LIBOR TRANSITION

Compendium

June 2021





DISCLAIMER

The information shared with you in this document are provided for general information only. While Axis Bank Limited ("Axis") endeavours to ensure that the information shared with you in this document is current, Axis cannot guarantee its accuracy due to continuous market development. In addition, Axis does not represent that the risks highlighted here (if any) are complete. None of the information provided should be taken as constituting financial, investment, accounting, legal, regulatory, tax or other advice or as a recommendation, an invitation or inducement to enter into, amend, or alter, any financial contracts or investment activities.



"In light of the UK Financial Conduct Authority's announcement regarding London Interbank Offered Rate (LIBOR) phase out by end of 2021, regulators from various jurisdictions have taken steps to transition away from LIBOR."

The current LIBOR rates will be replaced by Alternative Reference Rates (ARRs) recommended by regulators

AGENDA



- LIBOR Background, Need for Transition & ARRs
- 2 Transition Timelines, & Key Differences
- Contract Remediation Derivatives & Loans
- Fallback Methodology Derivatives & Loans
- 5 Loans Methodologies for ARR in arrears
- 6 ISDA IBOR Fallbacks Protocol and Supplement

The agenda of this material is to explain some key aspects of LIBOR Transition.





Need for Transition

ARRs

LIBOR Background



LIBOR – London Interbank Offered Rate

- □ LIBOR is based on submissions provided by a panel of banks and LIBOR rates are intended to reflect the interest rate at which banks could borrow money on unsecured terms in wholesale markets.
- □ LIBOR is currently published by Intercontinental Exchange (ICE) once a day using waterfall method. The calculation process is overseen by ICE Benchmark Administration (IBA) and regulated by Financial Conduct Authority.
- □ LIBOR is used as a global benchmark interest rate for derivatives, bonds and loans. More than \$350 trillion worth of financial contracts are linked to LIBOR globally. It reflects market expectation regarding central bank's interest rates, liquidity premiums in the money markets and, during periods of stress, it indicates of the health of the banking system.

LIBOR is currently in published for 5 currencies and for **7 tenors** in respect of each currency. **CURRENCIES TENORS** USD ON/SN **GBP 1W EUR** 1M CHF 2M **JPY** 3M 6M 12M

Need for Transition



- □ Allegations regarding LIBOR manipulation had first surfaced in 2012. Studies revealed that LIBOR had been manipulated to not only window dress banks' financial statements, but also to generate substantial trading profits from LIBOR linked exposures.
- ☐ Furthermore, global regulators have noted that the representativeness of LIBOR as a funding rate for banks has reduced significantly in comparison to Alternative Reference Rates (ARRs).

Announcement from Regulators

- The Financial Conduct Authority (UK) announced the phase out of London Interbank Offered Rate (LIBOR) by the end of 2021. In response to this, regulators from various jurisdictions have taken steps to transition away from these deeply embedded IBORs.
- The Reserve Bank of India (RBI) issued a letter to all Indian banks on 6th August, 2020 (CO.FMRD.DIRD. 49/14.02.001/2020-21), urging them to prepare for this large scale transition.

Impact on India

- In India, LIBOR is linked to derivative contracts, foreign currency term loans, foreign currency demand loans, trade finance loans and external commercial borrowings.
- Additionally, an Indian benchmark rate, i.e. Mumbai Interbank Forward Offer Rate (MIFOR) is derived from LIBOR and approximately \$1 trillion worth of derivative contracts are linked to MIFOR.

Alternative Reference Rates (ARRs)



LIBOR

USD LIBOR

GBP LIBOR

EUR LIBOR

CHF LIBOR

SGD SOR

JPY LIBOR/TIBOR



Alternative Reference Rates

SOFR	Secured Overnight Financing Rate	
SONIA	Sterling Overnight Index Average	
ESTR	Euro Short-term Rate	
SARON	Swiss Average Rate Overnight	
TONAR	Tokyo Overnight Average Rate	
SORA	Singapore Overnight Rate Average	

- Average daily trading volumes of ARRs continue to rise. There was good pickup in SOFR based trades driven by the CCPs switching from Fed Funds to SOFR discounting in Oct 2020.
- By April 2021, more than half of new GBP Swap trades were based on SONIA. Rapid progress is being made in GBP, while for other major currencies it has been gradual.

