Interest Rate Benchmarks

Information about the use of Risk-free Rates (RFR) and LIBOR Transition

The following is provided for general information only and you should conduct your own independent research and analysis regarding the risks involved in conjunction with your legal, tax, accountancy and other advisers. The statements below are not exhaustive. Practices and conventions relating to benchmark rates continue to evolve. Accordingly, HSBC cannot give any statement about the likelihood of any specific outcome or its potential impact on any transaction or customer position nor is HSBC providing any advice or recommendation.

What is LIBOR?

The London Interbank Offered Rate ("**LIBOR**") is an interest rate benchmark which has often been used directly or indirectly to determine the fees, charges, commission, interest and other amounts payable under a loan and/or trade facility.

What is changing?

LIBOR rates have been or will in future be discontinued.

- On 5 March 2021, the Financial Conduct Authority (FCA), the UK regulator of LIBOR , announced[1] that all LIBOR settings for all currencies will either cease or no longer be representative of the underlying market and economic reality that they intended to measure, immediately after the following dates:
  - 31 December 2021, for GBP, Euro, Swiss Franc (CHF) and Japanese Yen (JPY) LIBOR settings in all tenors, and USD LIBOR 1-week and 2-month settings; and
  - 30 June 2023, for USD LIBOR Overnight, 1-month, 3-month, 6-month and 12-month settings.
  - Regulators have indicated that new contracts using USD LIBOR should not be entered into starting January 1, 2022.
- It is possible in the future that EURIBOR may become unavailable or cease to be published. Your loan and/or trade facility documents may require amendment to reflect replacement rates or fallback provisions.
- Financial regulatory authorities encourage the use of "Risk-Free Rates", also known as "Near Risk-Free Rates" (**RFRs**), which have been developed as alternative interest rate benchmarks. RFRs are typically backward looking overnight rates or term rates based on actual transactions and reflect the average of the interest rates that certain financial institutions pay to borrow overnight on an unsecured basis from wholesale market participants (for unsecured RFRs, such as SONIA) or the average rate paid on secured overnight repurchase or "repo" transactions (for secured RFRs, such as SOFR). RFRs do not include or imply any credit or term premium of the type seen in LIBOR or EURIBOR. RFRs are not truly free of risk. RFRs can rise or fall as a result of changing economic conditions and central bank policy decisions.

[1] https://www.fca.org.uk/publication/documents/future-cessation-loss-representativeness-libor-benchmarks.pdf.

What has HSBC been doing?

In anticipation of unavailability of LIBOR, in line with the expectation of our regulators and following discussion with a number of our customers we have developed and are continuing to develop a range of lending and trade products based on RFRs.

Why are we sending this to you?

The lending or trade product you are considering references a RFR. As the market and industry conventions for RFRs are continuing to evolve and are new in the context of many lending and/or trade products we want to outline some of the key differences to loans and/or trade facilities that have previously referred to LIBOR.

We are not able to set out an exhaustive list of changes that may impact you in this regard and you should seek guidance from your professional advisors in deciding whether a product that references a RFR is right for you and meets your particular needs.

What are the key differences?

Overnight RFRs

The overnight RFR interest rate benchmarks for loans and/or trade facilities in GBP and USD are SONIA and SOFR, respectively. For JPY, EUR and CHF the RFR interest rate benchmarks for loans and/or trade facilities are TONAR,

ESTR and SARON. These RFRs are overnight rates based on actual historic transactions. They are published at the end of the overnight borrowing period. LIBOR, by contrast, is a 'term rate' which means it is published for different periods of time (e.g. 3 or 6 months) and is a 'forward looking' rate which means it is published at the beginning of the borrowing period and remains the same for that period.

Therefore, where your loan and/or trade facility references an overnight RFR it is important to note:

