

IBOR transition

Frequently asked questions

The purpose of this FAQ is to inform our Wholesale Banking clients of recent and upcoming developments about the transition of interest rate benchmarks.

This guide is not intended to be, and should not be relied upon as, legal, financial, tax, accounting or other advice. You should consult your advisors for advice on the risks and challenges relating to the reform of interest rate benchmarks. This FAQ is not intended to address all the financial and other risks that may arise regarding interest rate benchmark transition.

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1. Why are some interest rate benchmarks being reformed or discontinued?

Financial markets have significantly changed since the global financial crisis. Banks no longer fund themselves in the interbank market to the same extent. This decline in the liquidity of the underlying interbank markets is one of the key drivers for reform of some Interbank Offered Rates

(IBORs) and the transition away from others. The chief executive of the Financial Conduct Authority (FCA) has referred to LIBOR as ‘measuring the rate at which banks are not borrowing from one another’ to highlight its growing risk of no longer being representative.

In 2013, the International Organisation of Securities Commissions (IOSCO) introduced a set of principles, that include the criteria for the calculation of a benchmark rate. In July 2014 the Financial Stability Board (FSB) published a report called ‘Reforming Major Interest Rate Benchmarks’ which sets out the FSB’s recommendations, developed under the guidance of the Official Sector Steering Group (OSSG). The recommendations refer to the measures needed to strengthen existing benchmarks and to the development of alternative reference rates based on wholesale funding markets. Besides these recommendations the report discusses transition issues and how the market adoption of these recommendations will be monitored in the period ahead. The European Union (EU) followed with the introduction of the Benchmark Regulation (BMR). A fundamental principle is that benchmarks, including IBORs, need to be based on actual transactions to the fullest extent possible.

ICE Benchmark Administration (IBA) as the administrator of LIBOR has reformed the methodology of LIBOR, to a more transaction based one. However, the number of underlying transactions in the interbank market has fallen and as a result, the calculation of LIBOR under the reformed methodology is still reliant on the expert judgment for the LIBOR panel banks. The FCA has agreed with 20 panel banks that they will continue making submissions until the end of 2021, at which point some banks may then withdraw from the LIBOR panels. There is a possibility that if too many banks will withdraw that it won’t be feasible to produce a LIBOR rate that appropriately reflects an underlying market after that time.

Financial markets participants should therefore implement a transition process to avoid risking a disorderly discontinuation of an IBOR, which could in turn result in significant market disruption. In that case, fallbacks that involve a calculation agent sourcing quotations from reference banks for each transaction to synthesise IBOR, are unlikely to function because those banks will not wish to provide quotations.

2. Would it be easier to replace LIBOR with ‘a new LIBOR’?

Even if some panel banks are willing to support LIBOR, it may not be possible to produce a LIBOR rate that is representative of the relevant underlying market(s) or of the economic reality. The EU Benchmark Regulation tells us that this criteria must be met for a benchmark to be used as the reference rate for in-scope financial products and financial contracts. A prohibition on entering into new financial products referencing LIBOR would also reduce the liquidity of legacy LIBOR-linked products. Furthermore, relying on a reduced number of panel banks may change the properties of the LIBOR rate, by affecting the level or the volatility of the rate, for example.

In addition, LIBOR embeds a bank credit risk premium into its rate which may not be appropriate for certain financial products. As liquidity has declined in the interbank market, the bank credit risk premium is being priced in reference to a less active market, and this may make pricing more volatile, particularly in times of financial distress.

3. What are the alternative reference rates?

Market participants and industry bodies have put a significant amount of work into finding a way to either reform existing benchmark rates or, alternatively, to agree on procedures for

replacements which meet regulatory requirements. The alternative rates are based on overnight rates and designed to be nearly risk free. They are collectively referred to as Risk Free Rates (RFR). Below is an overview of the recommended alternative rates per LIBOR currency.