All ARRs mentioned above are **overnight** reference rates

Administrator

Secured/Unsecured

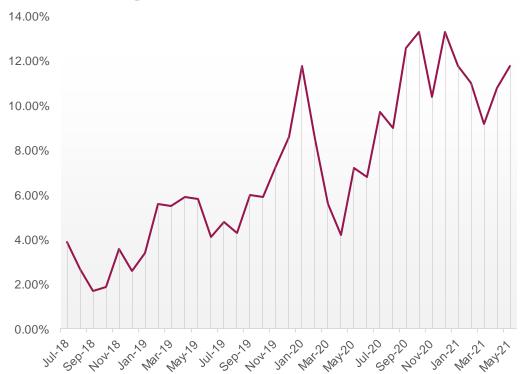
Federal Reserve of New York	Secured O/N Rate	
Bank of England	Unsecured O/N Rate	
ECB	Unsecured Wholesale EURO borrowing	
SIX Swiss Exchange	Secured O/N Rate	
ВоЈ	Unsecured O/N Rate Market	
MAS	Unsecured O/N Rate	

- □ In Europe, EUR LIBOR will be discontinued by December 2021 whereas EURIBOR is not expected to cease in the near future. However, ECB has recommended the transition to ESTR as a fallback rate and for replacing EUR LIBOR.
- □ Progress in JPY has been very gradual, and Japan plans to take a multiple rate approach wherein Domestic TIBOR is expected to continue with TONAR. In addition, EuroYen TIBOR is expected to discontinue after the cessation of JPY LIBOR.

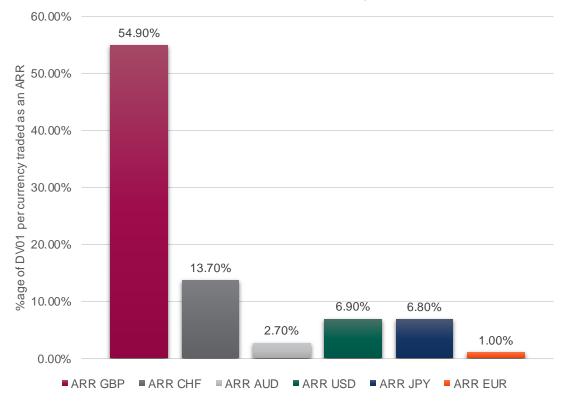
ARR Adoption Indicator (ISDA)



ARR Adoption: ARR Notional as a %age of total notional traded



ARR Adoption in May 2021







Transition Timelines

Key Differences

Transition Timelines



LIBOR Setting	Last date of publication/ representativeness	Index Cessation Effective Date	ISDA Spread Adjustment Fixing Date
CHF LIBOR			
All CHF LIBOR settings PERMANENT CESSATION	December 31, 2021	January 1, 2022	March 5, 2021
EUR LIBOR			
All EUR LIBOR settings PERMANENT CESSATION	December 31, 2021	January 1, 2022	March 5, 2021
GBP LIBOR			
Overnight, 1-week, 2- month and 12 month GBP LIBOR settings PERMANENT CESSATION	December 31, 2021	January 1, 2022	March 5, 2021
1-month, 3-month and 6-month GBP LIBOR Settings CEASE or SYNTHETIC BASIS	December 31, 2021	January 1, 2022	March 5, 2021

Source: Financial Conduct Authority 'FCA announcement on future cessation and loss of representativeness of the LIBOR benchmarks'.

Transition Timelines



LIBOR Setting	Last date of publication/ representativeness	Index Cessation Effective Date	ISDA Spread Adjustment Fixing Date
JPY LIBOR			
Spot next, 1-week, 2-month and 12-month JPY LIBOR settings PERMANENT CESSATION	December 31, 2021	January 1, 2022	March 5, 2021
1-month, 3-month and 6-month JPY LIBOR Settings CEASE or SYNTHETIC BASIS	December 31, 2021	January 1, 2022	March 5, 2021
USD LIBOR			
Overnight and 12-month USD LIBOR settings PERMANENT CESSATION	June 30, 2023	July 1, 2023	March 5, 2021
1-week and 2-month USD LIBOR settings PERMANENT CESSATION	December 31, 2021	July 1, 2023	March 5, 2021
1-month, 3-month and 6-month USD LIBOR Settings CEASE or SYNTHETIC BASIS	June 30, 2023	July 1, 2023	March 5, 2021

Source: Financial Conduct Authority 'FCA announcement on future cessation and loss of representativeness of the LIBOR benchmarks'.

