



Federal Home Loan Bank
NEW YORK

LIBOR's Transition to SOFR

September 2019

The LIBOR Transition is the biggest transformation in financial services today, affecting some \$200 trillion of U.S. Dollar transactions. LIBOR is slated for cessation at the end of 2021. Increasingly, financial regulators in the US and UK are speaking out about LIBOR reform, and their message is uniform – *transition needs to begin today*.

This leaves FHLB NY members and their clients with a need to identify an alternate benchmark index for new floating-rate transactions and a strategy for managing legacy LIBOR transactions extending beyond 2021. In this article, we'll talk about the alternative benchmark, the role of the Federal Home Loan Bank System in developing a new market, and the role of the Federal Home Loan Bank of New York in providing alternative floating-rate funding.

Introducing SOFR: A New Benchmark Rate, New Products and New Markets

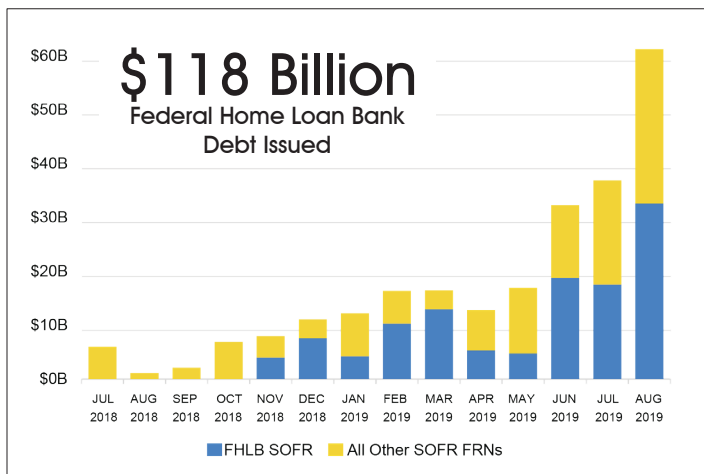
The Alternative Reference Rate Committee (ARRC), a group of private-market participants convened by the Federal Reserve Board and the Federal Reserve Bank of New York (New York Fed), endorsed the **Secured Overnight Financing Rate (SOFR)** to be LIBOR's replacement benchmark index in 2017. The New York Fed began publishing SOFR in April 2018, and SOFR-indexed products began trading in the capital markets in the second half of 2018.

As of July 2019, more than \$240 billion in SOFR bonds have been issued into the market, and nearly \$200 billion in SOFR

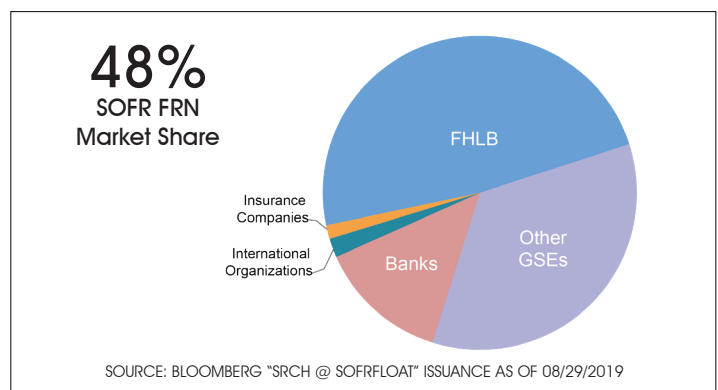
swaps have been transacted. While this represents encouraging growth for products referencing a new index, there is much work to do given the short time horizon. The International Swaps and Derivatives Association (ISDA) reports that in the second quarter 2019, derivatives traded notional referencing SOFR was \$84.7 billion, or 0.25% of the \$32.4 trillion derivatives traded notional referencing LIBOR during the period. The securities side has made better progress: in the second quarter of 2019, 65% of floating rate notes issued were LIBOR-indexed, 17% referenced SOFR, and 15% referenced Treasury Bill rates.

SOFR and the Federal Home Loan Bank System

As the second-largest issuer of floating-rate notes (FRNs) after the U.S. Treasury, with \$316 billion outstanding, the Federal Home Loan Bank (FHLB) System was, and remains, a key stakeholder in benchmark reform. The FHLB System was an early advisor to the ARRC in 2016 and, since 2018, has been represented at meetings of the ARRC through the Federal Home Loan Bank of New York.



The FHLB System began issuing SOFR bonds in November 2018, and today the FHLB System is the #1 issuer of SOFR Bonds, with more than \$118 billion issued as of August 2019.



The FHLB System alone makes up 48% of all SOFR FRNs outstanding. Even more impressively, in just nine months, the FHLB System has shifted its floating-rate debt composition from 99% LIBOR to 33% SOFR/66% LIBOR, meaning that the FHLB System has already converted a third of its floating rate debt to SOFR. In June, July and August of 2019, the FHLB System issued more SOFR debt than LIBOR debt.