Jurisdiction	Working Group	(Alternative) Reference Rate	Nature	Description
 Euro area	Working group on euro risk-free rates	Euro short-term rate (€STR)	Unsecured	Unsecured rate that captures overnight wholesale deposit transactions
 United Kingdom	Working Group on Sterling Risk-Free Reference Rates	Sterling Overnight Index Average (SONIA)	Unsecured	Unsecured rate that covers overnight wholesale deposit transactions
 United States of America	Alternative Reference Rates Committee (ARRC)	Secured Overnight Financing Rate (SOFR)	Secured	Secured rate that covers multiple overnight repo market segments
 Switzerland	The National Working Group on Swiss Franc Reference Rates	Swiss Average Rate Overnight (SARON)	Secured	Secured rate that reflects interest paid on interbank overnight repo rate
 Japan	Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks	Tokyo Overnight Average Rate (TONAR)	Unsecured	Unsecured rate that captures overnight call rate market

4. What is ISDA's approach regarding LIBOR's expected demise?

ISDA has already conducted a number of consultations to help transition the derivative market from LIBOR. The first key question is what fallback rate to use, and the second is when are such fallbacks activated? The first question has recently been settled and the second is subject to an ongoing consultation – see Question 15.

ISDA has published the basis for the fallbacks for LIBOR (and EURIBOR) contracts. The fallbacks are to be constructed from an RFR compounded in arrears, plus a spread adjustment to account for the difference in basis. The sum of these two component is called the “all in rate”. The consultation showed that the majority supported a spread adjustment based on a historical median over a five-year lookback period. For the compounded setting in arrears component, a clear majority favoured a two banking day backward shift adjustment for operational and payment purposes. This is the agreed way forward in relation to the derivatives documented under an ISDA agreement.

ISDA also announced that Bloomberg Index Services Limited (BISL) has been selected to calculate and publish these fallbacks rates. It is expected that BISL will publish the following rates on an indicative basis soon:

1. Compounded setting in arrears for each RFR for each relevant term (Adjusted RFR) – daily compounding of publicly available Risk Free Rates (RFRs) published by central banks (e.g. SOFR, SONIA)
2. Spread Adjustment – the median of the historical differences between the IBOR for each tenor and the compounded RFR for that tenor over a five-year lookback period (this will continue to change until the fallbacks are triggered)
3. The ‘all in’ fallback rate, which is the combination of the Adjusted RFR and the Spread Adjustment for each relevant tenor.

It is anticipated that ISDA will adjust the definitions for certain IBOR rate options in Q3 2020, which will become effective Q4 2020, after which all future trades will incorporate this fallback

mechanism. ISDA is also expected to issue a protocol for market participants who wish to incorporate the adjusted definitions in their legacy transactions (those entered into prior to the amendments becoming effective).

Other working groups are looking to see if this five-year lookback approach to determine the Spread adjustment could form the basis for the adjustment amount in fallbacks in other products, including term loans. For example the UK working group on sterling risk-free rates recent consultation on 'Credit Spread Adjustments for Cash Product' received a positive response for this approach, which is summarised in a report issued in March 2020.

5. What will happen to cash products that reference LIBOR?

Regulators in the UK have made it clear that they expect market participants to move away from offering cash products based on GBP LIBOR by the end of Q3 2020. As a result they envisage that new products will be offered on the basis of SONIA or other alternative rates (e.g. the Bank of England base rate or a fixed rate).

In the United States, the Alternative Reference Rates Committee (ARRC), which is leading the transition from USD LIBOR to SOFR, recommends including fallbacks with a so-called 'pre-cessation trigger' in cash market contracts. This means fallbacks are triggered if and when the FCA finds LIBOR unrepresentative.

However, many cash market instruments, especially older contracts, will not have any cessation triggers. Each contract will have to be dealt with on its own terms. It has been widely noted that for many securities, the traditional approaches would have the effect of them converting to a fixed rate (last published rate) when LIBOR ceases. The FCA foresees that the volume and proportion of cash market instruments without cessation triggers might change significantly by the end of 2021 when these triggers will be needed. For syndicated loans, each individual loan agreement referencing LIBOR will need to refer to a replacement benchmark rate. A standard protocol analogous to ISDA's derivatives may not work for loans, however in Europe, the Loan Market Association (LMA) has published an Exposure Draft and a Reference Rate Selection Agreement to help streamline the LIBOR transition on legacy transactions, although this does not constitute a recommendation for any particular form of amendment process.

6. How are legacy financial instruments that have no or inadequate fallback provisions for the cessation of LIBOR affected?