ISDA Spread Adjustment (Fixed on 5th March, 2021)



USD LIBOR

Tenor	Spread Adjustment
O/N	0.00644%
1w	0.03839%
1m	0.11448%
2m	0.18456%
3m	0.26161%
6m	0.42826%
12m	0.71513%

GBP LIBOR

Tenor	Spread Adjustment	
O/N	-0.0024%	
1w	0.0168%	
1m	0.0326%	
2m	0.0633%	
3m	0.1193%	
6m	0.2766%	
12m	0.4644%	

EUR LIBOR

Tenor	Spread Adjustment	
O/N	0.0017%	
1w	0.0243%	
1m	0.0456%	
2m	0.0753%	
3m	0.0962%	
6m	0.1537%	
12m	0.2993%	

CHF LIBOR

Tenor	Spread Adjustment	
S/N	-0.0551%	
1w	-0.0705%	
1m	-0.0571%	
2m	-0.0231%	
3m	0.0031%	
6m	0.0741%	
12m	0.2048%	

JPY LIBOR

Tenor	Spread Adjustment	
S/N	-0.01839%	
1w	-0.01981%	
1m	-0.02923%	
2m	-0.00449%	
3m	0.00835%	
6m	0.05809%	
12m	0.16600%	

Source: Bloomberg



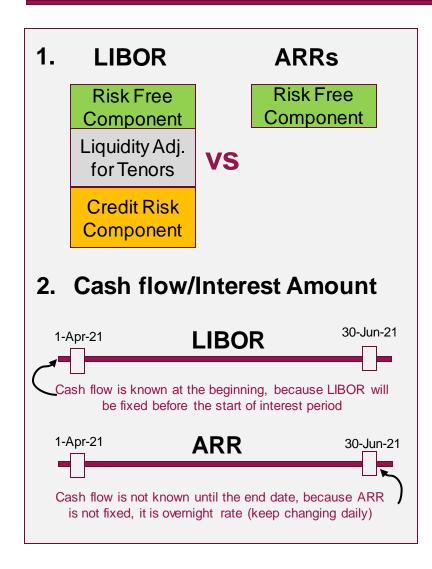
"Global regulators have issued supervisory guidance to limit new use of USD LIBOR after the end of 2021"

In other words it is expected that the **Bank will not offer fresh Derivative/Cash products**

that are linked to LIBOR after 31st December, 2021

Key differences between LIBOR and ARRs





Key Aspects	LIBOR	ARRs	
Calculation Methodology	Based on panel bank submissions	Based on Actual Transactions	
Term Structure	Using Forward-looking tenors ON/SN, 1W, 1M, 2M, 3M, 6M and 12M	USING BACKWARG-IOOKING U/N RATES	
Credit Premium	Credit Risk Premium included in the rates	No Premium, it is Risk Free rates (in some cases not completely risk free as some rates are unsecured)	
Methodology	All 5 Currencies follow same methodology	Each Currency has different methodology	
Publication Time	All 5 Currencies/7 tenors at 11:55 am London time on each applicable London business day	Rates for each of the 5 currencies will be published daily at different times by 5 different administrators and regulated by 5 different regulators	





Contract Remediation

Derivatives Contracts

Loan Contracts

Contract Remediation



Existing contracts (maturing beyond the LIBOR cessation dates)

Contract remediation and repapering is required. All the existing contracts (maturing beyond the respective LIBOR cessation date) need to be remediated on the basis of developed fallback language.

Fallback language - It refers to the provision which defines the process to identify a replacement rate if benchmark rate is not available.

Fallback language in Existing contracts

Derivatives

The current fallback language in existing derivative contracts is not sufficient to address the permanent cessation of LIBOR. While it provides a solution when benchmark rates are temporarily unavailable (e.g. owing to a natural calamity in London because of which panel banks are unable to provide a quote) it will not address the situation where benchmark rates are permanently unavailable.

Loans

- Loan contracts which are linked to LIBOR and are maturing after the respective cessation dates may be amended to incorporate fallback provisions where necessary.
- Long Term Facility Agreements will also require amendments

Derivatives Contracts (ISDA)



NEW CONTRACTS ISDA has published a **Supplement (which came into effect on 25**th **January 2021) to its 2006 Definitions**, all new cleared and non-cleared contracts derivative trades that reference the definitions will automatically incorporate the new Fallbacks.

2020 IBOR Fallbacks Supplement

To incorporate IBOR Fallback Provisions as an amendments to the 2006 ISDA Definitions

LEGACY CONTRACTS ISDA has published a **Protocol** that enables parties to introduce the new Fallbacks included in the Supplement in existing ISDA Master Agreements, ISDA Credit Support Documents and Confirmations, provided they are Protocol covered documents. The Protocol Effective Date was 25th January 2021. The Protocol will allow firms to include the new Fallbacks into their existing trades with other parties that choose to adhere. Currently there is no cut-off date for adhering to the Protocol.

2020 IBOR Fallbacks Protocol

To incorporate Supplement terms in existing transactions – Multilateral Implementation

Bilateral Documents

For the firms who decide not to adhere to the ISDA Protocol

Loans – Bilateral negotiations



1. Unlike Derivatives contracts, loan products do not have any uniform fallback language. Counterparties must negotiate outstanding LIBOR linked loan contracts, bilaterally.

