Life After LIBOR

THE SEARCH FOR ALTERNATIVES

By **Raja Khuri**

Many of Brown Brothers Harriman's (BBH) Commodities & Logistics clients have interest rates based on floating benchmarks, such as the London Interbank Offered Rate (LIBOR). International management consulting firm Oliver Wyman has dubbed LIBOR "the world's most important number" due to the benchmark's widespread use in credit markets. LIBOR is used to determine rates for hundreds of trillions of dollars' worth of contracts, including debt and derivative products.

First published in 1986, LIBOR has since become the globally accepted market standard for short-term interest rates. Today, it is administered and published by the ICE Benchmark Administration (IBA) for five different currencies and seven different tenors and used by banks and other financial institutions across the globe as a reference rate in pricing loans, particularly in syndicated credit facilities. The most frequently referenced LIBOR rates are those in U.S. dollars.

Changes in LIBOR can affect businesses in many industries, including marketing, logistics and distribution companies who rely on LIBOR-based working capital loans for their short-term funding needs. In May 2017, 30-day LIBOR was around 1%, and 90-day LIBOR was around 1.2%. Fast-forward to May 2019, and those same floating rates have more than doubled.

Although increasing borrowing costs are typically passed down the supply chain from suppliers to downstream customers, a spike in the cost of funds has the potential to affect a company's margins, which might influence it to reduce borrowings on its lines of credit and deploy additional equity into the business. Companies must balance their returns on equity with their cost of funds, finding the sweet spot therein. (That being said, an increase in a floating interest rate need not necessarily mean the bank is making more money, as banks' cost of funds also depend on floating interest rates.)

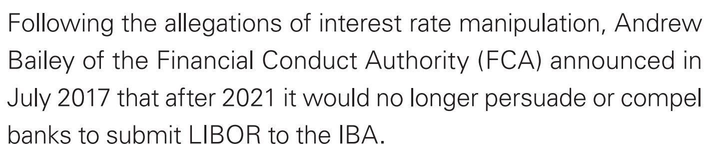
However, the effect of LIBOR movements on banks and companies may soon be a thing of the past. When borrowers wake up in 2022, LIBOR may have ceased to exist entirely, which will be a lot more impactful than a few basis points move in either direction.

How Is the LIBOR Rate Determined?

LIBOR has been a mainstay, but over the course of the past decade, allegations of interest rate manipulation have been made. Because of both the submission guidelines and dwindling activity in the unsecured interbank lending market, submitted rates may not necessarily be reflective of actual transactions.

The various LIBOR rates are derived from submissions from reference banks based on their "expert judgment" and meant to represent the cost of borrowing cash in the London interbank market on an unsecured basis. For U.S. dollars, submissions are

collected from up to 16 reference banks, with the four highest and four lowest submissions eliminated, leaving the remaining eight banks' submissions to be averaged. If fewer reference banks contribute rates on any given day, fewer submissions are eliminated.



Following the allegations of interest rate manipulation, Andrew Bailey of the Financial Conduct Authority (FCA) announced in July 2017 that after 2021 it would no longer persuade or compel banks to submit LIBOR to the IBA.

Many banks, including BBH, have formed taskforces to identify their exposure and create a plan of action to best prepare for the interest rate's potential discontinuation.

The Risks of a World Without LIBOR

The disappearance of LIBOR will likely affect banks and borrowers alike, presenting a challenge that the financial services industry and regulators together will have to overcome. Bidding farewell to one of the world's most important interest rates poses not only administrative and legal hurdles, but fundamental risks to banks, individual businesses and, ultimately, broader markets.

LIBOR is one of the most significant interest rates for commercial borrowers – and arguably the most significant floating rate for syndicated lenders across the globe. Particularly, LIBOR is a key interest rate that is an option for many, if not most, commercial credit facilities. For these floating rate loans, LIBOR is a key feature of the contracts, many of which will require formal amendments in order to take into account the potential disappearance of LIBOR. The extent and individuality of these contracts poses one of the greatest administrative challenges of the transition.

Many existing credit facilities that are priced based on LIBOR or that offer a LIBOR-based option have general provisions that address the unavailability or insufficiency of LIBOR. These agreements consider a course of events if LIBOR is not available on a certain day or no longer reflects the cost of funds. In most of such provisions, LIBOR is replaced with the base rate, the agent's prime rate, the federal funds effective rate, a quoted rate from a reference bank or an average of quoted rates from more than one reference bank. Many of these provisions exist as a necessity to account for days when LIBOR is not published by the IBA but borrowers may still borrow. This is the case, for example, on a U.K. bank holiday that is not a holiday in the U.S. Though there are currently several facilities accounted for in this fashion, such provisions may not represent sustainable long-term solutions to the potentially permanent discontinuation of LIBOR in 2021.

There are also numerous facilities for which there are no provisions that account for the unavailability or discontinuation of LIBOR.

