December 2021
 - For USD LIBOR settings, publication will cease or will no longer be representative:
 - (i) for one week and two month settings, after 31 December 2021
 - (ii) for overnight, one month, three month, six month and twelve month settings, after 30 June 2023
- ISDA and Bloomberg announced subsequently the 5 March 2021 as the **Spread Adjustment Fixing Date for all LIBOR Tenors** across all **LIBOR currencies**.
- The Federal Reserve Board (FRB), Federal Deposit Insurance Corporation (FDIC) and Office of the Comptroller of the Currency (OCC) issued supervisory guidance encouraging banks "to cease entering into new contracts that use USD LIBOR as a reference rate as soon as practicable and in any event by December 31, 2021." While Bank of England and the Sterling RFR WG recommended to cease initiation of new GBP LIBOR-linked loans that expire after the end of 2021 by end of March 2021.
- Forward vs. backward looking



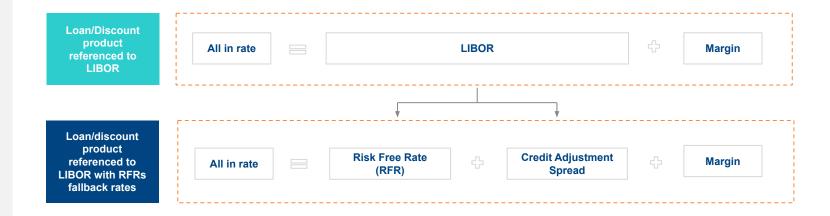
- Currently RFRs are daily interest rates while LIBORs are term rates. There are some term rate curves available for these new RFRs for certain tenors. However, the convention is to use the daily interest rates already being published and with a large support for publication of such rates from the respondents (backward looking) until appropriate term rates for the relevant tenors become available
- **Term SOFR** is expected to become available by 2H2021 (according to the ARRC). A **Term SONIA** benchmark rate by Refinitiv has been available in 1-month, 3-month, 6-month and 12-month tenors since January 2021, whilst other **Term SONIA** rates by 2 independent benchmark administrators (FTSE Russell, IBA) are presently available as "beta version".

01 – Introduction (2/2)

Economic concepts measured = Equivalent Result



• RFRs are designed to be nearly risk-free rates. As a consequence they do not incorporate any credit or liquidity premium. By contrast most IBORs are designed to provide an indication of the average rates at which submitter banks could obtain wholesale unsecured funding for set periods and incorporates both a credit premium (to reflect term bank credit risk) and a term liquidity premium (to reflect the risk inherent in longer dated funding).

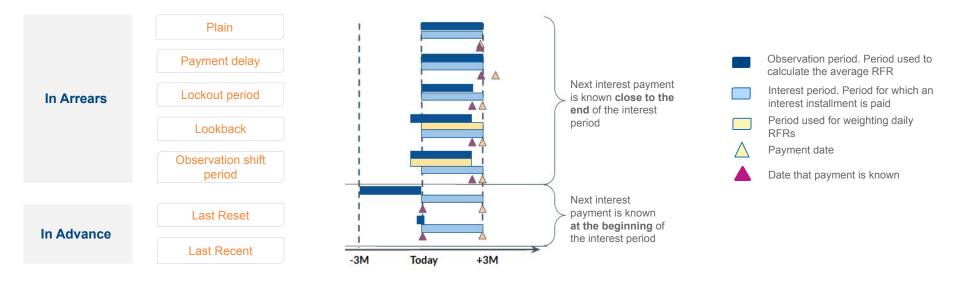


- Risk Free Rates (the Alternative Reference Rate): Overnight 'risk-free' rate after applying the agreed convention, based on the contract's particular fallback language, for each term rate (e.g. Daily Compounded SOFR in arrears with Lookback)
- Credit adjustment spread: This spread is usually calculated following ISDA methodology as the historical median over a
 five-year lookback period of the difference between the relevant RFR and LIBOR (published by Bloomberg). After the FCA
 announcement of LIBOR cessation dates, the ISDA credit adjustment spread value published by Bloomberg has been
 fixed. These fixed values can be found here
- Margin: Margin components (include funding costs and commercial margin) would be added to the Fallback Rate (RFR + Credit Adjustment Spread)

02 – Conventions - Interest calculation approaches

Methodologies for computing the overnight rate differ on when the interest rate will be set relative to the interest payment due date.

Daily interest calculation approaches for **simple** or **compounded RFR** (Illustrative example):



Some aspects of the "In Arrears" and "In Advance" methodologies are provided below:

In Arrears

Lookback **Observation Shift Period**

The observation period used of daily RFR is shifted backwards "n" lag days but the weighting of the daily RFRs remains based on the calendar days of the interest period. Recommended lag is [2 to 5] business days

Both the observation period used of daily RFR and the weighting of this RFRs shifts backwards "n" lag days. Recommended lag is [2 to 5] business days

In Advance method

- Uses historical rates to determine the simple or compounded rate at the start of the interest period.
- Historical rates for the calculation of In Advance are currently available (published RFRs)

In Advance vs forward-looking (term) rate

VS.

Forward-looking rates (RFR term rates)

- Uses forward-looking interest rates which incorporate the market's projection of future RFRs (e.g. via OIS or futures market) to determine the interest rate at the start of the interest period
- Forward-looking (term) rates require a sufficient level of liquidity in the RFR OIS markets. SONIA Term is published by Refinitv and 2 beta versions available (FTSE Russell, IBA), SOFR Term (2H2021) ...

