

**JYOTI NIVAS COLLEGE (AUTONOMOUS)
POST GRADUATE CENTER
BANGALORE**



SEON

**PRESENTS
E-JOURNAL**

(SEPTEMBER - 2021)

**BY THE DEPARTMENT OF M.COM(FA)
ON**

**LIBOR TRANSITION: PREPARING FOR END
GAME**

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INTRODUCTION

LIBOR stands for London Interbank Offered Rate. It is the one responsible for setting rates for bank on which loan is granted. It is the benchmark interest rate at which major global banks are willing to lend to one another in the International Interbank market for short-term loans. LIBOR was earlier administered by British Banking Association (BBA) but then subsequently the administration was taken over by Intercontinental Exchange (ICE).



LIBOR has grown into set of rates across year curve from overnight to 12 months. It is determined each day and published by intercontinental exchange around 11:30 am. It is calculated for 5 currencies:

1. US Dollar
2. EURO
3. Great Britain Pound
4. Japanese Yen
5. Swiss Frank

It is calculated by obtaining quotes from 18 global banks with high credit rating, for the rate at which they are willing to borrow. These quotes are published to ensure transparency. And has 7 maturity periods: Overnight, one week, 1 month, 2 months, 3 months, 6 month & 12 months.

According to the report, 200 trillion-dollar worth of loans are benchmark to the LIBOR. The change in LIBOR, impacts ROI on floating rate loans world over such corporate loans/bonds, personal loans including consumer loans, home loans, etc.

WHAT IS LIBOR TRANSITION

LIBOR transition is the movement of financial markets away from using LIBOR as the interest rate benchmark to using alternative risk-free benchmark rates (RFR). LIBOR transition will be achieved by considering three categories:

1. Existing financing to remain in place beyond the end of 2021, for which an amendment agreement will be required,
2. New financing to be expected to be placed beyond the end of 2021, which either should use the RFR from the outset or build in a clear contractual mechanism to facilitate conversion to an RFR before the end of 2021.
3. 'Tough legacy' financing, which is already existing and more typically of capital market nature.

The transition from LIBOR will bring considerable costs and risks for financial firms. Since the proposed alternative rates are calculated differently, the payments under contracts referencing the new rates will differ from those referencing LIBOR. The transition will change firms' market risk profiles, requiring changes to risk models, valuation tools, product design and hedging strategies.



WHY IS LIBOR CHANGING

HISTORY

Since the inception of the syndicated mortgage marketplace, pricing for loans has been set via way of means of connection with the hobby charge at which deposits have been supplied via way of means of banks to different top banks in that marketplace – interbank supplied charges or IBORs – with London being the main marketplace – the London interbank supplied charge or LIBOR. This is due to the fact with inside the early days of the mortgage marketplace banks funded their participation in loans via way of means of taking deposits with inside the interbank marketplace for the applicable for ex and tenor (hobby period).

Published LIBORs have been primarily based totally at the panel banks' submissions of the charges the panel banks taken into consideration they might be supplied with inside the interbank marketplace whilst transacting in affordable marketplace size. As the mortgage markets developed, LIBOR become quoted for a huge variety of currencies and tenors and, due to its ease of use, determined its manner right into a huge variety of economic contracts (mainly by-product contracts) and different business preparations as a pricing source.

However, over the years, banks have moved fa far from investment thru the interbank marketplace (it have become an idea in preference to a practice) and now fund themselves from different re-assets. New marketplace participants (together with debt funds, insurers and the like) fund themselves from re-assets aside from the interbank marketplace.

How will LIBOR transition be achieved:

In the styles of transactions on which this newsletter is focused, particularly the ones in which hobby publicity below loans is hedged below associated hobby charge hedging, there are 3 predominant classes to consider:

