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July 1, 2021 **DBR-2021-SYS-052**

Presidents and Chief Executive Officers
Federal Home Loan Banks

Re: Alternative Reference Rate Selection Risk Management

Dear Federal Home Loan Bank Presidents and Office of Finance Chief Executive Officer:

The Federal Home Loan Banks (FHLBanks or Banks) have been leaders in reference rate transition by prudently moving away from LIBOR and toward an appropriate and well-accepted replacement, the Secured Overnight Financing Rate (SOFR). The transition has been long and resource intensive.

In recent months, several organizations in the marketplace have announced or introduced other potential alternative reference rates that may be inconsistent with established principles for an acceptable reference rate. Accordingly, FHLBank use or adoption of these alternative rates may significantly pose the same safety and soundness and reputational risks that befell LIBOR. To ensure continued safe and sound FHLBank operations, this Supervisory Letter provides Division of Bank Regulation (DBR) expectations regarding the use of alternative reference rates.

Background

LIBOR's demise stems from the lack of a robust market for wholesale unsecured bank funding transactions. This provided an environment for the LIBOR scandal to develop, where some panel bank submissions reflected opportunistic behavior rather than unbiased assessments of market conditions, and is now leading to the end of these rates.

The Federal Reserve Board and the Federal Reserve Bank of New York (New York Fed) convened a group of private-market participants known as the Alternative Reference Rate Committee (ARRC) to develop and recommend a more robust reference rate than LIBOR. The ARRC recommended SOFR. Importantly, the FHLBank System (System), through the FHLBank of New York, has been an active ARRC member, and served as a member of the ARRC's End User Advisory Group at the time the ARRC and that Advisory Group recommended SOFR. With several hundred billions in financial instruments using LIBOR as a reference rate, debt issuance volumes that annually exceed several trillion dollars (and often swapped to floating rates), and a business model that used LIBOR based financial performance metrics, the System had been a significant end user of LIBOR and a key stakeholder to the ARRC. In addition to an active ARRC participant, the System has become a leader in reference rate transition and has issued the most bonds that use SOFR as a reference rate in the marketplace. The alacrity the System has demonstrated in transitioning away from LIBOR to a robust reference rate such as SOFR cannot be overstated. To this end, DBR does not believe the System should experience recidivism in adopting and using alternative reference rates that have shortcomings similar to those of LIBOR and other recently discontinued or soon to be discontinued reference rates.[1]

The ARRC selected and recommended SOFR as a replacement reference rate for LIBOR for a number of reasons, including that SOFR's construction and governance would be consistent with the International Organization of Securities Commissions' (IOSCO) *Principles for Financial Benchmarks*.[2, 3] The ARRC selected SOFR because of "…the depth of the underlying market and its likely robustness over time; [and] the rate's usefulness to market participants…" The New York Fed has adopted an extensive set of policies and procedures for SOFR that are consistent with international best practices for financial benchmarks, and annually assesses the compliance of the reference rates it administers and produces with the IOSCO Principles and releases an IOSCO Statement of Compliance online.[4]

The ARRC has recommended SOFR for all products, and recommends that market participants use overnight SOFR and SOFR averages given their robustness and because they allow market participants to hedge in the most efficient and transparent manner.[5] However, the ARRC also supports the use of the SOFR Term Rate in areas where use of overnight and averages of SOFR have proven to be particularly difficult. In doing so, the ARRC has emphasized that term SOFR should have a limited scope of use, to avoid (i) use that is not in proportion to the depth and transactions in the underlying derivatives markets or (ii) use that materially detracts from volumes in the underlying SOFR-linked derivatives transactions that are relied upon to construct a term rate, making the term rate itself unstable over time.

The marketplace has announced or introduced certain reference rate alternatives to LIBOR that have a credit component based on the underlying cost of bank borrowing in wholesale term unsecured markets. Unfortunately, most if not all of these credit sensitive rates suffer from the same underlying shortcomings as LIBOR: namely, a relatively small number of actual unsecured lending transactions on which to base a rate and sensitivity to market stress that can destabilize a smooth functioning market and overall economic conditions. As recently as during the onset of the pandemic, markets for unsecured bank borrowing, which were already thin, dried up completely. For example, as recently as the spring of 2020, during the market disruption caused by the onset of the pandemic, the Federal Reserve System was unable to produce its commercial

[1] The FHLBank of San Francisco has announced that it will stop publishing all cost of funds indices early in 2022 because of the significant decline in the number of financial institutions eligible to report the data used to calculate the indices. See https://www.fhlbsf.com/resources/cofi.

[2] Alternative Reference Rate Committee's *Frequently Asked Questions* page 4. https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/ARRC-faq.pdf. IOSCO's *Principles for Financial Benchmarks* can be found at https://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf.

[3] Note that there is no IOSCO certification granted by IOSCO itself. Instead, rate producers typically produce documentation explaining how they believe their rate to be IOSCO compliant. It is incumbent upon users of those rates to assess the level of support backing claims of IOSCO compliance.