In March 2020, the ARRC, which is leading the transition from USD LIBOR to SOFR, issued a proposal focusing on legacy contracts whose fallback language is most likely to lead to disputes or unintended economic consequences. If a contract has no fallback provisions or falls back to a LIBOR-based rate (such as the last available LIBOR rate), the legislation imposes the ARRC's recommended replacement benchmark rate (or 'SOFR') and spread.

For contracts where one party is allowed to choose a replacement benchmark, the legislation provides a safe harbour for choosing the ARRC-recommended benchmark rate and spread. The proposed legislation would also rescind any fallback provisions that require a party to conduct a poll for interbank lending rates. The proposed legislation does not impact fallback provisions that lead to non-LIBOR replacement benchmarks (such as the prime rate) or contracts where the parties mutually agree to 'opt out' of its application.

The UK working group on sterling risk-free rates has announced plans to set up a tough legacy task force which will provide market input about 'tough legacy' products that may be difficult to convert or amended to include robust fallbacks.

7. Where is the loan market headed? What are industry groups working on?

The existing conventions and operations of the LIBOR loan market are based on rates that are fixed in advance. Regulators and working groups have made it clear that they expect the loan market to be able to move to calculating interest on the basis of compounding in arrears and that market participants should not wait for term rates to become available before transitioning to alternative rates. Regulators, however, have acknowledged that there are a limited number of products where it may be preferable to use a term rate such as receivables financing where the discount amount is required to be determined up front.

Moving to calculation of interest on the basis of compounded in arrears will mark a significant change in loan operations for banks, agents and borrowers. For example, an agent will only be able to notify a borrower of the amount of interest to be paid towards the end of an interest period. To support the market in the transition to a compounded in arrears basis, the LMA has produced an exposure draft for loans where interest is compounded in arrears. It is still unclear how certain conventions in loan agreements will operate when calculating interest compounded in arrears (e.g. which formula will be used). The loan workstream of the sterling risk free rate working group chaired by the LMA and including the Bank of England continues to consult the loan market to determine whether a market consensus can be reached on how these conventions should operate. It is crucial to reach consensus on key conventions in the syndicated loan market, to allow it to continue to operate efficiently. Due to these uncertainties, we have seen very few SONIA loans made available to date.

In terms of fallback provisions in loan agreements, in the event that the benchmark rate for a loan agreement ceases to exist, there is an optional clause (since 2014) in the forms of the Loan Market Association that recommend what action to take. In 2018, the LMA published a detailed fallback wording in relation to that clause.

The ARRC has also produced two versions of fallback wording to be incorporated in loan agreements. Due to the uncertainties described above, both the LMA and one of the ARRC versions of fallback wording are more general in nature essentially stating that the parties will reach agreement on the replacement rate. The 'hardwired' approach provided by the ARRC, which sets out a specific waterfall of options, was initially unpopular because of these uncertainties. The hardwired approach is the preferred method. The disadvantage for using the amendment based approach is that it requires a lender vote and this is expected to delay the process given that the volume of loans that need to be amended. The hardwired approach does not have such a lender vote so would be easier to operate. It should also be noted that there will be no equivalent to an ISDA protocol for loan agreements and each legacy loan agreement which requires to be transitioned from LIBOR will require to be amended through an amendment agreement.

8. What are the issues with backward-looking risk free rates?

LIBOR is a forward-looking or 'term' rate quoted for five currencies (USD, GBP, CHF, JPY and EUR) and seven tenors (overnight/spot, one week, one month, two months, three months, six months and 12 months). Importantly, the LIBOR linked interest rate payable is known at the start of the

relevant interest period. All the alternative RFRs identified by the working groups are overnight rates and therefore not known in advance. This means that the determination and subsequent accounting for a three-month or six-month rate based on RFRs requires significantly different mechanics.

9. Would forward-looking risk-free rates be easier?

Some derivative products, such as Forward Rate Agreements, caps and floors, as well as certain cash and loan products, are viewed as incompatible with fixing in arrears. Because LIBORs were perceived to be vulnerable to manipulation, regulators are reluctant to encourage unnecessary reliance on forward-looking rates. However, there are initiatives to create solutions for these products. In the UK for example, there is an effort to produce credible Term SONIA Reference Rates (TSRR), supported by the Sterling Risk-Free Rates Working Group.