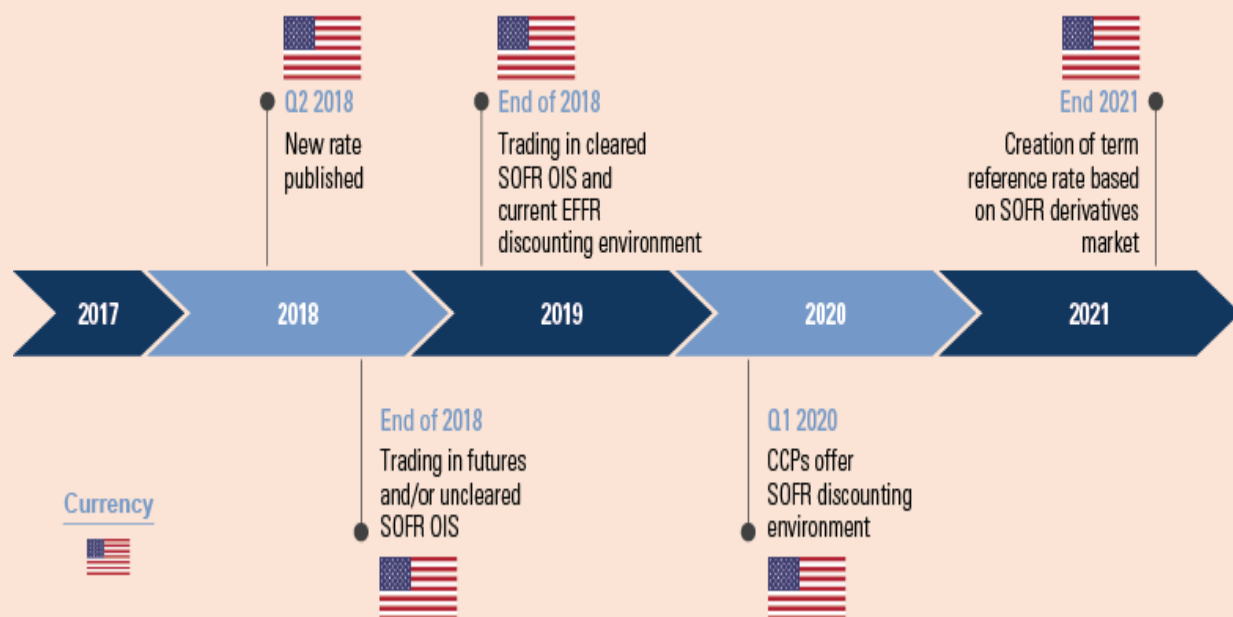
- Current financing predicted to stay in location past the cease of 2021, for which a modification settlement could be required; new financing predicted to be in location past the cease of 2021, which have to both use the Risk-free rate from the outset or have constructed in a clean contractual mechanism to facilitate conversion to a Risk-free rate earlier than the cease of 2021 and "hard legacy" Financing, that are current financing, greater usually of a capital markets nature, in which it isn't always notion to be feasible to attain the consensus required many of the lenders to make the vital amendments. Tough legacy financing are out of doors the scope of this newsletter and are predicted to be resolved the use of legislation.

THE REPLACEMENT OF LIBOR:

LIBOR is one of the principal loan cost benchmarks utilized in monetary business sectors. It decides loan costs for monetary agreements all throughout the planet, worth trillions of pounds. Since the worldwide monetary emergency in 2008-09, movement in the business sectors that

LIBOR measures has decreased. The low volume of hidden exchanges implies that LIBOR is as of now not feasible and has placed its future suitability in question. In Walk 2021, the Financial Conduct Authority (FCA) affirmed Opens in another window that most LIBOR boards would stop following 31 December 2021.

Hazard free rates (or RFRs i.e., Risk free rates), which are strong options in contrast to LIBOR, are as of now accessible. These incorporate the Sterling Overnight Index Average (SONIA) benchmark, these are benchmarks for the most part dependent on overnight store rates. They are viewed as stronger as they depend on a bigger volume of recognizable exchanges. They are thought of "risk free".



LIBOR is a term rate as is set preceding the initiation of the premium time frame to which it relates. This empowers a borrower to spending plan. The borrower will actually want to compute at the beginning of the interest time frame the measure of interest which will be payable. Most danger free rates, for example, SOFR are in reverse looking and are distributed the day after the period to which they relate. This can make budgeting troublesome as, depending upon the estimation technique picked, the borrower may just know on the interest installment date itself how much interest it owes.

They don't work in a similar sort of premium for term liquidity or bank credit risk (acknowledge hazard) as LIBOR. As a forward-looking rate, LIBOR contains a component of valuing dependent on the idea that one bank is assuming acknowledgment hazard on the other for the significant tenor. This isn't the situation with risk free rates. Therefore, premium determined over a period utilizing a risk-free rate will be lower than revenue determined over the same time frame at LIBOR.