2. Hardwired Approach:

- 1. Parties agree to switch rates out of LIBOR into an alternate rate
- 2. Parties agree on the methodology of computing the alternate rate
- 3. Parties are advised to negotiate hardwired approaches for legacy contracts. The alternative, a 'rate switch' clause in agreements now and methodology later, will entail extra legal costs and uncertainty.
- 4. Parties must also ensure that any new LIBOR linked contracts (prior to transition date) include a hardwired clause to switch out of LIBOR into ARR on respective transition dates.

LMA: https://www.lma.eu.com/documents-guidelines/documents#reference-rate-selection-agreement144

ARRC: https://www.newyorkfed.org/arrc/fallbacks-contract-language





Fallback Methodology

Derivatives and Loans

Replacing LIBOR in Legacy Contracts



3m LIBOR

- = 3m risk free rate
- + Interbank credit spread

replace with

All – in Fallback Rate

- = SOFR compounded in arrears
- + Historical median of spread between LIBOR and SOFR

Derivatives – ISDA Fallbacks Methodology



The methodology used in the calculation of the IBOR fallbacks. It was determined through a series of market-wide consultations conducted by ISDA.

All-in Fallback Rate*



Adjusted Reference Rate*



Spread Adjustment

Adjusted Reference Rate

- Overnight 'risk-free' rate compounded to provide a term rate
- Set in arrears

Spread Adjustment

- Median spread between IBOR and adjusted reference rate over a five-year historical period
- Becomes a fixed value when the IBOR cessation is triggered (5th March 2021 is the 'Spread Adjustment Fixing Date' for all LIBOR Tenors across all LIBOR currencies – refer slide 12 for further details)

NOTE: The selected methodology is fixed and cannot be altered without ISDA conducting further market consultations.

Interest Period Adjustment - Lookback with Observation Shift

- Interest calculation period is shifted 2 Business days backwards (Observation Shift)
- Interest calculation period ends on 2 Business days prior to the Payment Date
- So, Rate is known some days before the payment date.

*Published by Bloomberg based on the Methodology defined in the Bloomberg IBOR Fallback Rate Adjustment Rule Book

FBIL – Adjusted and Modified MIFOR



☐ Mumbai Interbank Forward Offer Rate (MIFOR) is also derived from LIBOR and approximately \$1 trillion worth of contracts are linked to MIFOR. Hence, phase out of LIBOR will raise issues related to existing contracts and methodology used to calculate rates like MIFOR.

Current Method

FBIL MIFOR = f(USDINR Forward Premia, USD LIBOR)

Computed for 6 tenors, viz. the Overnight, 1 month, 2 month, 3 month, 6 month and 12 month

- IBA (Indian Banking Association) has conducted market surveys to understand the market view regarding MIFOR fall back mechanics and to explore the options around replacing the current MIFOR benchmark.
- ☐ FBIL has published calculation methodologies for Adjusted MIFOR and Modified MIFOR

	Adjusted MIFOR*	Modified MIFOR*
Formula	All-in Fallback USD Rate + USDINR Forward Premia All-in Fallback = Adjusted SOFR + Spread Adjustment Value (published by Bloomberg)	Adjusted SOFR + USDINR Forward Premia
Applicable for	Legacy contracts	New contracts
Tenors	6 tenors—O/N; 1m; 2m; 3m; 6m and 12m	
Publishing Time	In-Arrears	

^{*} Simplified for understanding purpose. For actual equation to calculate Adjusted and Modified MIFOR, please refer www.fbil.org.in
There might be some supplement to ISDA IBOR Protocol which will incorporate Adjusted and Modified MIFOR.

Modified MIFOR is based on the draft methodology published on FBIL website.

Publication of FBIL Adjusted MIFOR* Curve



SOFR

Federal Reserve publishes the SOFR next day at 8 am EST



Bloomberg will publish the fallbacks within 45 minutes thereafter under normal circumstances



Publication time would be 45 minutes after the data on rates for all tenors is made available by

Bloomberg, which is at around 19:00 IST

In case of revision of the SOFR rate



Federal Reserve has a restatement window of 6.5 hours

SOFR

A revision of the SOFR rate, which would be published by 2:30 PM EST

All-in fallback Rate

Bloomberg will publish the fallbacks within 45 minutes of that announcement

Revised Adjusted MIFOR Curve

Published on the **next business day** at around **10:30 IST**

^{*} The FBIL Adjusted MIFOR will be published on the website of FBIL www.fbil.org.in