- if using daily RFRs in arrears, interest will only be capable of being determined at the end of an interest period based on a series of overnight rates over that interest period. It is not possible to know the exact amount of interest payable for an interest period in advance;
- in order to allow time to calculate and pay interest on lending products using daily RFRs in arrears, interest will be calculated by reference to the rate which is published a specified number of days prior to each day in the interest period (this is often referred to as 'lookback' or 'lag');
- trade facilities using daily RFRs in arrears do not generally use a lookback or lag with the result that exact amount of interest due may only be known on the due date;
- the overnight rates will fluctuate over the relevant interest period and may behave materially differently from traditionally forward-looking interest rate benchmarks such as LIBOR;
- the manner of adoption, calculation and application of RFRs in loan facilities and/or trade facilities may differ compared with the application, calculation and adoption of RFRs in other markets, such as the bond and derivatives markets;
- For some settings and currencies, LIBOR may continue to be published on a synthetic and non-representative basis. Its use is expected to be restricted so that it may be used only for contracts unable to transition from LIBOR because they genuinely have no appropriate alternatives and have no realistic ability to be renegotiated or amended;
- the adoption, calculation and application of a RFR in a facility could result in differences to the economics over the duration of the loan and/or trade facility and mean that amounts payable are lower or higher than using a LIBOR or other interest rate benchmark which was previously or is currently available or may be available in the future. You should ensure you speak to your advisers to understand the consequences of this;

What are term risk free rates and how are they different from overnight risk free rates?

As previously mentioned, overnight RFR's are 'backward looking' rates based on transaction data from the previous business day.

Term risk free rates provide an indicative, forward-looking expectation of an overnight risk free rate in the future. They are published for specific tenors, typically 1, 3 and 6 months. Because they are 'forward looking' this means they can be used to set the interest rate at the beginning of the borrowing period and remain fixed for that period. Interest is known at the start of the interest period.

Overnight RFRs may fluctuate over the relevant interest period, particularly where there is a change in the central bank policy rate, and may behave materially differently to term risk free rates which are an estimate of overnight RFRs in the future as implied by derivatives of the overnight RFR.

If you have a multi-currency facility with us, you may find that different currencies will use different interest rate benchmarks for calculating interest and the methodologies and conventions for each will differ e.g. a facility with EUR and GBP may utilise EURIBOR for EUR and a RFR for GBP. You should consider the impact this may have on you from an operational perspective.

If you have a combination of products with us you may find that different products will use different methodologies and conventions for calculating interest e.g. a loan facility may use a compounding in arrears methodology whilst a trade facility may use a forward looking term rate or a simple overnight rate. You should consider the impacts this may have on you from an operational perspective.

RFR interest rate calculation conventions will likely require your internal treasury, accounting and payment systems to be enhanced in order for you to manage the servicing of these products in an accurate, efficient and timely manner.

Future changes to market practice or conventions relating to the use of RFRs in loan and/or trade facilities could potentially be adverse to your interests, require you to make changes to the documentation you have executed with us or to other administrative and operational changes you have already made. These further changes could result in you incurring additional costs.

SOFR

What are the key differences between SOFR Term Rates and overnight SOFR in arrears?

Overnight SOFR is a robust benchmark interest rate based on overnight lending transactions (repurchase agreements or repos) secured against US Treasuries which is one of the world's deepest and most liquid markets. The US Treasury repo market has an average daily notional volume of approximately USD900bn.

Therefore, where you choose a SOFR Term Rate as the interest rate benchmark in your facility, it is important to note:

- SOFR Term Rates are derived from executed transactions and executable bids and offers in SOFR Futures, such as those traded on a CME Group Designated Contract Market (DCM). A set of Volume Weighted Average Prices (VWAP) are calculated using transaction prices observed during a sampling period, along with a snapshot of executable bid/ask prices at a random moment during the sampling period. Their robustness depends on the liquidity of this SOFR Futures market. If SOFR Futures volumes are not consistently as large as the overnight Treasury repo market, SOFR Term Rates may not be as robust as overnight SOFR. A broad based adoption of SOFR Term Rates may reduce liquidity in other products referencing SOFR, directly or indirectly reducing volumes in the SOFR derivatives from which SOFR Term Rates are derived;
- SOFR Term Rates include future rate expectations and their quality and stability is a function of derivative market liquidity which is different to the overnight SOFR rate and therefore poses additional risks in their use, representativeness and potentially their availability;
- SOFR Term Rates might be affected by a spike in derivative prices on the particular day the rate is taken with this rate being fixed and used to calculate interest for each day in the interest period;
- Overnight SOFR rates may change on a daily basis. A one-day spike in rates would have a significantly smaller impact on the average interest rate calculated over the interest period;
- The adoption, calculation and application of SOFR Term Rates in a facility could result in differences to the economics over the duration of that facility and mean that amounts payable are lower or higher than using overnight SOFR (simple or compounded in arrears) or another interest rate benchmark which was previously or is currently available or may be available in the future. **You should ensure you speak to your advisers to understand the consequences of this**.