LIBOR is managed in London and published on approximately 11 am London time for various different currencies. Hazard free rates are each managed locally in every currency jurisdiction (money ward) and published at various occasions.

ALTERNATIVE REFERENCE RATES:

SONIA

The Sterling Overnight Index Average, shortened SONIA, is the viable overnight financing cost paid by banks for unstable exchanges in the British Sterling market. It is utilized for the time being subsidizing for exchanges that happen in off-hours and addresses the profundity of overnight business in the commercial center.

The Sterling Overnight Interbank Average Rate furnishes dealers and monetary foundations with an option in contrast to the London Interbank Offered Rate, or LIBOR, as a benchmark loan fee for momentary monetary exchanges. The Sterling Overnight Index Average, or SONIA, is a record of exceptionally transient unsecured loans (unstable credits) among and between U.K. monetary foundations.

Launched in 1997, a few changes made in 2017 and 2018 have driven the SONIA rate to be the favored risk-free benchmark loan cost by U.K. security dealers. This comes as the LIBOR rate, and its method for computation, has gone under analysis for fixing and misrepresentation o criticism.

SOFR:

The Secured Overnight Financing Rate (SOFR) is a benchmark interest rate for dollar-designated derivatives and advances that is taking the place of the London interbank offered rate (LIBOR). Interest rates trades on more than \$80 trillion in notional obligation changed to the SOFR in

October 2020. This progress is expected to have increase in long term liquidity which also helps in resulting in trading short term volatility in derivatives SOFR depends on exchanges in the treasury repurchase market and is viewed as desirable over LIBOR since it depends on information from recognizable exchanges instead of on assessed borrowing rates.

ESTR:

The Euro Short-Term Rate (ESTR) is an interest rate benchmark that mirrors the overnight borrowing expenses of banks inside the Eurozone. The rate is determined and distributed by the European National Bank (ECB). The ESTR is replaced with the past euro overnight index average (EONIA) and euro interbank offered rate (EURIBOR) to turn into the benchmark for the European Association (EU) and European free trade association (EFTA). This is on the grounds that EURIBOR and EONIA neglected to meet the prerequisites set out in the EU's new benchmark guidelines, which expresses that all interbank rates should be founded on information rather than estimating and studies.

SARON:

SARON represents Swiss Average Rate Overnight Rate for the time being and addresses the overnight loan cost of the got funding market for the Swiss Franc. It depends on exchanges and statements posted in the Swiss repo market. Universally, overnight loan costs assume a huge part in deciding the yield bend. Consequently, repo exchanges have turned into a vital mainstay of the currency markets - even the Swiss Public Bank (SNB) utilizes repo exchanges as a method for carrying out its money related arrangement. This instrument permits market members to deal with their momentary short-term refinancing more readily, addressing a significant instrument for their day-by-day liquidity the managing activities. Henceforth, through the Swiss Reference Rates, an extra instrument was made which gives an option in contrast to the Swiss Franc Libor.

TONAR

Tokyo Overnight Average Rate (TONAR) is an unstable or unsecured interbank overnight loan fee and reference rate for Japanese yen. Since 2016, the Bank of Japan has suggested TONAR as the favored risk-free reference rate. TONAR is suggested as a trade for yen LIBOR, which is being eliminated toward the finish of 2021.

CHALLENGES OF DRIFTING AWAY FROM LIBOR



Problems with the LIBOR changeover extend beyond fresh issuance that isn't properly matched to RFRs to older contracts. According to recent estimates from the ARRC, a group of private-market participants assembled by the Fed to assist in the smooth transition away from USD LIBOR rates, legacy exposures referencing USD LIBOR might be worth \$220 trillion.

Despite the fact that many of these instruments are derivatives or will expire by June 2023, the market might still be left with a five trillion-dollar USD exposure in USD LIBOR referencing cash products (such as loans, bonds, and securitized products), which is a major issue.

One of the major concerns is that legacy LIBOR contracts may lack adequate backup language to deal with the permanent discontinuation of USD LIBOR. The new LIBOR legislation, which was just put into law by the State of New York, mitigates the negative economic consequences of legacy LIBOR fallback wording. The law wipes out any existing wording and substitutes it with the ARRC's suggested fallback language if the contract has no fallback or the fallback is based on LIBOR.

The ARRC has released suggested fallback language, stating that contracts using such language will default to SOFR plus a set spread adjustment.

