

A. Background

In July 2017, the Chief Executive of the Financial Conduct Authority (FCA) announced¹ the beginning of the end of the panel-based London Interbank Offered Rate (LIBOR). Since then, numerous regulatory and administrative bodies have come together to plan the smooth transition of LIBOR-benchmarked financial instruments and transactions worldwide to Alternative Reference Rates (ARRs). The most commonly used currency and tenors in LIBOR (i.e. the USD LIBOR of one-month, three-month and six-month tenors) will cease publication after 30 June 2023.

As we are on the cusp of the cessation of USD LIBOR, both financial and non-financial organisations will need to take into consideration various aspects of the transition. The Reserve Bank of India (RBI) announced² its roadmap for LIBOR transition in July 2021, and subsequently also released guidance³ for existing financial instruments like external commercial borrowings (ECBs) and foreign currency non-resident (FCNR (B)) deposits.

- 1 https://www.fca.org.uk/news/speeches/the-future-of-libor
- 2 https://www.rbi.org.in/scripts/FS_Notification.aspx?ld=12128&fn=6&Mode=0
- 3 https://www.rbi.org.in/Scripts/NotificationUser.aspx?ld=12204andMode=0





B. Key announcements and guidance from the RBI

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Roadmap for LIBOR transition

- Banks and financial institutions are urged to incorporate robust fallback clauses in existing contracts that are referenced to LIBOR and maturing beyond the cessation date.
- The regulator also urged banks and financial institutions to cease from entering into any new financial contract which is referenced to LIBOR and the Mumbai Interbank Forward Outright Rate (MIFOR) after 31 December 2021.



Introducing Modified MIFOR and Adjusted MIFOR

- The RBI, in association with Financial Benchmarks India Pvt. Ltd. (FBIL) and the Clearing Corporation of India Ltd. (CCIL), has introduced Modified MIFOR and Adjusted MIFOR as ARRs in the domestic financial market
- Adjusted MIFOR has replaced FBIL MIFOR in existing contracts, whereas Modified MIFOR is being used for new contracts entered from 1 January 2022.



The interest rate ceiling on FCNR (B) deposits has been revised by the RBI4 as under:

Period of deposit	Earlier ceiling rate	Revised ceiling rate
1–3 years	LIBOR plus 200 basis points	ARR plus 250 basis points
3–5 years	LIBOR plus 300 basis points	ARR plus 350 basis points

All-in-cost ceiling per annum for ECBs and trade credits (TCs) has been revised by the RBI⁵ as under:

Туре	Earlier ceiling rate	Revised ceiling rate
Existing ECBs	LIBOR plus 450 basis points	ARR plus 550 basis points
New ECBs		ARR plus 500 basis points
Existing TCs	LIBOR plus 250 basis points	ARR plus 350 basis points
New TCs		

 $^{{\}tt 4~https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=12191\&Mode=0}\\$

 $^{5\} https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=12204 and Mode=0$



C. What are the steps taken by leading banks and financial institutions?

1. Assessment of exposure linked to LIBOR

- Leading banks and financial institutions have taken the active step of assessing their existing exposure to all the LIBOR currencies and executing corrective actions based on the insights from this exposure assessment.
- Such assessments are being continued by leading organisations till the final cessation date. They include exposure to benchmark rates which are directly and indirectly linked to LIBOR, across currencies, trading book and banking book products, maturity, geographies and counterparties.



2. Assessment of the impact of transition

- Leading banks have conducted quantitative exercises to assess the impact of transition on their LIBOR-linked portfolio. Emphasis has been given to both banking book products and trading book products for such an impact assessment.
- When it comes to banking book products like loans and borrowings, banks are assessing the impact on the interest computations using daily compounding.
- Similarly, for trading book products like derivatives, which include swaps, forwards, options and futures, impact has been analysed on the fair valuation using new interest rate curves.



3. Incorporating fallback spreads and launching new products

- The FCA and Bloomberg⁶ have published five-year median fallback spreads which act as market indicators for the difference between LIBOR and ARR.
- Banks are incorporating the fallback spreads in their existing financial products which are benchmarked to LIBOR. This step is pivotal from the perspective of maintaining transparency and consistency to the buyers of such products.
- Offerings to new ARR-linked products such as loans referenced to Secured Overnight Financing Rate (SOFR) and Term SOFR have picked up in the recent past.