10. What are the plans and expectations regarding a term rate based on SOFR?

The ARRC has included the production of a forward-looking term rate as the final step of its Paced Transition Plan (which runs to the end of 2021). The ARRC's Second Report noted that production of this type of rate is not intended for primary use in derivatives but to ease transition for some users in certain cash markets, such as corporate loans, whose systems are built around the use of forward-looking term rates. The ARRC has made it clear that while term rates can be useful for some, their use also needs to be consistent with the functioning of the overall financial system and that those who are able to use SOFR should not wait for term rates, noting that it cannot guarantee that an administrator will be able to produce a robust, IOSCO-compliant forward-looking term rate before LIBOR stops publication.

11. What are the plans and expectations regarding a term rate based on SONIA?

A consultation conducted by the Sterling RFRWG in 2018 identified a demand for a term rate from some cash market participants where usage of forward-looking rates has historically been common. The consultation also noted support for such a rate to aid the transition of certain legacy contracts. Nevertheless the Sterling RFRWG expects the use of forward risk-free term rates in cash markets to be more limited than the current use of LIBOR, and strongly encourages market participants to develop products using compounded overnight rates.

Four benchmark administrators have confirmed that they are working on the development of a TSRR and the Sterling RFRWG has established a Term Rate task force to ensure this work remains on track.

12. What guidance and tools are available for the transition from USD LIBOR to SOFR?

To facilitate adoption of SOFR in consumer and other cash products, the Federal Reserve Bank of New York has started publishing from 2 March 2020: 1) a SOFR Index to measure the cumulative impact of compounding on a unit of investment over time, with the initial value set to 1 on 2 April 2018, the first value date of SOFR; and 2) SOFR compounded averages over rolling 30-, 90-, and 180-calendar day periods. The SOFR Index value reflects the effect of compounding SOFR each business day and allows the calculation of compounded SOFR rates over custom time periods. The SOFR Index and Averages could be referenced in a variety of products and as a result, the

publication (“one golden source”) is intended to help accelerate the transition away from USD LIBOR.

The ARRC also released a User’s Guide to SOFR, to explain how market participants who may be unfamiliar with overnight rates can use SOFR in cash products. The User’s Guide covers a number of conventions, including simple versus compound averaging; in arrears versus in advance payment structures; and lookback, payment delay, and lockout conventions for providing payment notice.

13. Are some USD LIBOR dependant products already using SOFR?

Although USD LIBOR remains the dominant rate, SOFR cash markets have begun to grow:

- A number of parties have issued SOFR-based floating rate notes (FRNs), with total issuance exceeding \$300 billion. The Federal Home Loan Banking system now regularly issues SOFR FRNs and offers SOFR advances to its member banks. Many issuers report obtaining better rates on SOFR FRNs than what they would have paid for comparable LIBOR FRNs, and the investor base for these SOFR instruments has been wide.
- The first SOFR-based securitisation, a Real Estate Mortgage Investment Conduit (REMIC), was issued in May 2019.

14. How is SONIA being adopted in the cash market?

There has been good progress in establishing SONIA as the successor to sterling LIBOR. This is supported by a clear message to market participants to stop transacting in LIBOR wherever possible. There have been a number of positive developments in the sterling cash market, as summarised in the OSSG 2019 annual update:

- SONIA-linked FRN issuance now dominates sterling floating rate financials issuance and there is clear momentum towards using the compounded SONIA rate across bond markets more generally.
- Use of compounded SONIA has also become established as the market standard for sterling securitisations, with over £15 billion of publicly distributed issuance since the first example in April 2019.
- In June 2019, a LIBOR-linked security was switched to reference compounded SONIA through a consent solicitation process. This has established a model for others to follow, with consent now secured for the conversion of over £4 billion of legacy securities, across FRNs, securitisations and covered bonds from a number of major issuers.
- The first loan product referencing compounded SONIA was also announced in June 2019, and was followed by the first example of an existing LIBOR-linked loan product being converted to SONIA in October 2019.

15. What is a pre-cessation trigger and how will CCPs treat a declaration of unrepresentativeness?

Pre-cessation is a trigger where the competent authority (the FCA for LIBOR) of the administrator of the benchmark declares a benchmark unrepresentative of the underlying market and economic reality that the benchmark is intended to measure. This is a market-sensitive moment, because the five-year window over which IBOR fallback spreads will be calculated could be fixed by a pre-cessation event for some products, even if an unrepresentative IBOR continues to be published.