IMPACT ON VARIOUS INDUSTRIES OR SECTORS

For financial firms, the move away from LIBOR will entail significant costs and risks. Payments under contracts referencing the new rates will differ from those referencing LIBOR because the proposed alternative rates are calculated differently. Risk models, valuation tools, product design, and hedging strategies will all need to change as a result of the transition.

Even if products that reference LIBOR remain in effect, it may become unavailable. In the event that LIBOR is unavailable, these contracts usually include "fallback provisions" that specify contract terms. If the period of unavailability is brief, as anticipated when the contracts were written, the losses incurred are minimal.

LIBOR is a benchmark interest rate which acts as a base for interbank loans. Banks across the world provide unsecured funds to each other at the rate obtained by adding spread (Bank's Profit) to the existing LIBOR rate. This LIBOR is published daily at 11:00 AM in the London market. It comes in 5 currencies (USD, Euro, Pound, Yen and Franc) & 7 maturities.

Computation of LIBOR:-

ICE (Intercontinental Exchange benchmark) or IBA asks the top 18 banks in the world to submit their favorable rate of interest to provide loans to other banks. From the obtained rates, ICE eliminates the lowest and highest interest rates given. Further, it calculates the average of the remaining sixteen interest rates. This average goes on to be called "LIBOR".

LIBOR SCANDAL

The LIBOR scandal was a widely reported scam in which various renowned financial institutions were accused of being colluded with each other & manipulating the London Interbank Offered Rate i.e., LIBOR. The manipulation of LIBOR had its beginning in 2003. The case went through numerous unofficial investigations till it officially came into light in 2012.



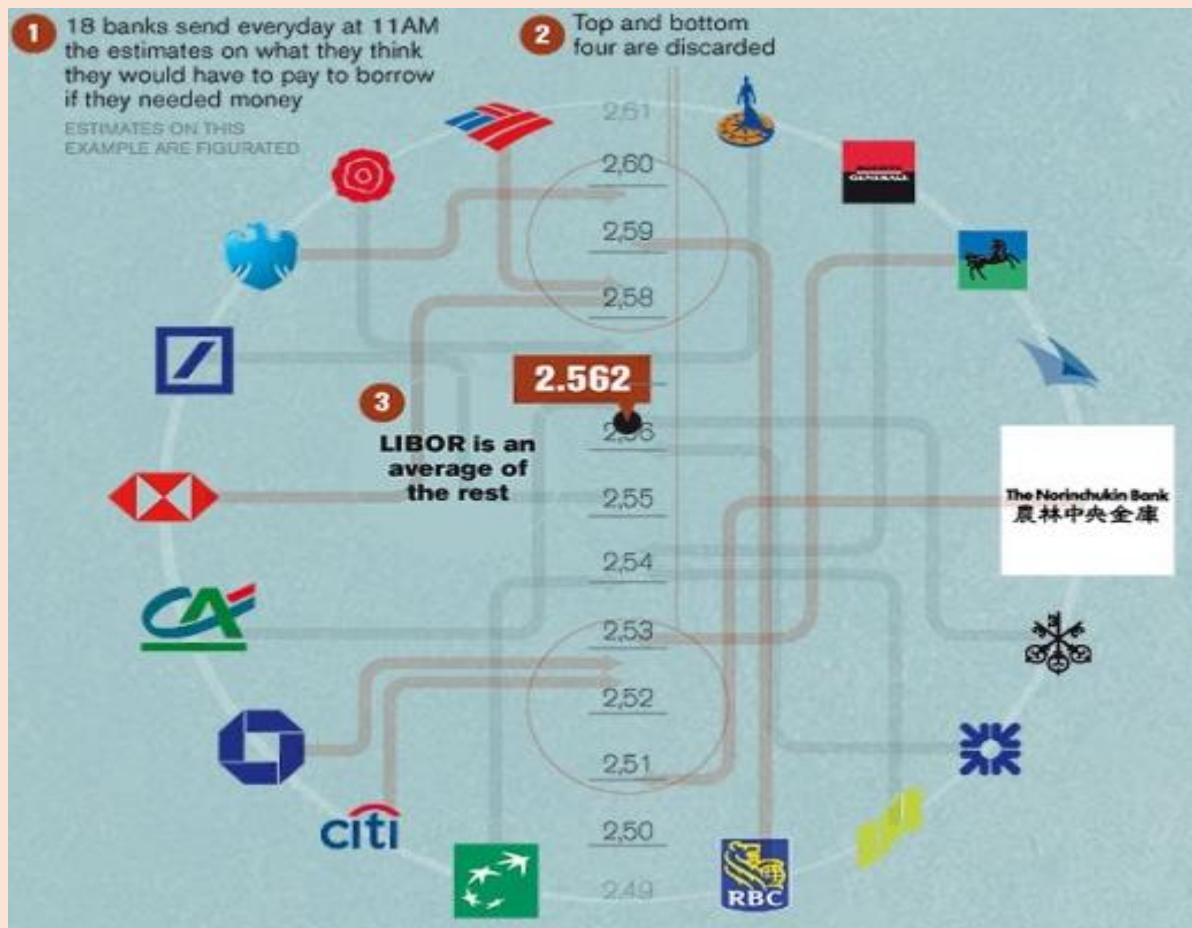
In July 2012, an article was published by the Financial Times stating that manipulation of LIBOR rates has been a common case since 1991. Since then, a number of relative articles came up, including from BBC as well as Reuters. This led to the widespread of the scam & it being the topic of discussion around the world.

