Transitioning from LIBOR to SOFR

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Background

The London Interbank Offered Rate (LIBOR) gained global acceptance as a benchmark borrowing and lending rate, measuring bank funding costs, in the early 1980s. Originally described as the "new prime rate," LIBOR ultimately underpinned trillions of dollars of loans, investments, mortgages and derivatives (swaps and options) for numerous asset classes, including municipal bonds. LIBOR rates for different maturities and currencies are set daily via a survey of international banks in London. Historically, the British Bankers Association (BBA) was tasked with conducting the survey, collecting each institution's uncollateralized lending rate, and compiling the results.

In the years following the 2008 financial crisis, it was alleged that certain banks included in the daily LIBOR survey process manipulated their responses in an attempt to influence the ultimate rate in their favor. In the wake of this, the BBA was stripped of its role and the Intercontinental Exchange (ICE) assumed responsibility.[1] In addition to concerns of manipulation, the overall volume of unsecured interbank lending shrunk dramatically post-financial crisis, leaving LIBOR as a less meaningful measure of bank funding costs.

In the U.S. debt markets, LIBOR is used to set rates for approximately $200 trillion in financial contracts, including more than $127 trillion in swaps, forward rate agreements and options.[2] With concerns that LIBOR lacked meaningful and market-based data to continue to serve as a reference rate for these contracts, in 2014, the Federal Reserve Bank (FRB) formed the Alternative Reference Rates Committee (ARRC) with the objective of determining alternative interest rate benchmarks. In June 2017, this committee recommended using the Secured Overnight Financing Rate (SOFR) as a LIBOR alternative.

A month later, in July 2017, the UK Financial Conduct Authority announced that after 2021, it will no longer require panel banks to provide daily submissions of LIBOR. While this does not mean that LIBOR will be discontinued, future LIBOR rates may lack enough inputs and data to serve as a reliable reference for debt and related financial instruments.[3]

Secured Overnight Financing Rate (SOFR)

SOFR is a secured, short-term (overnight) borrowing rate based on U.S. Treasury repurchase (repo) agreements and general collateral financing (GCF) data. Based on transactional data and not subject to manipulation like LIBOR, SOFR is a market-driven reflection of the funding cost for large financial institutions using risk-free collateral. The underlying Treasury repo market is highly liquid with more than $750 billion in daily volume.[4] In April 2018, the FRB of New York[5] began publishing the overnight SOFR rate

1 Global banks paid over $9 billion in fines to regulators in connection with the LIBOR scandal and several bank traders were convicted.
2 Source: The Alternative Reference Rates Committee, Second Report, March 2018.
3 Source: Financial Conduct Authority, "The Future of LIBOR," published July 27, 2017.
4 Source: The Alternative Reference Rates Committee, Second Report, March 2018.
5 Source: https://apps.newyorkfed.org/markets/autorates/rates-search-page?rateType=R3.

on a daily basis, and in May 2018, the CME Group[6], a futures and options exchange, launched the first SOFR-based futures contract. To date, SOFR has performed in line with expectations, with rates close to the effective federal funds rate, but below the GCF repo rate.

SOFR's Impact on Municipal Bond Issuers

In the municipal market, LIBOR is most commonly used as the base index for floating-rate bonds, notes and loans, both publicly-issued and privately placed. Often times, the LIBOR rate is adjusted to approximate a tax-exempt proxy (e.g., utilizing a percentage of the resetting LIBOR rate) or used as a base rate with a credit spread added to it, to represent the credit quality of borrowers and lender costs of capital. Recently issued debt may contain provisions addressing the potential elimination of LIBOR, but debt issued in prior years may lack these provisions. Issuers should pay special attention to changes to referenced indexes that trigger events, such as a reissuance, in which terminations and potential payments could be involved.

In the debt markets, issuers have come to market with more than 10 SOFR-based issuances since July 2018 for a volume of nearly $20 billion.[7] While many issues have seen strong interest in their SOFR offerings, municipal issuance of SOFR-based debt has been limited, with several issuances coming to market in 2018. It is expected that this market will continue to develop and gain increasing acceptance with stronger pricing performance relative to the other short-term index alternatives. Additionally and importantly, as more issuers bring SOFR-based transactions to market, namely derivative contracts, the ability to develop a term structure of rates will occur.

For those issuing new debt tied to LIBOR, terms should be structured in a way to easily allow for the transition to a replacement rate. Alternatively, issuers should consider the merits and potential risks of using SOFR as a basis for issuance.