The FHLB System's strength in the SOFR market allows the FHLB NY to offer SOFR funding to our members at competitive levels. The FHLB NY began offering the SOFR-linked **Adjustable Rate Credit (ARC) Advance** in November 2018.

What are the advantages of SOFR-indexed funding?

1. SOFR is a robust reference rate, developed by public and private market participants after more than two years of research and consultation, based on over \$1 trillion of daily transactions, and operationally overseen by the New York Fed. SOFR is, by intent and construction, a reliable and representative indicator of market interest rates.
2. SOFR is a nearly risk-free rate, meaning it does not incorporate credit spreads which can increase funding costs in periods of crisis.
3. SOFR instruments set coupon payments based on an average of secured overnight rates, moderating daily rate volatility and the timing effects of individual fixing dates. The 3-month average of SOFR is less volatile than 3-month LIBOR.
4. Members have the opportunity to offer their clients SOFR-indexed floating-rate loans, funded by SOFR-indexed funding.

What are some considerations to keep in mind in connection with the transition to SOFR as a funding index?

1. The daily SOFR index will require a feed from a market data source. Historical SOFR is available from April 2018. To create a longer time series for analysis, indicative historical SOFR data is available from August 2014 and survey proxy data is available from February 1998, all from the New York Fed.
2. Operationally, SOFR instrument interest accrual is different than a LIBOR instrument, potentially requiring changes to systems and processes. Planning a SOFR pilot transaction is a good way to recognize, implement and test such changes. While SOFR conventions are evolving, the basic set of instrument parameters are mature, and, as a leading issuer, FHLB System conventions are well established.
3. SOFR markets are still developing, particularly in derivatives and long tenors. Fortunately, the SOFR cash FRN market is well-developed to 2-3 year tenors and FRNs of 5 years or longer are beginning to come to market. SOFR index projections may require new data sources of SOFR futures and SOFR swap market data and analytical system enhancements.

What's Next?

We believe that the tools, methods, markets and expertise are all out there to make today the best day to start planning your LIBOR transition. We plan to periodically post topics pertaining to LIBOR transition.

Subjects would include:

- What Will LIBOR Fallback Look Like?
- SOFR vs LIBOR: Index Construction and Instrument Conventions
- Creating a Transition Checklist
- LIBOR Reform: How Did We Get Here?

Please send suggestions, comments and requests to fhlbny@fhlbny.com

"Since 2014, the official sector has publicly warned that LIBOR could become unstable. ... My key message to you today is that you should take the warnings seriously. ... the regulator of LIBOR has said that it is a matter of how LIBOR will end rather than if it will end, and it is hard to see how one could be clearer than that."

Randall Quarles

Vice-Chair for Supervision,
Board of Governors of the
Federal Reserve System
June 3, 2019

"The FHLBanks provide access to reliable liquidity to approximately 6,800 members in support of housing finance and community investment. Our regular and frequent issuance of SOFR-linked securities strengthens the FHLBanks' ability to meet the current and future needs of our members as we participate in the development of the SOFR index in support of our mission."

Randy Snook

Chief Executive Officer,
Federal Home Loan Banks' Office of Finance
August 21, 2019

"As the leading issuer of LIBOR-linked securities, the Federal Home Loan Banks have a unique role and responsibility in both the development of the SOFR market and the transition away from LIBOR."

José R. González

President and Chief Executive Officer,
Federal Home Loan Bank of New York
December 3, 2018

Web References*

You'll find many valuable sources of information on the subject of SOFR and LIBOR reform. Here are a few to start:

- ARRC Alternative Reference Rates Committee
Your first SOFR stop. Offers News, Presentations Consultations, Meeting Minutes since 2014
<https://www.newyorkfed.org/arrc>
- Federal Reserve Bank of New York
Your source for daily SOFR, TGCR, BGCR rates and volumes, historical indicative data from 4/2/2018, proxy survey data from 1998
<https://apps.newyorkfed.org/markets/autorates/sofr>
- ISDA International Swap and Derivatives Association
Evolving derivatives fallbacks, supplements, consultations, protocols, market statistics
<https://www.isda.org>
- CME Group: SOFR futures and cleared SOFR swaps exchange
A SOFR page featuring trade data, news, and a running summary of SOFR issuance
<https://www.cmegroup.com/trading/interest-rates/secured-overnight-financing-rate-futures.html>
- ICE Intercontinental Exchange: LIBOR's administrator
<https://www.theice.com/iba/libor>
- FASB Financial Accounting Standards Board
LIBOR and SOFR Hedge Accounting in Transition new
<https://www.fasb.org>

*Note: These websites are not operated or maintained by the FHLBNY

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