In August 2012, a subpoena was sent by a joint New York-Connecticut investigation of LIBOR to the Royal Bank of Scotland, Barclays, HSBC holdings, JPMorgan, Deutsche Bank, UBS and the Citi Group. It was sent to gather information related to communication between the executives of these banks which supposedly led to a collusion & furthermore, manipulation of the LIBOR rate. Thus, the scam became evident & led to major consequences in these institutions.

EARLY REPORTS & INVESTIGATIONS:-

- 1) The Wall Street Journal article published in 2008.
- 2) Criminal investigation conducted by the US Department of Justice.
- 3) Investigation by the Canadian Competition Bureau started in January 2011.
- 4) Investigation conducted by the United States Congress.
- 5) UK Serious Fraud Office.

UNDERSTANDING THE SCANDAL:



As discussed above, LIBOR rate is calculated by deriving the average of the rates submitted by the leading banks across the world. It means that these banks have a major role to play in the whole scenario. Now, what some of these leading banks did is they intentionally submitted artificial rates, higher or lower as the case may be, to support their own derivatives and trading activities. They did this to benefit their traders.

Manipulation of Libor :

Barclays:- During the global financial crisis of 2007-08, the bank was going through a period of disruption. Thus, to make the bank look less risky, Barclays told the calculators that they can provide unsecured funds at a relatively inexpensive interest rate. Hence, manipulating the LIBOR downwards. This provided a sense of stability to the bank. In 2012, to the investigation with some regulatory authorities, the bank admitted to being involved in the fraudulent activities that led to the scandal. They're responsible for making other banks alter their rates as well.

UBS:- The investigation of UBS primarily focused on THOMAS HAYES, who is considered as the mastermind of the whole scenario. During his three-year stint at UBS, he managed to make hundreds of millions profit for the bank due to LIBOR rigging.

IMPACT OF LIBOR MANIPULATION:

It is quite difficult to know the exact effect of the LIBOR scandal but there are many ways in which it could impact the global market.

For example:-

- Many banks across the world use LIBOR as a base for setting interest rates for consumer loans. Any downward or upward trend in the LIBOR will lead to fluctuation in these interest rates.
- Since these rates are used for the pricing of derivatives, it had a huge impact on the return of the investors.
- The scandal has decimated public trust in the market.
- It has imposed huge penalties to the banks that are guilty of manipulation.
- It has adversely impacted the banks' ability to hold enough capital to satisfy regulatory requirements.

CONSEQUENCES

- In view of the scandal, the Financial Conduct Authority (FCA) of Britain made the Intercontinental Exchange's Benchmark Administration (IBA) the responsible authority for the LIBOR. Earlier, it was the responsibility of the British Bankers' Association (BBA).
- The FCA has decided to support LIBOR only till 2021.
- The decrease in reliability & credibility of LIBOR as a benchmark rate among the public has led to it being replaced by an alternative system.
- It will be replaced by Secured Overnight Financing Rate (SOFR).
- As a part of this replacement, one-week and two-month USD LIBOR will not be published after December 2021.

Penalties

As a result of this huge scandal, multiple financial settlements and prosecutions took place led by US & some regulatory bodies. An estimated total of \$ 9 billion was paid by the guilty banks as penalties.

