Mashreq Bank

LIBOR Transition | Frequently Asked Questions

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Glossary

Terminology	Description
€STR	the euro short-term rate provided by the European Central Bank (ECB), as administrator of the benchmark, (or any successor administrator)
ARR	Alternative Reference Rates
Benchmark rate	Reference rates (LIBOR and ARR)
CAS	Credit Adjustment Spread
LIBOR	London Interbank Offered Rate
SARON	the Swiss Average Rate Overnight rate provided by SIX Financial Information AG (SIX), as administrator of the benchmark or any successor administrator
SOFR	the daily Secured Overnight Financing Rate provided by the Federal Reserve Bank of New York, as administrator of the benchmark (or any successor administrator)
SONIA	the daily Sterling Overnight Index Average rate as provided by the administrator, or any successor administrator, of the benchmark to and published by authorized distributors
TONA	the Tokyo Overnight Average rate provided by the Bank of Japan, as administrator of the benchmark, or any successor administrator

Overview

LIBOR transition is a constantly evolving topic, and this means that new information becomes available on a regular basis. In such a dynamic scenario you should make sure to keep yourself up to date and informed on LIBOR Transition issues.

To assist you, Mashreq Bank has prepared this Document, which includes important information, related to the LIBOR Transition, and comes as a supplement to the "LIBOR Transition Overview" Document, prepared by Mashreq Bank.

Section 1 | LIBOR Transition

LIBOR cessation

When will LIBOR be discontinued?

According to the announcement, made the by Financial Conduct Authority (the 'FCA') on 5 March 2021, the following LIBOR benchmark rates will either cease to be provided or will no longer be representative immediately after the following Cessation Dates:

Currency	Tenor[1]	Currency code	Discontinued after[2]
Pound Sterling	All	GBP	31 December 2021
Euro	All	EUR	31 December 2021
Swiss Franc	All	CHF	31 December 2021
Japanese Yen	All	JPY	31 December 2021
United States Dollar	1W, 2M	USD	31 December 2021
United States Dollar	ON, 1M, 3M, 6M, 12M	USD	30 June 2023

What happens after LIBOR is discontinued?

LIBOR will be replaced by the designated Alternative Reference Rates (ARRs) in the following way:

- existing contracts, referencing LIBOR, will be amended with the benchmark rate changed from LIBOR to ARR.
- new contracts will be referencing the ARR.

What are the designated ARRs?

[1] LIBOR tenors are Overnight (ON), 1 week (1W), 1 month (1M), 2 months (2M), 3 months (3M), 6 months (6M) and 12 months (12M).

[2] Depending on the currency, it is either a 'Cessation date' or a 'Loss of representativeness date', which defines the date, when the benchmark will no longer be provided (cessation date) or will no longer be a reliable benchmark even though it is yet to have ceased (loss of representativeness date).

The following LIBOR replacements were identified by the industry working groups[3]:

LIBOR currency	ARR
GBP	SONIA
EUR	€STR
CHF	SARON
JPY	TONA
USD	SOFR

Are other benchmark rates going to be impacted by the LIBOR or IBOR Transition?

In the UAE the calculation and reporting methods of the EIBOR, benchmark rate in UAE dirham, were adjusted by the Central Bank of the UAE in 2018 to meet the global trend of accurate and transparent pricing.

In Hong Kong, both the Hong Kong Dollar Overnight Index Average (HONIA) and Hong Kong Interbank Offered Rate (HIBOR) will persist, with HONIA under consultation for refinements.

In India, the sustainability of MIFOR, where USD LIBOR is utilized as a calculation input, is untenable in the current form.

LIBOR vs ARR

Are the ARRs a substitute for LIBOR?

The ARRs (Alternative Reference Rates) are not economically equivalent replacements to LIBOR and, therefore, a simple switch to the new rates is not possible.

LIBOR is a forward-looking term rate whereas ARRs are backward-looking in principle, with forward looking term rates only available for certain currencies and allowed for use under certain circumstances. LIBOR includes a bank credit risk premium which ARRs do not have as overnight ARRs are either risk-free (in case of secured rates) or nearly risk-free (in case of unsecured) due to the short duration.