Publication of FBIL Modified MIFOR* Curve



SOFR

Federal Reserve publishes the SOFR next day at 8 am EST of USA

Adjusted SOFR

The FBIL-approved data service provider will publish the Adjusted SOFR within 45 minutes thereafter under normal circumstances

Modified MIFOR Curve

Publication time would be 45 minutes after the Adjusted SOFR for all tenors is made available,

which is at around 19:00 IST

In case of revision of the SOFR rate



Federal Reserve has a restatement window of 6.5 hours

SOFR

A revision of the SOFR rate, which would be published by 2:30 PM EST

Adjusted SOFR

The FBIL-approved data service provider will publish the restated Adjusted SOFR within 45 minutes of that

announcement

Revised Modified MIFOR Curve

Published on the **next business day** at around **10:30 IST**

^{*} The FBIL Modified MIFOR will be published on the website of FBIL www.fbil.org.in Modified MIFOR is based on the draft methodology published on FBIL website.





Loans

Term LIBOR vs O/N ARR

Methodologies for ARR

Hedge Effectiveness

Loans – Term LIBOR vs O/N ARR



O/N ARR - In Arrears

Payment delays, lookbacks and lockouts allow some notice, while reducing the basis with derivative contracts

Reflects the actual behaviour of interest rates during the interest period

Gives little notice before the payment is due

Term LIBOR - In Advance

Based on an average of rates observed before the start of the interest period

Will be known at the start of the interest period

Will create a basis between loan and derivative. Basis can be larger for longer reset periods.

Loans - Methodologies for ARR in arrears



COMPOUND

INTEREST

Simple Interest

- Easy to calculate
- Easy to implement
- Small difference with compounded interest rate (at low levels of interest rates, the differences are close to 0 bps)
- Less accurately reflects the time value of money.
- will lead to inaccurate hedging with derivatives

Payment Delay

- Use of compounded average SOFR over current interest period, paid *k* days after the end of the interest period (e.g. settlement T+2 in line with OIS swaps)
- Structure matches derivatives and could be easily hedged using swaps.
- Rate is known 1d after the end of the interest period (given the fixing lag in SOFR).

Lookback

- Use of SOFR rate published *k* days earlier (Two methods **Observation shift** and **Lag shift**)
- Structure closely matches derivatives and could be approximately hedged using swaps.
- Rate is known some days before the payment date.
- Prepayments are relatively easy

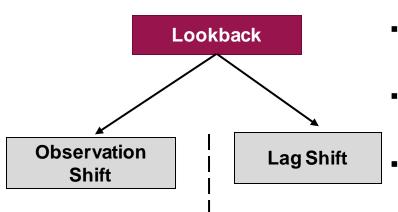
Lockout

- Last few rates fixed at the rate set k days before the end of the interest period (e.g. the rate set on 25th June is used for the remaining days until 30th June)
- Does not exactly match the basic swap structure and can create some hedging basis.
- Further rules needed for prepayments.
- For most of the interest period, the daily rate will be the last known value.

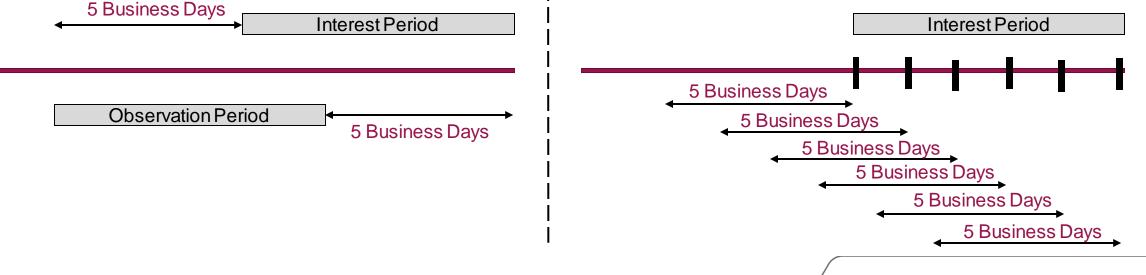
Lookback Methodology



- It creates a Notional Observation
 Period
- No. of calendar days/Business days in the Observation Period
- ARR will be observed for each business day in the **Observation** period



- It creates a Notional rate for each banking day in the Interest Period
- No. of calendar days/Business days in the
 Actual Interest Period
- ARR will be observed for each
 corresponding business day ('x' lag days)
 from each business day in Actual Interest
 Period



Lookback with Observation Shift - Example



Loan Interest	(SOFR + 110 bps)		
Rate	payable monthly		
Coupon Period	01-Dec-20 31-Dec-20		
Observation Shift	5 Business days		
Observation Period	23-Nov-20	23-Dec-20	

