Phasing Out of LIBOR

For finance professionals the term LIBOR (London Inter-Bank Offered Rate) is not new. For last several decades this rate has been in use as benchmark in the global financial markets. Trillions of dollars of financial transactions and derivative products have been riding on this benchmark rate. LIBOR was considered as the gold standard of the financial world as a key reference rate for setting the interest rates charged on adjustable rate loans and a variety of mortgages. Over time however there have been certain happenings that eroded trust on this benchmark rate and it is currently in its sunset period. An attempt is made in this article to provide an overview of LIBOR and the transition towards alternate reference rates.

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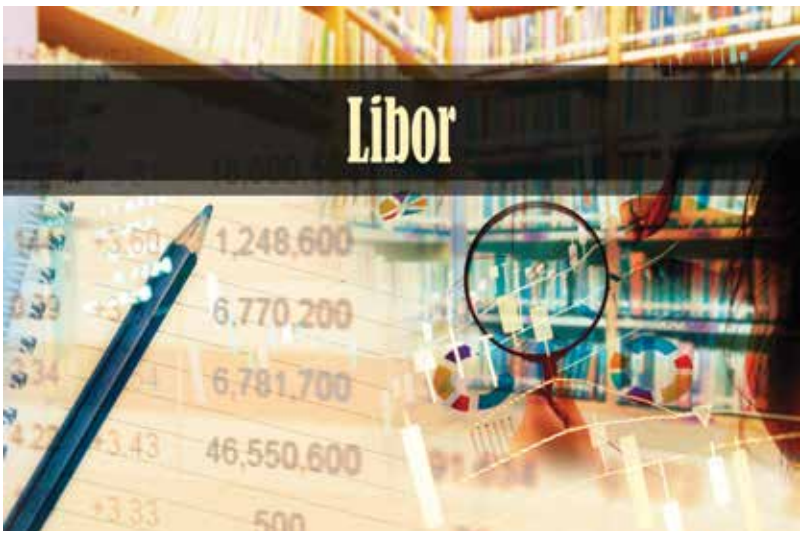
In 1984 the British Bankers Association (BBA) developed the BBAIRS (BBA Interest Rate Settlement Rates) upon request by the member banks for a reliable benchmark to be used for derivative transactions. Over a period of time this rate became London Inter Bank Offered Rate (LIBOR). From January 1986 LIBOR started officially publishing rates for three currencies USD, JPY and GBP. Through passage of time, two more currencies and further maturities were added. Currently rates are quoted for five currencies, USD, GBP, JPY, EUR and CHF.

LIBOR is the reference rate at which the panel banks indicate that they can borrow short term wholesale funds from each other. LIBOR is thus an interbank unsecured rate. The rationale for wide usage of LIBOR in the financial world is due to the fact that it represents the terms, at which the world's largest and financially sound institutions are able to obtain funds on short term basis.

Determination

LIBOR is determined daily, through a process in which the member banks in the panel, submit quotes at 11 AM (London time) in the morning for different currencies and maturities ranging from 1 day to 12 months, and an average of these rates so submitted is taken and published



after certain adjustments. The rates thus published are used as reference for a wide variety of financial transactions across the globe. **It is estimated than an amount of USD 300 - 350 trillion of financial instruments in corporate debt, mortgages, variable rate loans, consumer loans, municipal debt and other derivative products across the globe are linked to LIBOR as the reference rate.** LIBOR has become so important that it is sometimes referred to as the financial world's most important number.

Rate rigging

In 2010 the British Financial Services Authority (FSA) launched an investigation into allegations of manipulative practices followed by the member banks for determining LIBOR. The Department of Justice of the US and the UK Serious Frauds Office (SFO) investigated the member banks. A lot of US financial instruments are linked to USD LIBOR rate and hence US had the authority to prosecute the member banks. The investigations revealed that derivatives traders and employees of the member banks discussed and provided artificial rates that would benefit the traders instead of the rates that the bank would actually quote to borrow money. Banks also coordinated with other banks, something akin to a cartel, to alter the rates as well. This made the benchmark rate to vary based on entirely the trader's positions sometimes. Further the during the global financial crisis of 2007-08, banks artificially quoted lower rates to appear that they can borrow money at lower rates to make the bank appear less risky and insulate itself from the global phenomenon. The investigation revealed facts which shocked the financial world as to the scale of wrongdoings and the benefits the member banks got by rigging the benchmark rate. It also shattered the trust the financial system had on the benchmark rates. Reports revealed manipulation could be traced as back as 2003. There were no proper checks in place in determination of the rates and the conduct of the member banks and the process relied on a self-policing mechanism left to the banks themselves.