➤ Barclays:

In 2012, Barclays paid a total of \$435 million to the regulatory authorities of the U.S. and the U.K. Additionally, in 2016, they paid \$100 million to the U.S. for their role in the manipulation of dollar-denominated LIBOR rate.

➤ UBS:

On the complaint of U.S. Commodity Futures Trading Commission, UBS paid the biggest LIBOR scam related fine of \$1.5 billion in December 2012 to global regulators.

➤ RBS:

In 2013, the regulatory authorities of the U.S. and U.K. fined RBS \$612 million for LIBOR rigging. Furthermore, a combined penalty of \$2 billion was imposed on Deutsche, RBS and Society general together.

➤ Deutsche Bank:

In April 2015, Deutsche Bank paid \$2.5 billion to the regulatory authorities of the US & UK which brings their total penalty to \$3.5 billion making it the largest penalty imposed in this case. Other financial institutions namely Citibank, JP Morgan Chase were also pleaded guilty but paid a

relatively smaller amount as penalty. They paid over \$5 billion to the US Justice Department and other regulators.

Along with the penalties, there were many individual arrests related to the case. Thomas Hayes was the main culprit and he got arrested in 2015 and was sentenced to 14 years in prison. In 2015, two former Rabobank employees were sentenced for two years in relation to the scandal. In 2016, several Deutsche Bank traders were also sentenced.

LIBOR plays a key role in the operation of the global market. The scandal highlighted the limitations & risks related to the LIBOR rate. The repercussions weren't clearly visible, but it did impact the investors worldwide as the manipulation was primarily done to benefit the traders of the guilty financial institutions.

POTENTIAL ALTERNATIVES TO LIBOR :

In July 2017, the FCA showed that past 2021, regulators and marketplace contributors will now no longer depend upon Libor. Since then, the marketplace has been growing alternate ways, together with using danger-loose reference price (RFRs), to be able to update using libor. the 2 precept RFRs presently advocated are the Secured Overnight Financing Rate (SOFR) (for US dollars) and Sterling Overnight Index Average (ONIA).

SOFR is rapid turning into the benchmark price for greenback-ruled derivatives and loans. this transition is predicted to increase lengthy-time period liquidity but additionally bring about giant short-time period buying and selling volatility in derivatives. SOFR is based strictly on transaction information such as a day-by-day price, referred to as an 'in a single day price'. it's far a danger-loose price as it i primarily based totally at the treasury. SONIA is desired because the number one hobby price benchmark for sterling markets and is used for in a single day investment for trades that arise in off-hours and represent the intensity of in a single day commercial enterprise with inside the marketplace.

The key variations the RFRs and libor have implications so that it will have an effect on the manner the economic gadgets referencing SOFR, and SONIA are documented. SOFR and SONIA are

primarily based totally on a size of in a single day borrowing costs, hence, they're danger loose, while Libor represents the value of interbank for a particular duration of time, therefore, it takes into consideration a sure quantity of credit score and liquidity premium.

Transitioning to a brand-new benchmark price could be nearly hard and could create troubles for the trillions of dollars' really well worth of LIBOR primarily totally based agreements that aren't set to mature till after Libor discontinuance (i.e., they cross past 2021) consisting of the normally used three-month US greenback libor. but, the substitute index, as soon as determined upon, may be included into the agreements with the right adjustments. documentation for those current agreements will want to be mended with the aid of using the quilt of 2021, with a view to contain the alternate. as for brand spanking new financing agreements, establishments are suggested to encompass the right opportunity technique for the way prices could be treated going forward.

In a scenario in which Libor ceases to be quickly available, loans primarily based totally on the same old Loan Market Association (LMA) from incorporate a provision that covers the sort of scenario in which the creditors value of investment or a stipulated reference financial institution price is used. this fallback but affords in addition troubles because it gives most effective brief alleviation for the scenario of LIBOR unavailability.