Observation Dates	Daily SOFR Rates for Observation Dates	No. of Days in Observation Period	Compounding Factor	Product of Compounding Factor	Compounded SOFR Rate	Full Coupon Rate = (Compounded SOFR + 110 bps)
23-Nov-20	0.050000%	1	1.000001389	1.000069725	0.08097%	1.18097%
24-Nov-20	0.070000%	1	1.000001944			
25-Nov-20	0.080000%	2	1.000004444			
26-Nov-20	Holiday	0	1.000000000			
27-Nov-20	0.080000%	3	1.000006667			
28-Nov-20	Saturday	0	1.000000000			
29-Nov-20	Sunday	0	1.000000000			
30-Nov-20	0.090000%	1	1.000002500			
01-Dec-20	0.080000%	1	1.000002222			
02-Dec-20	0.080000%	1	1.000002222			
03-Dec-20	0.080000%	1	1.000002222			
04-Dec-20	0.090000%	3	1.000007500			
05-Dec-20	Saturday	0	1.000000000			
06-Dec-20	Sunday	0	1.000000000			
14-Dec-20	0.080000%	1	1.000002222			
15-Dec-20	0.090000%	1	1.000002500			
16-Dec-20	0.090000%	1	1.000002500			
17-Dec-20	0.090000%	1	1.000002500			

Compounding Factor (t) =

$$C. F(t-1) \times (1 + SOFR * n)$$

Where:

C.F= Compounding factor SOFR = Daily SOFR rate n = no. of days till next business day

28-Nov-20	Saturday	0	1.00000000
29-Nov-20	Sunday	0	1.000000000
30-Nov-20	0.090000%	1	1.000002500
01-Dec-20	0.080000%	1	1.000002222
02-Dec-20	0.080000%	1	1.000002222
03-Dec-20	0.080000%	1	1.000002222
04-Dec-20	0.090000%	3	1.000007500
05-Dec-20	Saturday	0	1.00000000
06-Dec-20	Sunday	0	1.000000000
	•		
	•		
14-Dec-20	0.080000%	1	1.000002222
15-Dec-20	0.090000%	1	1.000002500
16-Dec-20	0.090000%	1	1.000002500
17-Dec-20	0.090000%	1	1.000002500
18-Dec-20	0.090000%	3	1.000007500
19-Dec-20	Saturday	0	1.000000000
20-Dec-20	Sunday	0	1.000000000
21-Dec-20	0.090000%	1	1.000002500
22-Dec-20	0.070000%	1	1.000001944
23-Dec-20	0.060000%	1	1.000001667

Lookback without Observation Shift (lag shift) - Example



Loan Interest Rate	(SOFR + 110 bps) payable monthly			
Coupon Period	01-Dec-20 31-Dec-20			
Lag Shift	5 Business days			

Coupon Dates	Interest Rate Date based on 5 Business day Lag	Corresponding Daily SOFR Rates	No, of Days ir coupon period	•	Product of Compounding Factor	Compounded SOFR Rate	Full Coupon Rate = (Compounded SOFR + 110 bps)
01-Dec-20	23-Nov-20	0.050000%	1	1.000001389	1.000070002	0.08129%	1.18129%
02-Dec-20	24-Nov-20	0.070000%	1	1.000001944			
03-Dec-20	25-Nov-20	0.080000%	1	1.000002222			
04-Dec-20	27-Nov-20	0.080000%	3	1.000006667			
05-Dec-20	Saturday	NA	0	1.000000000			
06-Dec-20	Sunday	, NA	0	1.000000000			
07-Dec-20	30-Nov-20	0.090000%	1	1.000002500			
08-Dec-20	01-Dec-20	0.080000%	1	1.000002222			
09-Dec-20	02-Dec-20	0.080000%	1	1.000002222			
10-Dec-20	03-Dec-20	0.080000%	1	1.000002222			
11-Dec-20	04-Dec-20	0.090000%	3	1.000007500			
12-Dec-20	Saturday	, NA	0	1.000000000			
13-Dec-20	Sunday	, NA	0	1.000000000			
	•		-				
21-Dec-20	14-Dec-20	0.080000%	1	1.000002222			
22-Dec-20	15-Dec-20	0.090000%	1	1.000002500			
23-Dec-20	16-Dec-20	0.090000%		1.000002500			
24-Dec-20		0.090000%		1.000010000			
25-Dec-20	Holiday	, NA	0	1.000000000			
26-Dec-20	Saturday	, NA		1.000000000			
27-Dec-20	,	, NA		1.000000000			
28-Dec-20	18-Dec-20	0.090000%	1	1.000002500			
29-Dec-20	21-Dec-20	0.090000%	1	1.000002500			
30-Dec-20	22-Dec-20	0.070000%	1	1.000001944			
31-Dec-20	23-Dec-20	0.060000%	1	1.000001667			