D. What are the looming challenges around LIBOR transition?

The interest rate ceiling on FCNR (B) deposits has been revised by the RBI as under:

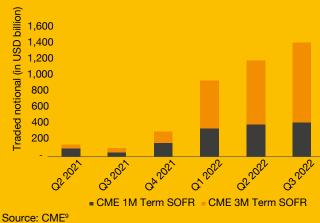
01 Complex and varying market conventions

- One of the primary changes in the interest computation framework for LIBOR-linked products is that they will transition to ARR with daily compounded reset rates.
- Regulators have introduced various conventions like two-day and five-day lookback, lockout, observation shift
 and narrow definition. It is a challenge for banking institutions to bring consistency in their product offerings
 across such conventions.

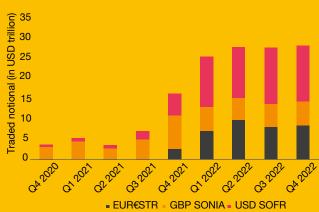
02 Adoption of Term SOFR

- Chicago Mercantile Exchange (CME) has been selected as the official administrator for forward-looking Term SOFR rates. These rates can be used by banks and financial institutions for end user derivatives for the purpose of hedging.
- However, the liquidity of Term SOFR is yet to pick up on a global scale. As of the last calendar quarter of 2022, the total traded notional for CME Term SOFR is around USD 1,425 billion.⁷
- On the other hand, the traded notional for trades linked to overnight USD SOFR is USD 14.3 trillion⁸ in the last calendar quarter of 2022, denoting its higher liquidity and market presence than CME Term SOFR.





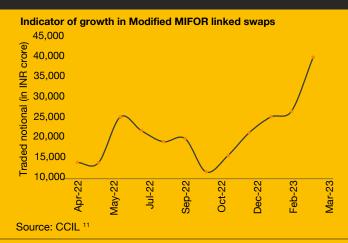
Indicator of growth in overnight ARR linked contracts



Source: International Swaps and Derivatives Association (ISDA)¹⁰

03 Embracing Modified MIFOR

- Modified MIFOR started being traded in the domestic financial market from January 2022. The benchmark has primarily been observed in interest rate and cross-currency swaps.
- In the first fifteen months of its existence, this benchmark rate has shown an uptrend in traded volumes.
- Modified MIFOR is still on its way to completely replacing the earlier benchmark (i.e. FBIL MIFOR) in the financial market. The market share of this benchmark is high among foreign banks and private banks (86.68% and 13.14% respectively).¹²



⁷ https://www.cmegroup.com/articles/whitepapers/cme-term-sofr-solidifies-its-benchmark-position.html

⁸ https://www.isda.org/a/hlxgE/Transition-to-RFRs-Review-Full-Year-2022-and-the-Fourth-Quarter-of-2022.pdf

⁹ https://www.cmegroup.com/articles/whitepapers/cme-term-sofr-solidifies-its-benchmark-position.html

¹⁰ https://www.isda.org/a/hlxgE/Transition-to-RFRs-Review-Full-Year-2022-and-the-Fourth-Quarter-of-2022.pdf

¹¹ https://www.ccilindia.com/Documents/Rakshitra/2023/MAR/Statistics.pdf and https://www.ccilindia.com/Derivatives/Pages/StatisticsArchive.aspx

¹² https://www.ccilindia.com/Documents/Rakshitra/2023/MAR/Statistics.pdf

04. Hedge effectiveness and accounting

- While guidance on transitioning existing LIBOR-linked contracts has been made available by all major global regulators, market participants are awaiting a direction on hedge accounting of such contracts.
- Key enabling factors such as economic relationship, effectiveness testing, hedge documentation and critical term match shall be impacted once the existing hedged item and hedging instrument are transitioned to ARRs.
- Corporates and non-financial institutions that are hedging their exposure using LIBOR-referenced derivatives will be closely monitoring these developments as their internal processes will also be impacted.

E. How can PwC continue to help?

The dawn of ARRs and cessation of LIBOR in the financial industry will require complete transition and overhauling of institutions under the careful oversight of the regulator. The impact shall be seen in both banks as well as corporates.

PwC has been supporting leading public and private sector organisations in the domestic market with LIBOR transition. We have been instrumental in charting the roadmap to the transition and guiding our clients on the journey. We will continue to work with banks and corporates across the lifecycle of the transition to ARRs, including:

- assessing and managing the impact of exposure to LIBOR
- supporting on functional aspects of interest computation incorporating acceptable conventions
- · analysing the impact on risk, pricing and valuation models
- · identifying and implementing systems and process changes
- providing support in system configuration for existing and new contracts
- · furnishing customer communication and outreach templates
- · managing tax and accounting-related implications.



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