CCPs have stated they will view the loss of representativeness as a trigger to use the discretionary powers available to them under their own rules to shift all their cleared relevant LIBOR portfolios to the recommended risk-free rate fallback in accordance with the term and spread methodology proposed by ISDA. In a recent letter to the Financial Stability Board, ISDA requested that CCPs formalise this intent in a definitive public declaration. In response, UK clearing house LCH announced its own public consultation on proposed rule book changes, that closed on 1 April 2020.

16. Could there be divergence between cleared and bilateral LIBOR derivatives?

This is an acknowledged concern. The CCPs intend to apply the ISDA fallback provisions upon a declaration of unrepresentativeness for products they clear, however, bilateral LIBOR derivatives that lack a pre-cessation trigger would not be affected. For this reason, ISDA launched a consultation on the inclusion of pre-cessation triggers, that recently concluded that a pre-cessation trigger will be incorporated in the standard rate definitions.

17. What changes are happening to EONIA?

As insufficient transaction volumes prevent EONIA from becoming BMR compliant, the European Money Markets Institute (EMMI), the administrator of EONIA, announced that EONIA will no longer be published as of 3 January 2022.



The Euro Risk Free Rate Working Group has recommended the Euro Short-Term Rate (€STR) as the alternative rate and the eventual replacement of EONIA. €STR measures the wholesale euro unsecured overnight borrowing cost for banks in the euro area based on transaction data collected by the Euro-system for money market statistical (MMSR) purposes. Administered by the ECB, €STR was first published on 2 October 2019.

To bridge the period of transition from EONIA to €STR, EONIA will continue to be published, on the basis of €STR + 8.5 basis points (0.085%) spread as of 2 October 2019. The ECB calculated this spread based on daily EONIA and pre-€STR data from mid-April 2018 to mid-April 2019. This approach is designed to ensure that EONIA's economic value is not modified by the new calculation methodology. Between 2 October 2019 and 3 January 2022 both benchmarks will co-exist to facilitate a smooth transition from EONIA to €STR.

18. What will happen when CCP's amend their discount curves for EUR cleared derivatives?

LCH, Eurex and CME have announced that they will adjust the discount curves from EONIA to €STR for both new and existing cleared euro derivatives and apply this change to the calculation of interest payments on collateral, known as price alignment interest (PAI). This was initially planned to occur over the weekend of 19-22 June 2020, but due to the disruption caused by COVID-19 this has been rescheduled to 24-27 July. This discounting change (a shift of 8.5bps) will result in a valuation impact. In order to avoid any value transfer, a one-off cash will be settled between CCPs

and their members to compensate for any valuation change in the derivatives to avoid any value transfer.

19. What will happen when the CCP's switch their discount curves for USD cleared derivatives?

On 16 October 2020, the central clearing houses CME and LCH are scheduled to switch from using the effective federal funds rate (EFFR) to using SOFR as the discount curve for cleared USD interest rate products and apply this change to the PAI. These clearing houses will apply a combination of cash compensation for the economic impact as well as a number of standardised fed fund-SOFR basis swaps, to account for the change in risk profile. Unlike for the euro, where €STR is a replacement for EONIA, the fed funds market will not disappear for the foreseeable future.

20. What is the latest on EURIBOR?

EURIBOR Panel banks progressively transitioned to a new submission methodology in 2019. EURIBOR is now BMR compliant and will continue to be published for at least five years. This means that EURIBOR can be used in new and legacy contracts. However, the cessation of EURIBOR after this period is still a possibility. If a contract expires prior to the possible cessation of EURIBOR, the contract isn't expected to require amendment. As with other benchmark dependent products, it is advised to include robust fallback wording in contracts to deal with a possible cessation or change of an existing benchmark.

21. How is COVID-19 effecting the transition timetable?

The FCA, Bank of England and members of the Sterling RFRWG have discussed the impact of the coronavirus on the transition.

They have stated that transition away from LIBOR remains an essential task that will strengthen the global financial system. Hence the central assumption that market participants cannot rely on LIBOR being published after the end of 2021 has not changed. So the end of 2021 should remain the target date and preparations for transition should continue.

Alongside other international authorities, the FCA and working groups will continue to monitor and assess the impact on transition timelines and will update the market accordingly.

If you have any questions about IBOR that are not answered here, please contact your relationship manager at ING.