What are the main differences between LIBOR and ARR?

The main differences between LIBOR and ARR are presented in the table below:

	LIBOR	ARR
Calculation methodology	Forward-looking estimate based on panel bank submissions	Overnight backward-looking rates with limited forward term structure
Publication Base	Based on expectations/speculations; quotes submitted by panel banks	Based on actual transactions; calculated volume-weighted median

[3] Please, refer to the LIBOR Transition Overview Document, published by Mashreq Bank

Publication Time	11:55 AM Greenwich Mean Time	Different times on T+1 for each currency (except SARON on T+0)
Components	Includes a built-in Credit Risk and Liquidity Spread across the tenors	Close to risk-free rate, no term or credit premium embedded
Payment notice	Interest is known at the beginning of the interest period, thus sufficient notice before payment is due	Interest is not known at the beginning of the interest period, thus little notice before payment is due
Administration	Private Sector – London Interbank Market	National Central Banks (except SARON)

Is there a need for forward-looking term ARR structures and are they expected to be available to substitute LIBOR with the same tenors?

Term rates are primarily required for cash products to determine interest payments at the start of the calculation period. A deep and liquid derivatives market is required to develop term ARRs.

Currently, SONIA forward looking term rates are available for some tenors and the ARRC recommends use of CME Group's forward-looking SOFR Term Rates for 1-, 3- and 6-month tenors.

The ARRC supports the use of SOFR Term Rate[4] in addition to other forms of SOFR for business loan activity. The ARRC does not support the use of the SOFR Term Rate for the vast majority of the derivatives markets.

How will the transition affect Mashreq clients?

The termination of LIBOR may have the following effects on your current products or contracts:

- Changes in underlying reference rate that that may alter your interest rate.
- Modifications to the calculation of amounts payable or receivable.
- Modifications to fees, margins, and other charges, if applicable
- Revisions to systems and accounting practices

Section 2 |Technical Aspects

Overview

What challenges does the LIBOR Transition introduce?

The Transaction brings technical and operational challenges. Notice of Payment and Interest calculation methodologies need to be reviewed and a concept of Credit Adjustment Spread introduced.

[4] ARRC_Press_Release_Term_SOFR.pdf (newyorkfed.org)

Notice of Payment

Which Notice of Payment conventions are used for contracts, referencing LIBOR?

The '*in advance'* convention - used in contracts that reference LIBOR set the floating rate based on a value of LIBOR determined before the beginning of the interest period. The floating-rate payment due is set *in advance of the start of the interest period*.

The '*in arrears'* convention – used in contracts, that reference a value of LIBOR determined at the *end of the interest period.*

What are the main characteristics of the 'in advance' and the 'in arrears' conventions?

An average overnight rate in arrears references an average of the rate over the current interest period and reflects what actually happens to interest rates over the period and thus, allows to fully hedged interest rate risk.

In advance' convention references an average of the overnight rates observed before the current interest period began. the floating-rate payment due is set in advance of the start of the interest period

What challenges does the LIBOR Transition introduce in terms of Notice of Payment?

Most of the contracts that reference LIBOR use the 'in advance' convention, thus giving borrowers sufficient notice of the amount due before they are required to make a payment (please, refer to Example 1 in the Annex).

Risk-free rates are mostly available in overnight tenors, which elevates the role of the 'in arrears' convention. The challenge of using the 'in arrears' convention is the need to provide borrowers sufficient time notice of the amount due to payment.

What are the solutions to timely Payment Notice challenge?

To allow the borrower and lender sufficient notice of the final payment Modifications to the in arrears convention are used:

- Lookback - applies rate from a fixed number of days before the given interest date (please, refer to Example 2 in the Annex);
- Lockout - the final rate is fixed for the last few days of each interest period (please, refer to Example 3 in the Annex).
- Payment delay - payment is due a number of days after the end of an interest period (please, refer to Example 4 in the Annex);

Which convention is broadly accepted by the market?

A lookback structure is recommended. A 5 business day lookback gives counterparties more notice by applying the rate from a fixed number of business days prior to the given interest date.