Compounding Factor (t) =

$$C.F(t-1) \times (1 + SOFR * n)$$

Where:

C.F= Compounding factor SOFR = Daily SOFR rate n = no. of days till next business day

Hedge effectiveness between Loans and Derivatives





Methodology used for calculation of interest rates for loans



Methodology used for calculation of interest rates for Swaps



It reduces the effectiveness of the hedge

For hedging purpose, clients may prefer loans which are similar to the Derivative Methodology





ISDA IBOR Fallbacks

Protocol

Supplement

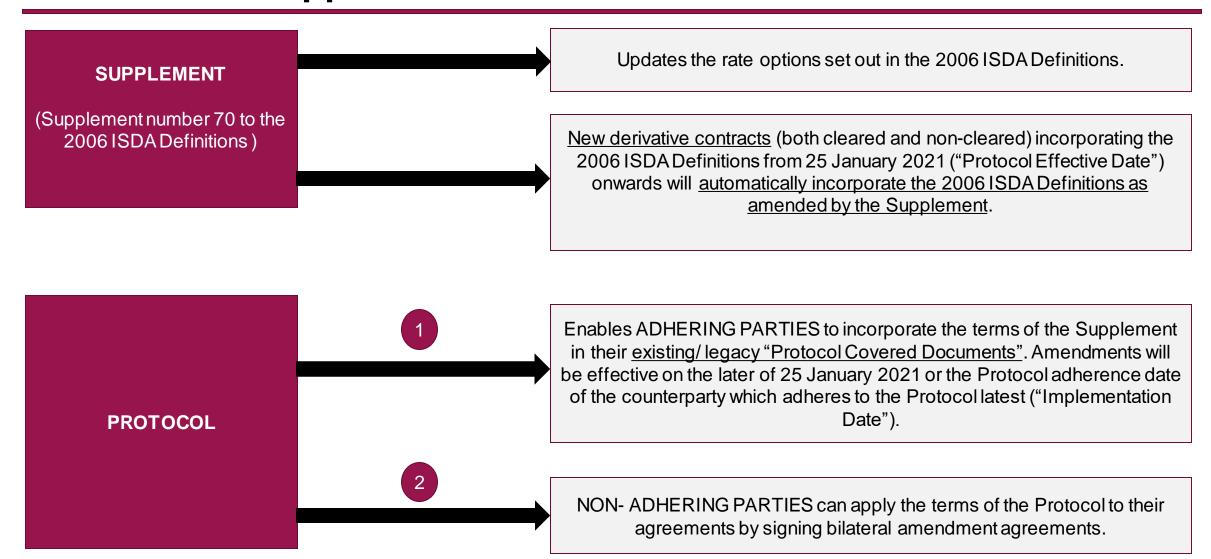
Derivative Contracts



- □ Currently, derivative contracts reference specific fallback rates as set out in the 2006 ISDA Definitions. These fallback rates under the 2006 ISDA Definitions typically require the counterparty that is the calculation agent to obtain quotes from major dealers in the relevant interdealer market.
- If an IBOR has been permanently discontinued (for e.g. the proposed phasing out of LIBOR rates), it is likely that major dealers would be unwilling and/or unable to give such quotes. It is also likely that quotes could vary materially across the market.
- ☐ The adjusted proposed ARR in the relevant currency would apply as a fallback following a permanent cessation of the IBOR in that currency.
- In order to ensure that fallbacks are incorporated in the derivative contracts, ISDA published the following documents on 23 October 2020:
 - 1. 2020 IBOR Fallbacks Supplement ("Supplement")
 - 2. 2020 IBOR Fallbacks Protocol ("Protocol")
 - 3. Template Bilateral Documents

Overview of Supplement and Protocol





Protocol Covered Documents



For a document to be classified as a 'Protocol Covered Documents' one of the following three criteria should be met:

- A document (Master Agreement, Credit Support Document or Confirmation) should incorporate the 2006 ISDA Definitions or certain earlier ISDA definitions (i.e., the 2000 ISDA Definitions, the 1998 ISDA Euro Definitions, the 1998 Supplement to the 1991 ISDA Definitions or the 1991 ISDA Definitions) to incorporate the relevant rate options (each a "Covered Definition Booklet"),
- ii. referencing an IBOR "as defined" in or with the meaning given in a Covered ISDA Definitions Booklet, or
- iii. referencing an IBOR howsoever defined.