Though many banks were allegedly involved in misreporting, banks like UBS, Barclays among others reached settlements with the authorities. As per the annual filings in 2012 by UBS with SEC it was mentioned that the company has agreed to pay Swiss francs 1.4 Bn in fines. Further certain banks agreed with the United States Department of Justice for paying fines in this regard.

Authorities in the US and UK have fined the banks in total to the tune of USD 9 Bn for rigging LIBOR. Criminal charges were also brought against individual traders and brokers for their role in manipulating the rates. Some high-level executives in the banks had to leave on these charges. In October 2019 the UK Serious Fraud Office (SFO) closed its investigation into the LIBOR scandal.

The results of investigation called for reform of the entire process. In 2012 FSA came out with a 10-point plan to reform the LIBOR, but did not propose scrapping the rate. In 2014 the administration of LIBOR has been moved from BBA to Inter Continental Exchange (ICE). It has brought major reforms in administration of the rates. Even after these changes, the trust on LIBOR stood eroded and it was too late for it to continue as the benchmark rate that will determine the course of the global financial markets.

Phase out

In July 2017 the UK Financial Conduct Authority (FCA) announced that LIBOR should be phased out by end of 2021. In April 2017, Bank of England as a part of its wider interest rate benchmark reform process selected a risk-free, Alternate Reference Rate (ARR) rate for GBP financial contracts and derivatives. The ARR benchmark was set based on Sterling Over Night Index Average (SONIA). Over a period of time various other Alternate Reference Rates (ARR) have also been developed by central banks across the world. Each of the five LIBOR currency jurisdictions are working on the new rates and addressing the transition related issues that will crop up.

ARRs will be different from LIBOR for the fact that ARRs are based on actual overnight transactions either secured or unsecured, whereas LIBOR is unsecured without any collateral and relies to a great extent on the judgment of the panel banks. This feature of judgement by banks and the associated subjectivity also became its main shortcoming over the years. The ARRs are also designed to be near risk free with no term premium.

The phase out of LIBOR will mean that each of these rates will be the benchmark for reference.

Geography	Alternate Reference Rate	Regulator	Nature
UK	Sterling Over Night Index Average (SONIA)	Bank of England	Unsecured
USA	Secured Over Night Financing Rate (SOFR)	Federal Reserve	Secured
Switzerland	Swiss Average Rate Over Night (SARON)	Swiss Exchange	Secured
Euro Zone	Euro Short Term Rate (ESTER)	European Central Bank	Unsecured
Japan	Tokyo Over Night Average Rate (TONAR)	Bank of Japan	Unsecured

We can take a look at two of these ARRs and see how they are different from LIBOR and the current shortcomings of these rates.

Sterling Over Night Index Average (SONIA)

This is the longest in existence of all the ARRs identified. Though this rate was in existence for more than two decades, it was not normally used as benchmark. However, in 2017 it was selected as an alternate preferred risk-free rate as a replacement for LIBOR. The selection was made primarily because it is based on active liquid underlying market, average daily volume in January 2020 was around GBP 150 Bn. The rate is administered by the Bank of England (BoE). This is an unsecured overnight rate produced by the BoE and is calculated based on actual transactions that banks pay to borrow pound sterling overnight from other financial institutions.

Though both LIBOR and SONIA are overnight rates, there are certain limitations to for the latter. SONIA is based on past data and is backward looking, where as LIBOR was based on expected rates and forward looking. The other major difference or drawback is that LIBOR is available across a range of maturities like 1 month, 3 months, 6 months and 1 year etc. SONIA currently does not have any term rates except for the overnight rate. Work is currently underway to arrive at term rates of SONIA for different maturities and these rates are expected to available in Q3 2020. This coincides with the timeline that FCA has set, that no new LIBOR referenced loans can be issued after Q3, 2020.