FCA will now no longer require reference banks to retain publishing prices as this fallback could be luxurious within side the lengthy run. To ease the transition of the discontinuation of libor, the LMA added an optional 'Replacement of Screen Rate' clause which offers events the power to pick out a substitute benchmark following Libor with a majority-lender consent. Pursuant to the advent of the Replacement of Screen Rate clause, the Asia Pacific Loan Market Association (APLMA)

included a changed model of the LMA's Replacement of Screen Rate clause in its very own agreements mentioning that majority of creditors should approve an alternate of benchmark might bring about a discount in quantity of hobby payable. From January 25, 2021, all new derivatives contracts referencing the International Swaps and Derivatives Association (ISDA) definitions will contain fallback provisions, which can be contained in a brand-new protocol and complement that ISDA troubles on October 23, 2020. for derivatives contracts referencing the Libor, the fallback provisions will practice as soon as FCA determines that the Libor price now no longer displays the underlying marketplace.

LIBOR TRANSITION IMPACT ON BANKS IN INDIA

The transition from LIBOR will entail considerable costs and risks for financial companies, especially banks. Since the inception of the syndicated loan market, the price of loans has been set by reference to the interest rate at which deposits have been offered by banks to other primary banks in this market - Interbank Offered Rates or IBORs - where London is the primary market - the London Interbank Offered Rate or LIBOR. The published IBORs were based on the presentation by the panel banks of the rates that the panel banks believed could be offered in the interbank market when trading at reasonable market size. It is generally expected that the guaranteed overnight funding rate will be accepted as the new benchmark rate.

On July 8, the depository financial institution of India (RBI) issued a notice to banks and other regulated entities, stressing the necessity for them to prevent signing new financial contracts that consult with the London Interbank Offered Rate (LIBOR) because the point of reference. reference. The board was a part of a worldwide transition of monetary institutions from old benchmarks to new alternative benchmarks. LIBOR is that the benchmark rate for all global banking transactions. in keeping with the RBI, moving from LIBOR, and adopting accepted Alternative Reference Rates (ARRs) developed in various jurisdictions is vital and requires careful preparation to manage potential customer protection, reputation, and litigation risks, yet on avoid disruption of the safety and resilience of economic institutions and therefore the overall financial stability of the economy.

What has been the RBI's response on LIBOR transition? In August 2020, the RBI advised banks and financial institutions to assess their LIBOR exposures that might accumulate after LIBOR termination and also to stipulate a board-approved plan of action to deal with the risks arising from the transition. . The regulator has now issued new advice to banks to organize for the transition. Big Indian banks like the banking company of India have started using SOFR rather than LIBOR. On January 20, SBI said it had entered into two short-term interbank securities industry deals with prices tied to SOFR. On January 21, ICICI Bank said it had executed the primary SOFR-linked securities industry interbank transaction. The transaction, executed through the bank's Hong Kong branch, is an element of its benchmark transition management attempt to assess readiness for a smooth transition to the new ARR.

Banks use benchmark quotes like LIBOR broadly to rate global transactions and as issuing economic instruments. They want to put together a transition to reduce transaction dangers by figuring out a brand-new benchmark fee at the earliest.

Bank systems and agreements have to be updated.

Since LIBOR has been used for a long period of time , the transition earlier than the closing date may be complicated work for banks. The same is identical for big corporate s that look forward to global borrowings or bond issues.

CONCLUSION

The key point is that global and national financial regulators should maintain the momentum of the transition and continue to closely monitor progress. Observations and key questions on supervisory issues related to the LIBOR transition further highlighted the following:

- With termination deadlines now confirmed, no doubt should remain about the urgency of the need to abandon LIBOR by the end of 2021. old contracts are maturing, instead of supporting new USD LIBOR activity.
- Supervisors should intensify their active and adequate communication efforts to raise awareness of the scale and urgency of IBOR transitions relevant to all clients and other market participants. FIs and non-FIs should accelerate the adoption of RFR in new contracts, acceptance of newly developed products, as well as the active conversion of

existing LIBOR contracts to refer directly to RFR and / or incorporate robust fallback language. EMDEs lagging behind in engagement with FIs should intensify their efforts to increase their reach in order to promote awareness and action.

- Internationally, collaboration and coordination remain crucial to accelerate the progress of the transition. The Financial Stability Board encourages authorities to set globally consistent expectations and milestones by which businesses will quickly cease new use of LIBOR, regardless of where these transactions are recorded or the currency in which they are denominated
- As stated in the FSB statement on the smooth functioning and rapid transition of LIBOR. 54 FSB members reiterate the expectation that regulated entities in their mandate will cease new use of LIBOR as soon as possible, with reference to relevant milestones in each currency, and no later than the end of 2021.