What are the main characteristics of the Lookback convention?

A lookback gives counterparties more notice by applying the rate from a fixed number of business days prior to the given interest date. The concept of a lookback can be implemented in the form of a lookback without an observation shift or a lookback with an observation shift.

A lookback with observation shift also applies the rate from a fixed number of business days prior to the given interest date, but in contrast to a lookback without a shift, it applies that rate for the number of calendar days until next business date following the observation date.

Interest Calculation

What is the key challenge in LIBOR Transition from interest calculation perspective?

ARRs are not the exact replacements to LIBOR rates, interest payments calculations need to be changes.

What is the source of differences in interest calculation between LIBOR and ARR?

LIBOR and ARR tenors mismatch: LIBOR is published daily for a range of tenors (overnight, 2 weeks, 1, 3, 6 and 12 months) and the interest rate on LIBOR products is fixed for discrete periods (interest periods), while ARRs are currently mostly available as an overnight rate.

What are the solutions to address differences in LIBOR and ARR tenors?

Averaged Overnight Rates, which accurately reflect movements in interest rates over a given period of time and smooth day-to-day fluctuations in market rates.

Simple and compound averages are typically used in calculation of interest for financial products. Compound interest more accurately reflects the time value of money and matches the payment structure in derivatives and debt market.

What are the recommended approaches?

The ARRC recognizes that either simple or compound interest can be used "Compounding in arrears" approach incorporates the previous day's rate within the compounding calculation each day and reflects what actually happens to interest rates over the period.

Term Rates

What are the most recent developments in the establishment of a forward-looking rate similar to LIBOR?

So far, many working groups have focused on using overnight RFRs to support a global transition effort coordinated by the FSB. Several working groups say forward-looking term rates should only be used in specified products or conditions. The ARRC appointed CME Group to administer a SOFR-based term rate in May 2021, with plans to use it in fallback and other scenarios in July 2021. In the UK, there are two Term SONIA options.

What are alternatives to Term rates Risk Free Rates ?

The BSBY and ICE BYI indexes are both publicly available alternatives to SOFR. Due to its three-day average, the BSBY Index may lag behind large one-day market movements, making it less relevant to some users. Market participants worry that the BSBY has some of the same faults as LIBOR. the CME term SOFR rates are therefore a suggested alternative rate method.

Credit Adjustment Spread

What is Credit Adjustment Spread (CAS)?

LIBOR includes a credit spread component to take into account the credit risk when lending to banks, whereas the ARRs are near risk-free rates. The spread adjustment between LIBOR and ARRs is intended to account for these differences to ensure a fair conversion for existing contracts.

What is the methodology to calculate Credit Adjustment Spread (CAS)?

In the derivatives market, this work has been led by ISDA. ISDA sets out the historical mean / median with a five-year lookback period approach as the preferred option for the credit adjustment spread to be used in derivatives market.

A majority of cash market participants favours the same approach as ISDA.

More information on the Credit Adjustment Spread may be found in materials, provided by the Working Group on Sterling Risk-Free Reference Rates here.

What are the latest developments with reference to the Credit Adjustment Spread (CAS)?

Credit Spread Adjustment, used by ISDA in derivatives market, is now fixed (a result of the announcements, made by the FCA, on 5 March 2021[5]) for each LIBOR tenor and is being published by Bloomberg Index Services Limited.

Use of Credit Adjustment Spread in cash market depends on the decisions of cash market participants.

Section 3 |Contractual Aspects

Fallback Language

What is fallback language?

A contractual provision to find a replacement rate if the existing rate is not available. Usually, fallback language is included in contracts, but it only addresses a temporary unavailability of rates.

What is a trigger event?

This is an event which causes the fallback provisions to be implemented. Trigger events include cases, when a benchmark ceases to exist, is deemed unrepresentative or becomes prohibited by law.

Is fallback language the same for all products?

The language differs between product groups, which brings challenges and systemic risk to the industry.

[5] HouseStyle (isda.org)

ISDA has published The ISDA 2020 IBOR Fallbacks Protocol (the Protocol) which allows to incorporate robust fallbacks for derivatives, linked to certain IBORs.