Secured Over Night Financing Rate (SOFR)

In 2014 the US Federal Reserve Board of Governors convened the Alternative Reference Rates Committee (ARRC) to identify an ARR to USD LIBOR. In 2017 the ARRC selected SOFR from various alternative rates and worked to on an implementation plan for the adoption of SOFR in all financial products that reference LIBOR. SOFR is based on overnight transactions in the USD repo market. The rate is produced by the Federal Reserve Bank of New York (FRBNY), and is based on an active well-defined market where daily volumes are in the tune of USD 700- 800 Bn. It is a transparent rate based on actual observable transactions.

As in the case of SONIA in the UK, there are major differences between LIBOR and SOFR which

Parameter	LIBOR	SONIA
Administrator	Panel Banks	Bank of England
Currency	Multiple Currencies	Pound Sterling
Term	7 different tenors	Overnight (Term rates being worked)
Nature	Forward looking / Judgment	Backward / overnight data
Credit Premium	Includes bank credit risk	Near risk free
Term Premium	Term premium based on tenor	No term rates currently

While ARRs have been identified, there are challenges on outright implementation and need to be considered for transition. Apart from the structural challenges some of the fundamental problems can also arise from a liquidity and market depth perspective. LIBOR being a mandated rate, each bank had to submit rates across different tenors of yield curve. However, the ARRs being based on actual data will suffer from the fact that there may be no actual transactions on certain tenors on a daily basis, which may become a handicap.

cause difficulties in transition from one rate for contracts extending after LIBOR phase out. SOFR is entirely based on on transaction data, whereas LIBOR is based on both on market-data and also expert judgment by the banks of the future. Further SOFR is also a daily rate—what's called an overnight rate—vs. LIBOR's seven varying rates on terms of one day to one year. Yet another major difference is that LIBOR incorporates a built-in credit-risk component as it represents the average cost of borrowing by a bank. On the contrary, SOFR represents a risk-free rate because it is based on Treasury.

SOFR also doesn't have term rates and a yield curve across various maturities which LIBOR currently offers. The ARRC proposed that FRBNY could construct a forward-looking term rate based on SOFR derivatives markets once the transactions based on SOFR mature and have enough liquidity. Being based on repo rate data, SOFR is also influenced by the volatility of the money market and short-term spikes.

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Transition

The transition from LIBOR to the ARRs will be a herculean task and will require coordination across all areas of financial and regulatory environment. The transition will have far reaching implications across the globe. The impact of this change will be felt on accounting, reporting, regulatory, taxation, corporate finance and many other areas. Some of the areas of impact have been outlined below, but this is by no means an exhaustive list of impact.

Contracts based on LIBOR stretch far into the future after the discontinuation of the benchmark rate. Market estimates indicate that contracts to the extent of USD 900 Bn will mature beyond 2021. There are also some instruments with maturities stretching beyond 2030 and some bonds are perpetual with no maturity date. Financial institutions and clients have to assess the legacy contracts which run beyond 2021 and address them appropriately. The contracts may have to be amended to see that it continues beyond 2021 by appropriate fall-back clauses to refer the new ARRs. This will help renew the contracts beyond the sunset period.

Accounting considerations

There are a number of accounting considerations that have to be taken care of, particularly around financial instruments. The change in rate from LIBOR to the new rate will amend the contract and it needs to be tested to see whether the terms of the modified contract are substantially different from the terms of the original contract. This will help

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in determination of accounting either as a modification or derecognition of the original contract and recognition of the new contract.

Where current debt related exposure is hedged, the hedge documentation needs to be updated to reflect the new benchmark interest rate. It also needs to be evaluated whether based on the new rate the hedging relationship needs to be discontinued, or whether amounts recognised in other comprehensive income neds to be recycled to the income statement.

The changes will have to be worked carefully to ensure that the debt covenants are not breached due to this change, in case of such a scenario,

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modification of the covenants with the lenders may have to be done to provide the required headroom.