In addition, some commitments have LIBOR-based options that extend beyond 2021, with facility types ranging from industrial revenue bonds to revolvers. If, in these facilities, adequate language does not account for the potential discontinuation of LIBOR, this could pose significant issues down the line. These facilities pose the greatest risk to lenders and borrowers, as they could be bound to an interest rate that no longer exists.

Many recently completed or amended transactions, and certain prior transactions, include flexible language that specifically allows for the determination of an alternative reference rate. In these facilities, either a targeted amendment or the definition of LIBOR allows the lender(s), with or without the borrowers' consent, to assign a new alternative rate.

In the broader marketplace, many syndicated facilities that offer LIBOR-based pricing do not include provisions for a permanent event of LIBOR discontinuation. This lack of fallback language exposes lenders to undetermined or undeterminable interest rate risk if their facilities are not flexible enough to adopt an alternative rate. Such an occurrence would most likely require a number of simultaneous amendments to any impacted facilities, which would pose a significant operational challenge to lenders that are significantly exposed to LIBOR.

Plan B

In an effort to find a solution to LIBOR's potential discontinuation, market participants have proposed a number of replacement rates. Broadly speaking, they represent different transaction types and have different timelines for being fully ready to be integrated into the larger interest rate markets of loans and derivative products as suitable replacements for LIBOR.

The Federal Reserve Bank of New York, in cooperation with the U.S. Treasury Department's Office of Financial Research, in 2014 chartered the Alternative Reference Rates Committee (ARRC), which has developed and published a set of two solutions. One is a "hardwired approach," which designates the Secured Overnight

Financing Rate (SOFR) as the replacement rate in the event of LIBOR discontinuation. The other is an "amendment approach," which allows for an alternative reference rate to be determined at a later date.

Within BBH's portfolio, recent amendments have been written more in line with the amendment approach, allowing for the assignment of an alternative reference rate while considering market convention.

However, even with the flexibility to designate an appropriate alternative reference rate when the time comes, the question remains what that replacement rate will be and if there will be a suitable replacement across the board.

SOFR, So Good? Maybe Not.

The ARRC-devised SOFR is a money market repo rate that tracks the cost of overnight borrowing secured by Treasury securities and reflects activity in the overnight interbank market. It is calculated based on a volume-weighted median using data from actual transactions and, beginning on April 2, 2018, is published each U.S. business day. While the ARRC has publicly endorsed SOFR as the rate moving forward, there remain considerable challenges for SOFR as it hopes to replace LIBOR.

The most widely used LIBOR rates in U.S. dollars are not the overnight rate, but the 30-, 60- and 90-day rates. Accordingly, the ultimate replacement for LIBOR will have to contemplate term rates as well as an overnight rate. Proposals for a term structure have been floated that include compounding in arrears, or trailing averages. The jury is still out on which, if any, of these methods will be the most suitable, as each poses certain challenges. Any backward-looking term rate will not incorporate a forward-looking aspect, for which many market participants have expressed a desire. However, forward-looking rates determined in arrears will not be known to the lender or borrower at the beginning of the interest rate period. This could cause both operational challenges and uncertainty for both banks and borrowers.

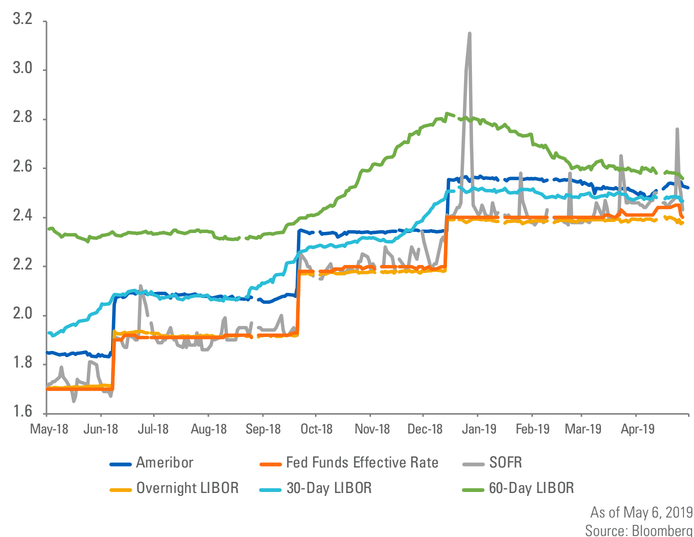
Though the ARRC has suggested various methods to create term rates for SOFR, these methods should ideally align with the measures that are ultimately proposed for derivative products by the International Swaps and Derivatives Association (ISDA).

It is important to note the basis risk that could arise if there is a disconnect between the term structure determined by ISDA for derivative products and the ARRC for loans and other products.

There is also the question of the differences between the transactions reflected by SOFR and those for which LIBOR rates are used. While SOFR is essentially an overnight repo rate, LIBOR is used in longer-term borrowings and is meant to reflect unsecured credit. Accordingly, LIBOR is said to contain a credit component, while essentially risk-free rates, such as SOFR, by definition do not. The addition of a "credit spread" to the index has been offered as potential compensation for this discrepancy, but how such spreads will be calculated has yet to be determined.