Industry bodies and official working groups like Loan Market Association (LMA) in the UK and the ARRC in the US are providing recommended fallbacks for cash products.

What is the recommended fallback language for USD LIBOR syndicated loans and bilateral loans?

The recommended terms of LIBOR fallbacks are described in the ARRC Supplemental Recommendations of Hardwired Fallback Language for LIBOR Syndicated and Bilateral Loans here

Section 4 | Other Financial Products

Are there any recommended best practices for transitioning away from USD LIBOR-based loans?

As an alternative for LIBOR (whether used as a fallback clause or not), the term SOFR can be used in loan agreements in the future, as advocated by the ARRC. Trading in short-term SOFR could lower overnight SOFR liquidity, making the rate less stable, hence it is not widely used. ARRC estimates that most loan agreements will not need to be considerably updated to replace LIBOR with Term SOFR.

Have any jurisdictions released recommended fallback language for cash products and/or derivatives?

In the 2006 ISDA Definitions, ISDA revised some "floating rate options" to include fallbacks in case certain important benchmark rates were permanently discontinued and LIBOR was deemed "non-representative". Some USD LIBOR-based floating rate options now include fallbacks in case USD LIBOR is permanently discontinued or a non-representative USD LIBOR is determined. The 2006 ISDA Definitions will continue to apply to legacy derivatives created before January 25, 2021. That is, the amended floating rate options with fallbacks will be absent. Parties may choose to include the fallback in legacy non-cleared derivatives contracts via an ISDA protocol or bilateral discussion, but this is optional. The ISDA 2020 IBOR Fallbacks Protocol allows firms to add the new floating rate options and thus the fallbacks to existing derivatives contracts with other protocol participants.

What are the implications of the transition around Islamic Products?

Some examples of Sharia-designated financings with variable rates are International Commodity Murabaha, Musharaka, Mudaraba, Wakala, and Service Agency. A client's profit, rental, return, or incentive payments may also be based on LIBOR. A profit rate swap may be used in conjunction with LIBOR or other rates derived from LIBOR in more sophisticated financial operations. LIBOR transition may affect certain Islamic commodities' repayment terms or product attributes. This may impact the timing of Islamic products price, as well as the payment of installments, profit, and rent. The Bank's Shariah Committee will review and approve any planned or implemented product adjustments.

Use of term / forward-looking SONIA and SOFR is recommended for Islamic products owing to the need for pricing to be certain and known in advance.

What is the recommended strategy for overcoming the transition?

There are several measures you can take to counteract this shift. Several of these steps include the following:

- Conduct a review of available information regarding the LIBOR conversion
- Conduct an assessment of your LIBOR-related exposures. These include contracts and arrangements, as well as changes and risks associated with a LIBOR conversion
- Seek independent professional advice to assess the potential effects of a LIBOR conversion on your financial products and services, including legal, tax, accounting, financial, and other operational implications.

Section 6 |Useful Links

How can I find out more about the LIBOR Transition and ARR?

LIBOR Transition is an on-going process and updates occur frequently. Mashreq Bank will update this Document as market developments occur. Should you seek any further information on LIBOR Transition, please, consider referring to the guidance and information, provided by the relevant working groups and industry bodies. A list of links includes:

Guidance and Information	Location
ISDA | LIBOR Transition for Derivatives	Derivatives | ISDA
SOFR | Replacement to USD LIBOR	SOFR Guide | ARRC, SOFR Data | FRBNY
SONIA |Replacement to GBP LIBOR	SONIA | Bank of England
TONA |Replacement to JPY LIBOR	TONA | Bank of Japan
SARON |Replacement to CHF LIBOR	SARON | SIX Group
€STR |Replacement to EUR LIBOR	€STR | ECB

What to do if I have additional questions?

You are encouraged to reach out to your relationship manager at Mashreq Bank to discuss how LIBOR transition will impact you.