SONIA

What are the key differences between Term SONIA Reference Rates (TSRRs) and overnight SONIA in arrears?

UK regulators have stated that they expect the use of TSRRs to be relatively limited **and TSSRs are not offered for lending products**. This is because in their view, overnight SONIA is the most robust benchmark interest rate available given that it is derived from markets that have remained active and reliable through times of stress.

Therefore, where your facility references a TSRR it is important to note:

- TSRRs are derived from executable quotes for SONIA Overnight Index Swaps (**OIS**). Their robustness depends on the liquidity of this swap market. If OIS volumes are not consistently as large as overnight wholesale lending markets, TSRRs cannot be as robust as overnight SONIA. A broad based adoption of TSRRs may reduce liquidity in products referencing SONIA compounded in arrears, directly or indirectly reducing volumes in SONIA OIS from which TSRRs are derived;
- TSRRs include future rate expectations and their quality and stability is a function of derivative market liquidity which is different to the overnight SONIA rate and therefore poses additional risks in their use, representativeness and potentially their availability;
- TSRRs might be affected by a spike in derivative prices on the particular day the rate is taken with this rate being fixed and used to calculate interest for each day in the interest period;
- When using Overnight SONIA on the other hand, any one-day spike in rates would have a significantly smaller impact on the average interest calculated for the interest period;
- HSBC has selected to use the TSRRs published by ICE Benchmark Administration Limited. Other providers may use a different methodology for calculating TSRRs;
- The adoption, calculation and application of a TSRR in a facility, could result in differences to the economics over the duration of that facility and mean that amounts payable are lower or higher than using overnight SONIA (simple or compounded in arrears) or another interest rate benchmark which was previously or is currently available or may be available in the future. You should ensure you speak to your advisers to understand the consequences of this;
- Overnight SONIA calculation conventions will likely require your internal treasury, accounting and payment systems to be enhanced in order for you to manage the

servicing of these products in an accurate, efficient and timely manner;

- Derivatives based on TSRRs could give rise to a conflict of interest for dealers providing prices to swap order books used to construct TSRRs, reducing their willingness to stream prices, in turn undermining the robustness of TSRRs and causing TSRRs to cease being representative of the underlying market and economic reality that they are intended to measure;
- Future changes to market practice or conventions relating to the use of SONIA or TSRRs in facilities could potentially be adverse to your interests, require you to make changes to the documentation you have executed with us or to other administrative and operational changes you have already made. These further changes could result in you incurring additional costs.

Amending an existing LIBOR referencing facility

Where you are amending an existing LIBOR referencing facility to replace the LIBOR benchmark with a RFR benchmark, in addition to the above, there are particular issues to consider including:

An adjustment spread may be added to the RFR and the level of this may differ depending on the calculation methodology used, if and when the adjustment spread is fixed and the interest period selection made. The adjustment spread addresses the economic differences between LIBOR and RFRs which result from, amongst other factors, the term credit risk premium that is built into LIBOR but not into RFRs;

- There are different methods for calculating the applicable spread adjustment. Where the historic five-year median approach is used to calculate the spread adjustment you should be aware that the rates became fixed on 5th March 2021 and will not be recalculated after that date. Where the forward looking (or market implied) approach is used to calculate the spread adjustment you should be aware of the risks inherent in using a rate which is based on market expectation.

What happens if the RFR becomes unavailable?

The facility includes fallback provisions intended to address the unavailability of a RFR as an interest rate benchmark. The fallback provisions may vary based on product, currency and jurisdiction. Fallback rates might be lower or higher than would have been payable if the RFR had applied and might operate in a different way to the RFR.

Could the changes affect hedging?

It is important that you ensure that any hedging product appropriately hedges the exposure under the loan and/or trade facility and that the requirements for any particular accounting treatment are satisfied.

If the methodology used to calculate the RFR based rate in the loan or trade facility does not align with the methodology used in the hedging product or if any fallbacks that might apply to the facility if a RFR is no longer available are not the same as the fallbacks in the hedging product, this could result in the facility not being hedged appropriately by the hedging product.

Furthermore, in the event of a restructuring or termination of any associated hedging product(s) you have with HSBC or another hedging provider, a payment may be due from you to HSBC or that hedging provider. Such payment may be significant.

What should you do if you have any questions?

HSBC is unable to provide you with any specific advice or recommendations on this issue. We strongly recommend you seek guidance from your usual professional advisers if you have any questions.

Further information is available at

HSBC Guide to IBOR Transition