How to Adhere to the Protocol



- □ Currently there is no cut-off date to adhere to the Protocol, but ISDA reserves the right to designate a closing date of the IBOR Fallbacks Protocol by giving at least 30 days' calendar notice on the "ISDA 2020 IBOR Fallbacks Protocol" section of its website at www.isda.org (or by any other suitable means).
 - 1) To adhere to the Protocol, market participants can go to the Protocols section of the ISDA website to generate and sign the adherence letter.
 - The PDF can then be uploaded on the ISDA website.
 - 3) Once ISDA has accepted the adherence letter, it will send an email confirmation of adherence to the adhering party. Agents may adhere to the Protocol on behalf of their clients.
- The Adherence Letter can be signed by any individual who has the legal authority to bind the adhering institution. Each Adhering Party (subject to the type of ISDA member) is not required to submit a fee to ISDA if it submits its Adherence Letter prior to the Protocol Effective Date. If it submits its Adherence Letter on or after the Protocol Effective Date, it must submit a one-time fee of U.S. \$500 to ISDA on or before submission of its Adherence Letter.

For more information, please visit the ISDA website (https://www.isda.org/protocols/) or reach out to your Axis Bank Relationship Manager.

Possible Scenarios (ISDA Protocol)



1. For Clients/Counterparties who have outstanding IBOR linked exposures with Axis Bank (as on 25th January, 2021)

Protocol needs to be signed or enter into Bilateral Agreement. If Protocol is signed by both parties, no amendment is required in any of the documents (ISDA, CSA, and Confirmations) provided all are protocol covered documents.

2. For Clients/Counterparties who **do not** have outstanding IBOR linked exposures with Axis Bank (as on 25th January, 2021) but executed ISDA and CSA **before** 25th January, 2021

Protocol needs to be signed or enter into Bilateral Agreement. If Protocol is signed by both parties, no amendment is required in any of the documents (ISDA and CSA) provided all are protocol covered documents.

What will be relevant is the date of the later of the two parties adhering to the Protocol. If the Protocol is signed all Counterparties who do not have outstanding IBOR linked transactions as on such date but executed ISDA and CSA before such date, no amendments are required to be entered into.

Possible Scenarios (ISDA Protocol)



3. For Clients/Counterparties who do not have outstanding IBOR linked exposures with Axis Bank (as on 25th January, 2021) but executed ISDA and CSA after 25th January, 2021 (or) New clients/Counterparties who are executing ISDA after 25th January, 2021

No action required

(Since ISDA, CSA, and Confirmations are referencing to 2006 Definitions)

4. Clients/counterparties who have existing ISDA agreements with Axis Bank and wanted to do new SOFR/ARR trades.

They can enter into SOFR trades without adhering to the Protocol, for the purposes of ensuring smooth LIBOR transition they should make reference to the 2006 definitions under the confirmation in relation to such trades.

ISDA IBOR Protocol Matrix



ISDA IBOR Protocol Matrix	LIBOR linked Derivative transactions entered before 25-Jan-2021 (outstanding beyond LIBOR cessation)	LIBOR linked Derivative transactions entered on or after 25-Jan-2021 (outstanding beyond LIBOR cessation)	Protocol or Bilateral Agreement is required / confirmation to be amended Protocol or Bilateral Agreement is required for some transactions Protocol or Bilateral Agreement is not required
ISDA executed before 25-Jan-2021		If "as revised from time to time" is mentioned in relation to the 2006 ISDA Definitions, there is no need to adhere to the Protocol/enter into a Bilateral Agreement If not, Protocol needs to be signed or enter into Bilateral Agreement.	1 & 2 - ISDA reserves the right, in its sole and absolute discretion, upon at least thirty calendar days' notice on the "ISDA 2020 IBOR Fallbacks Protocol" section of its website at www.isda.org (or by other suitable means), to designate a closing date of this Protocol (such closing date, the "Cut-off Date"). After the Cut-off Date, ISDA will not accept any further Adherence Letters to this Protocol. So, it is in the interest of the counterparty to adhere to the Protocol as early as possible 3 - Since the ISDA is executed on or after 25 Jan
ISDA executed on or after 25-Jan-2021	For transactions executed before the Effective Date, with an ISDA Confirmation, the respective Confirmation will have to be amended to include reference to the 2006 ISDA Definitions, as amended and supplemented from time to time.	4 No action required	2021 (i.e. the "Effective Date"), as long as ISDA incorporates the 2006 ISDA Definitions by reference in the agreement, as amended and supplemented from time to time, there is no need to adhere to the Protocol or enter into a Bilateral Agreement for all transactions entered on or after the Effective Date. 4 - Provided that the ISDA/ Confirmation incorporates the 2006 ISDA Definitions by reference, as amended and supplemented from

supplemented from time to time.

40

time to time

Thank You