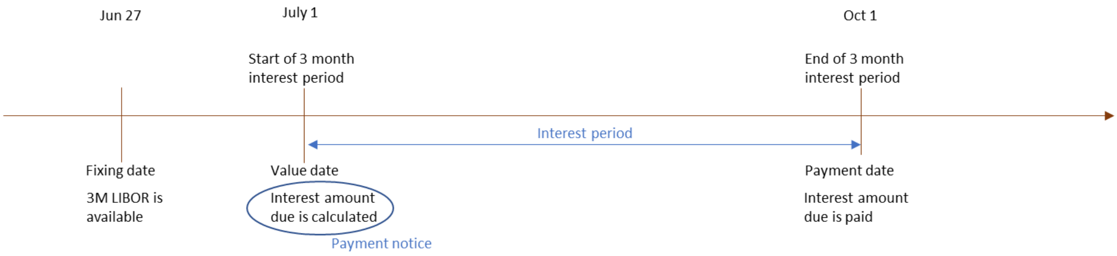
Section 5 |References

Guidance, Tools and Templates, used for this Document

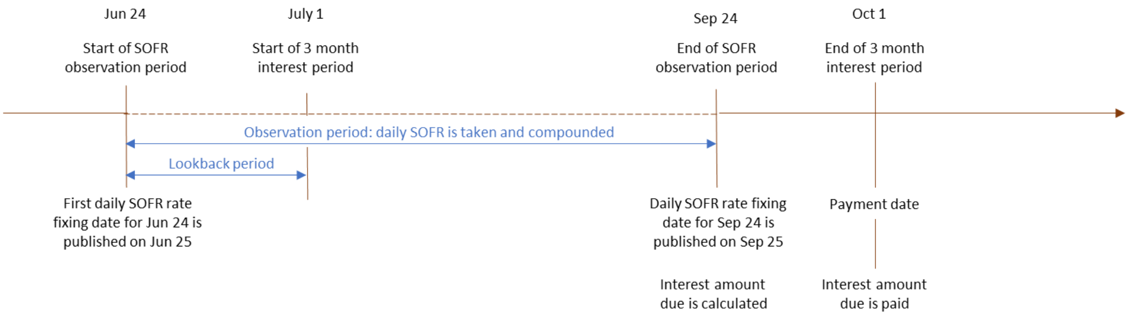
Source	Location
ARRC	An Updated User's Guide to SOFR
ARRC	Guide to Published SOFR Averages
ARRC	ARRC Best Practice Recommendations Related to Scope of Use of the Term Rate
ARRC	Term SOFR
ARRC	Fallback Language for LIBOR Syndicated and Bilateral Loans
ARRC	ARRC Consultation on Spread Adjustment Methodologies
Working Groupon Sterling RFR	Credit Adjustment Spread
ISDA	ISDA Guidance

Annex

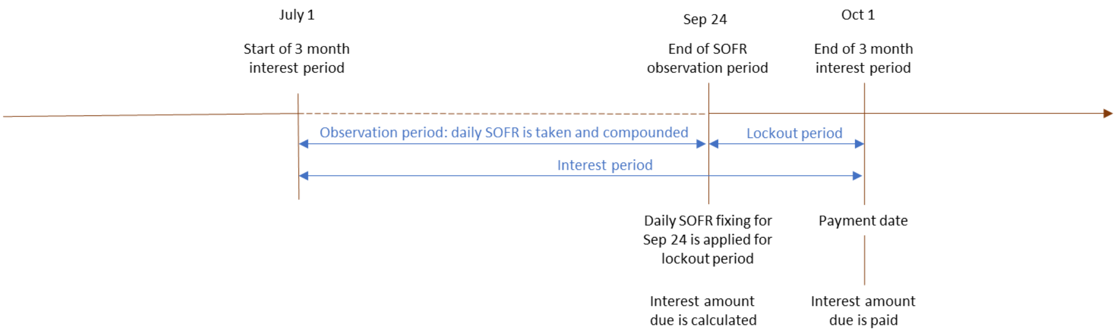
Example 1. USD 3M LIBOR



Example 2. SOFR compounded in arrears with Lookback (5 business days)



Example 3. SOFR compounded in arrears with Lockout



Example 4. SOFR compounded in arrears with Payment Delay