As shown in the chart below, overnight LIBOR closely follows the fed funds rate, while SOFR has exhibited more volatility thus far. This could prove to be impactful were SOFR widely adopted in place of LIBOR, particularly when an outlying overnight rate is used to calculate a term rate. Furthermore, even though the overnight LIBOR might somewhat resemble SOFR and the fed funds rate, LIBOR term rates are typically higher than overnight rates.

Benchmark Interest Rates Over the Past Year (%)



As of May 6, 2019.
Source: Bloomberg.

To date, SOFR has also raised concerns regarding its volatility around quarter-end, at which point balance sheet considerations at banks can cause a spike in the short-term interest rate. Around New Year's Eve, the interest rate experienced a hike of around 70 basis points. Occurrences like this may pose a financial risk or have a financial impact on borrowers whose term rates are affected by daily outliers in the larger trend of interest rates.

Taking into consideration the short history of SOFR, there may not yet be enough data to determine whether SOFR is an appropriate replacement. The market for SOFR-based derivatives is not sufficiently developed and does not approach the size of the market for LIBOR-based derivatives, the scale of which may have acted to stabilize LIBOR.

The Quest for Alternative Replacement Rates

Though the ARRC is endorsing SOFR as the way forward, other market participants feel there is a need to create alternative replacement rates. Richard Sandor, the founder of the Chicago Climate Exchange and an instrumental force in developing the futures markets in the second half of the 20th century, established the American Financial Exchange (AFX) in 2015 partly to address the need for a suitable replacement benchmark rate. The AFX allows small banks to lend to and borrow from each other under mutual lines of credit overnight or for 30-day terms. Sandor approximates 5,300 banks within the target range (less than $1 billion in assets) across the U.S. To date, 700 banks across 35 states have signed onto the platform.

The AFX also analyzes the transactions that take place on its platform to create its own benchmark, dubbed Ameribor. As shown in the earlier chart, overnight Ameribor has tracked at a seemingly consistent buffer above overnight LIBOR. It also reflects the unsecured interbank nature that LIBOR is intended to convey.

However, despite some similarities to LIBOR, and the transaction-based nature of Ameribor, the interest rate is based on a volume of transactions far inferior to that which backs SOFR. Whereas the transactions backing SOFR have fallen in the range of $700 billion to $800 billion per day, the transactions backing Ameribor averaged $1.5 billion per day over the first quarter of 2019.

Sandor has confirmed that Ameribor's value proposition caters to the smaller regional and community banks, not necessarily the largest ones. However, considering the ubiquity of LIBOR rates, and particularly their role in indexed and standardized interest rates that are mutually agreed upon by banks of all sizes, Ameribor's breadth and reach will need to expand in order to serve as a true LIBOR replacement.

Considering the many syndicated credit facilities, in which large multinational banks benefit from the participation of smaller commercial banks or lenders, there are certainly arguments to be made for a one-size-fits-all replacement to LIBOR. However, the limited extent of the markets backing Ameribor need not automatically disqualify it as a universally suitable replacement rate. In fact, one of the supposed issues identified with LIBOR was the dwindling nature of the unsecured interbank markets that were meant to be reflected in LIBOR rates. So, if the market for Ameribor is growing and larger than that of LIBOR, Sandor's proposed interest rate already has a leg up over LIBOR, not to mention that it is transaction-based.

In addition to the ARRC and AFX, there's another replacement rate on the horizon, to be released by ICE, LIBOR's current administrator. The ICE Bank Yield Index would be based on transaction data reported to the Financial Industry Regulatory Authority and submitted by 13 large, internationally active banks. The benchmark would track unsecured lending and be published for 30-, 60- and 90-day terms.

Despite the transaction-based and unsecured nature of the proposed ICE Bank Yield Index, ICE has warned that the public should not plan to rely on this index as a definitive replacement rate, as it is still in the trial phase. ICE is aiming to begin publishing the index in early 2020.

Waiting Is Not an Option

Though solutions to LIBOR's discontinuation have been proposed and endorsed by various market stakeholders, the fixes are still in a trial phase. The perceived lack of a clear path forward has prompted certain market participants to request that LIBOR continues to be published and used for contracts that currently exist and extend beyond the potential discontinuation date. However, the current administrators of LIBOR (including first and foremost the U.K.'s FCA) and regulators (including the Federal Reserve) have made it quite clear that they intend for LIBOR to be phased out according to the currently announced timeline.

Despite lacking concrete and definite solutions as this deadline approaches, borrowers and lenders should not ignore the situation. The disappearance of one of the world's most important interest rates will no doubt affect banks and companies alike. While it may not yet be time to commit to a definitive replacement rate or amend all documents that reference LIBOR to be in line with one fallback solution, banks and borrowers should educate themselves on the timeline of events and ensure they have taken stock of all their potential exposures.

At BBH, we are staying abreast of developments in the broader marketplace, specifically when it comes to proposed replacement rates and recommended fallback solutions. For the time being, the market is still assessing the viability of various proposed replacement rates.

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