Disclosure requirements under IFRS 7 have been amended to provide for disclosure of the interest rate benchmarks to which the company's hedging is exposed to, the extent of exposure to the rate, methodology of managing the transition, significant assumptions and judgements and the amount of the hedging instrument.

In September 2019, IASB published certain amendments to IFRS 9, IFRS 7 and IAS 39, which are mandatory for application from the financial year 2020. Standard setters are working on appropriate guidance to address the issues and facilitate transition.

Valuation

LIBOR is a key component for building the discount rates in most valuation models for many purposes. Various financial assets, liabilities, testing for impairments rely on the discount rates which use LIBOR as the base. An assessment in general has to be made on the impact from shift in the base rates once LIBOR publication stops. The current models will have to be tweaked appropriately to address this change.

Transfer Pricing

Over a period of time and after many judgements, the courts in India have taken cognizance of LIBOR as a benchmark for intragroup financial transactions. With the phase out of LIBOR approaching, it will further bring uncertainty into the process. The main challenge just like financial transactions will also be for the calculation of appropriate spread to be applied on the ARRs. The spread will need to factor customer risk, time period risk, liquidity premium and each of which may be subjective and litigative in the absence of the volumes in the first few years of implementation. Assessees will need to enter into new agreements perhaps with built in transition mechanism with associated enterprises and arrive at the rates that will be considered to be arm's length.

The Central Board of Direct Taxes (CBDT) on 20 May 2020 released the safe harbour rules for 2019-20. These rules are also based on LIBOR and appropriate spread based on the credit rating of the associated enterprise. As new contracts will henceforth be based on ARRs as the reference rate, these rates have to be aligned to the SONIA / SOFR or other rates depending on the currencies and appropriate spreads may be worked by CBDT for publishing the safe harbour rules for 2020-21.

FEMA

As per RBI master circular on ECB, limits are prescribed on All in Cost (AIC), with a limit of 450 basis points over the benchmark rate which is 6 Month LIBOR or any other interbank interest rate applicable to the currency of borrowing. In the revised scenario the RBI may have

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to specifically refer to the ARRs and provide a spread on each rate. Further due to the difference in the nature of LIBOR vs the reference rate, the spread may have to be altered to factor the difference between a risk-free rate and the unsecured rate which LIBOR was. It may also happen that the ARRs for some currencies may not be quoting a 6-month rate, such considerations may also be needed.

Also, the existing ECBs which will continue beyond 2021 may have to be grandfathered to ensure that borrowings which were compliant in LIBOR regime don't find themselves non-compliant due to this change.

Mumbai Inter Bank Forward Rate (MIFOR)

MIFOR published by the FBIL as authorised by RBI, is the rate that Indian banks use as benchmark for setting prices on forward rate contracts and currency derivatives. It is calculated by using the overnight USD LIBOR rate and the applicable forward premium from the forex markets. Instruments linked to MIFOR will also be impacted. A suitable ARR will also have to considered once LIBOR is phased out.

Other Aspects

The Indian Banks Association (IBA) has set up a working group in 2019 to assess the impact due to the end of LIBOR in 2021 and the transition plan. This is intended to help the member banks on various aspects of operations and also education of customers. IBA is preparing a guidance note for banks to address this.

It is estimated that contracts estimated to be around $500 Bn may be negotiated between Indian companies and foreign lenders. Companies in infrastructure and housing finance use long term ECB for funding.

Conclusion

Every change is hard to overcome, the phasing out of LIBOR is which has been the benchmark and considered gold standard of the financial framework for decades will be even more challenging. The transition from LIBOR to ARRs will be a challenge of daunting proportions. This is the Y2K problem of the financial world only that the date this time will be 31 December 2021.

The stakes are high and the transition process has to be very effective to avoid chaos and confusion. In the limited time available COVID 19 has taken out the fair bit of attention of regulators and financial institutions. The sunset date as it stands is not changed based on the communication by FCA and BoE in March 2020. Despite the restructuring of the process and the controls around LIBOR after the financial scandal, these measures could not stop the death of the benchmark and the end is inevitable. All stakeholders have to plan themselves to ensure a smooth transition. While some degree of turbulence is a given, adequate preparation will help mitigate the hardships. ■■■

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