03 – Conventions and Proposed Fallbacks

Fallback concepts

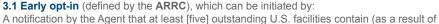
- Fallback language relates to provisions that apply if the underlying reference rate (such as the RFR) in the product (LIBOR) is discontinued/not representative and can be applied via an Amendment or Hardwired Approach and can be triggered via cessation, pre-cessation and anticipated triggers
- ARRC and LMA recommend that new production includes robust fallback clauses
- Market standards for fallback language are already available for loans (ARRC/LSTA and LMA). Although there are certain differences between ARRC/LSTA and LMA recommendations
- BAFT examined the IBOR Transition impact on Trade Finance related products and provided recommendations for each product type

| | ARRC Hardwired Fallbacks | LMA Hardwired Fallbacks | BAFT – Recommendations |
|--|--|--|--|
| Objective | ARRC has published LIBOR USD hardwired fallbacks for bilateral loans during 3Q20. The LSTA published a SOFR concept credit agreement following ARRC directions | LMA has published draft fallbacks for multicurrency loans and RCF following UK Sterling WG recommendations | BAFT published a document " <u>SOFR: Trade Finance Priorities</u> " which examines the impact of the LIBOR Transition on the trade finance and payments businesses and which provides general recommendations on solutions for each product type |
| Approach (Adjusted reference rate waterfall)* | Step 1: Term SOFR Step 2: Daily Simple SOFR in arrears with lookback Alternatives to step 2: Daily Compounded SOFR in arrears with lookback Compound SOFR in advance Step 3: Selected Rate (Lender - if bilateral, or Borrower and Administrative Agent if syndicated) | Step 1: Daily compound SOFR/SONIA in arrears with lookback** Step 2: Compound Central bank rate Step 3: Cost of funds (optional) | Recommendations on discount products are the following: Term Rate is required. Given the product characteristics, the Reference Rate has to be based on a forward-looking basis. The upfront discounting at the beginning of the period mechanism is what differentiates the product from other trade finance products with loan-like characteristics that has interest accumulating at the end of period. |
| Credit adjustment Spread | Step 1 and 2: ISDA Credit Adjustment Spread (median 5 years between the LIBOR and RFR, published by Bloomberg) Step 3: Selected Spread adjustment (Lender - if bilateral, or Borrower and Administrative Agent if syndicated) | Step 1:ISDA Credit Adjustment Spread (published by Bloomberg) Step 2: Central Bank Spread | BAFT states that they believe that the ISDA Credit Adjustment Spread (published by Bloomberg) could also be applied to trade products BAFT welcomes any (other) solution that could be leveraged. |

^{*} be rounded (not truncated) to 5 (SOFR) & 4 (SONIA) decimal points, amounts are rounded to 2 decimal points

Trigger events

- Permanent Cessation: Regulator announces that the administrator has or will cease to provide the benchmark, and there is no successor
- 2. **Pre-Cessation:** Regulator with authority over the administrator of the benchmark officially announces that the benchmark is **no longer representative**
- **3. Anticipated Triggers**: Anticipated triggers are triggers that can be initiated via contractual arrangements:



A notification by the Agent that at least [five] outstanding U.S. facilities contain (as a result of amendment or as originally executed) a SOFR-based rate as a benchmark rate the joint election by the Agent and the Borrower to trigger a fallback from USD LIBOR and the written notice of such election to the Lenders. The lenders have five business days to object to the "early opt-in" election

3.2 Backstop date (defined by the **LMA**), which can be initiated by a deadline put in place so that once all the conditions of a given contract have been fulfilled the rate switch will occur automatically. This backstop date can be moved if agreed by the requisite parties

^{**} Use of Central Bank rate + spread in case RFR is temporarily unavailable

04 - External links

Please find below an overview of some key links to external resources and documents which you can access for more information on the IBOR Transition:

| Jurisdiction | RFRs WGs | Link to websites/docs |
|--------------|--|----------------------------|
| UK | Working Group on Sterling Risk- Free Reference Rates | <u>Link</u> |
| | Statement on behalf of the Working Group on Sterling Risk-Free Reference Rates – Recommendations for SONIA Loan Market Conventions | <u>Link</u> |
| | Working Group on Sterling Risk-Free Rates Detailed Loans Conventions | <u>Link</u> |
| | Use Cases of Benchmark Rates: Compounded in Arrears, Term Rate and Further Alternatives | <u>Link</u> |
| US | Alternative Reference Rates Committee (ARRC) | <u>Link</u> |
| | ARRC Releases Updated Recommended Hardwired Fallback Language for Bilateral Business Loans | <u>Link</u> |
| | SOFR "In Arrears" Conventions for Use in Bilateral Business Loans A User's Guide to SOFR | <u>Link</u> <u>Link</u> |
| SWITZERLAND | Swiss National Bank – National Working Group on Swiss Franc Reference Rates | <u>Link</u> |
| EU | Working Group on euro risk-free rates | <u>Link</u> |
| JAPAN | Bank of Japan – Study Group on Risk Free Rates | <u>Link</u> |
| Abbreviation | Supranational entities and relevant organizations | Link to websites/docs |
| ECB | Banking Supervision ECB – European Central Bank | <u>Link</u> |
| FCA | FCA – Financial Conduct Authority | <u>Link</u> |
| FSB | FSB – Financial Stability Board | <u>Link</u> |
| ISDA | ISDA – International Swaps and Derivatives Association | <u>Link</u> |
| LMA | LMA – Loan Market Association | <u>Link</u> |
| BAFT | BAFT – The Bankers Association for Finance and Trade | <u>Link</u> |
| | SOFR: Trade Finance Priorities | <u>Link</u> |
| | | |