SOFR Calculation and Adjustment for Swaps and Derivatives

The International Swaps and Derivatives Association (ISDA) recently published a summary of the results of a preliminary consultation with market participants to develop Risk-Free Rate (RFR) fallbacks in case Interbank Offered Rates (IBORs) are permanently discontinued.[8] Although this summary did not include U.S. dollar LIBOR, which will be covered in a future consultation, it is expected that the results will be broadly consistent. According to ISDA, the overwhelming majority of respondents preferred the "compounded setting in arrears rate" for the adjusted RFR. SOFR would be compounded daily over the relevant tenor and the rate reset would be known only at the end of the period. This is similar to the methodology used for the SIFMA Municipal Swap Index, which is reset weekly, except for the compounding calculation. ISDA also reported that a majority of market participants preferred the historical mean/median approach for adjusting the spread between the RFR (SOFR) and the IBOR (USD LIBOR). Using this methodology, the SOFR/IBOR spread would be calculated based on the mean or median spread between the two rates over a static lookback period. This reflects the difficulties of using a forward approach to calculate the spread adjustment given the current lack of a term structure (yield curve) for RFR rates. ISDA concluded that "preliminary feedback… indicates that the compounded setting in arrears rate and the historical mean/median approach to the spread adjustment may also be appropriate for USD LIBOR."[9]

6 Source: https://www.cmegroup.com/media-room/press-releases/2018/5/08/cme_group_announcesfirsttradesofnewsofrfutures.html.

7 Government-sponsored enterprise issuances only.

8 Source: ISDA report, "Anonymized Narrative Summary of Responses to the ISDA Consultation on Term Fixings and Spread Adjustment Methodologies" published December 20, 2018.

9 Source: ISDA report, "Anonymized Narrative Summary of Responses to the ISDA Consultation on Term Fixings and Spread Adjustment Methodologies" published December 20, 2018.

What's Next for Swaps and Derivatives?

ISDA intends to amend the 2006 ISDA Definitions to include the fallbacks after a review period in the first half of 2019. ISDA is also expected to publish a fallback rate protocol in the second half of 2019 that will enable parties to amend ISDA agreements to include a defined fallback rate in case LIBOR is permanently discontinued. Critical to market participants' adoption of SOFR will be the development of a term structure for SOFR. So far, SOFR swap trading and bond issuance has been almost exclusively in short-term maturities of less than two years. SOFR-linked swaps have seen very little trading, with only $6.1 billion notional (50 transactions).[10] This is compared to $225 trillion notional and 1.2 million transactions for all other USD swaps. For hedgers, the Financial Accounting Standards Board (FASB) issued an Accounting Standards Update adding SOFR as a benchmark rate, which causes it to be eligible for hedge accounting. The Internal Revenue Service (IRS) has not issued formal guidance concerning SOFR yet, but has indicated they will try to provide relief from potential reissuance problems for tax-exempt issuers converting to SOFR swaps.

Summary

The transition from LIBOR to SOFR is likely to be a complicated process that will extend beyond 2021. For banks, converting to SOFR requires an overhaul of major systems to handle SOFR's daily reset/daily compounding/monthly pay features, capture SOFR forward curves, and the development of risk management systems. All of this is likely to be very expensive. For hedgers, since SOFR is an RFR and includes a daily reset feature, it may introduce more basis risk in swaps, as it does not include a credit component, whereas LIBOR did. New ISDA agreements will include fallback rate language if a swap is based on LIBOR. Existing ISDA agreements will need to be amended using the ISDA protocol (once published) to address the potential discontinuance of LIBOR. Additionally, existing municipal debt instruments that are LIBOR-based will need to eventually move to a different rate basis, with SOFR being the likely alternative. Issuers of new debt transactions that utilize a floating rate and are not SIFMA-based will also need to consider an index other than LIBOR, again with SOFR being a likely and feasible alternative. Furthermore, the market will benefit from additional use of SOFR-based instruments, allowing for the development of a SOFR term structure beyond the shortest end of the curve. Until the status of LIBOR is finalized, PFM's financial advisory and swap advisory businesses will actively monitor developments in this area for our clients.

About PFM

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10 Source: ISDA, as of December 13, 2018.

11 Source: Refinitiv, formerly Thomson Reuters, as of December 31, 2017, based on par amount and number of transactions.

Disclosure

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