[4] https://www.newyorkfed.org/markets/reference-rates/iosco-compliance

[5] For more information on the production of SOFR and the New York Fed's other reference rates, see the following: https://www.newyorkfed.org/markets/reference-rates. See also https://www.newyorkfed.org/markets/reference-rates/additional-information-about-reference-rates.

paper rate series[6] for a period of 29 business days, lasting from March 27, 2020, through May 6, 2020. Since that time, the Federal Reserve System did not publish the series for seven consecutive business days starting on June 4, 2020, and for five consecutive business days starting on September 24, 2020. In addition, during the period 2020 to present, the Federal Reserve System did not publish the series for at least three business days in three other instances. FHLBank use of alternative reference rates with a credit sensitive component can lead to elevated System funding costs during periods of market stress or to costs that do not reflect the Banks' credit risk profile as government sponsored enterprises that issue debt in the capital markets.

To address insufficient transactions, sponsors of alternative reference rates look to proxies for actual transactions, including executable quotes. Those sponsors also resort to the use of various methods of looking back over periods of time to garner enough transactions to produce a rate or use regression models to predict a rate when there are too few transactions. These proxy mechanisms introduce a number of additional risks to the integrity of the rate production process, including operations and model risk.[7] They also introduce doubts about exactly what the rate produced for a given day represents.

Guidance

The FHLBanks should make informed and sound decisions prior to employing an alternative reference rate. In selecting an alternative reference rate, the FHLBank should address the following considerations:

- *Volume of Underlying Transactions* - Is the reference rate based on actual market transactions every day, including during times of economic stress?
    - Reference rates using "indications" or using extrapolations from previous days' trades as a backup when there are no transactions should not be considered robust or reflective of market activity. Similarly, rates that use data from other sources may not represent the same market and rate behavior as is represented by the reference rate.
- *Credit Sensitive* - Does the alternative reference rate have sufficient correlation with Bank funding costs?
    - Credit sensitive rates tend to widen their basis to FHLBank funding costs during periods of market stress. The widened basis for credit sensitive rates often translates to higher funding costs for the FHLBanks, especially when there is a flight to safety. FHLBanks must pass along the higher cost to members, increasing their cost to borrow that are passed along to housing market borrowers. The FHLBank System defines its mission as providing "their members with a reliable source of funding for housing finance, community lending and asset-liability

[6] Commercial paper (CP) consists of short-term, promissory notes issued primarily by corporations. Maturities range up to 270 days but average about 30 days.

[7] Speaking in March 2021, Bank of England governor Andrew Bailey cautioned on the use of "rolling windows" for assembling data to construct reference rate. He stated that they give "the appearance of larger underlying volumes" and warned about the potential model risk stemming from the use of regression approaches intended to create stability. He stated "[W]hat is a lot less clear is how stable these rates will be in the future as these underlying markets continue to evolve, especially against a backdrop of money market reform… [I]t is therefore not clear to what extent alternative credit-sensitive benchmarks have addressed the weaknesses of Libor."

management as well as liquidity for members' short-term need."[8] Widening spreads related to credit events does not foster a reliable source of funding.

- *Model Risk* - Is the reference rate the most robust version available for the purpose intended?
  - As noted above, credit sensitive rates may rely on quotes, other data sources, or extrapolations from previous days, and all these factors are inherently more difficult to model and introduce model risk that FHLBanks should seriously consider.
  - Although the ARRC is moving to recommend SOFR term rates, it has emphasized that averages of the overnight SOFR are more robust than derived term SOFR rates.[9] Banks should therefore regularly reevaluate any use of derived rates such as a SOFR term rate, should it be endorsed by the ARRC, to ensure that their use does not dwarf the underlying markets they are derived from. In such instances, derived rates may become unrepresentative or subject to manipulation by opportunistic trades.
- *Underlying Transactions* - Does the FHLBank have the necessary information about the underlying transactions and methodology supporting a candidate reference rate to monitor its representativeness over time?
- *Contractual Fallback Language* - Is there sufficient clarity in the contractual language accompanying the use of the rate to determine (a) when the rate will be considered unreliable or unrepresentative, (b) what replacement rate will be used, and (c) what entity will make those decisions?
- *Depth of Derivative Markets* - Does the FHLBank have the ability to obtain adequate hedging for the rate chosen in the foreseeable future and under stressful market conditions?[10]

The FHLBanks have been leaders in the marketplace through their efforts to prudently move away from LIBOR and introduce SOFR-based products. The FHLBanks should avoid rates that contain shortcomings that exist in LIBOR and other recently discontinued or soon to be discontinued reference rates.[11] In addition, a FHLBank reference rate should not use proxies for actual transactions and should avoid the use of models that unnecessarily introduce model risk. Accordingly, a Bank needs to provide advance notice to their respective Examiner-in-Charge of plans to use an alternative reference rate not already being used by the FHLBanks. The Examiner-

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[8] https://fhlbanks.com/mission/

[9] From the June 2, 2021 Financial Stability Board report: "Moving the bulk of current exposures referencing term IBOR benchmarks that are not sufficiently anchored in transactions to alternative term rates that also suffer from less liquid underlying markets would not reduce risks and vulnerabilities in the financial system. Therefore, because the FSB does not expect such RFR-derived term rates to be as robust as the overnight RFRs themselves, they should be used only where necessary."

[10] As Treasury Secretary Yellen noted in her remarks at the June 11th Financial Stability Oversight Council meeting, "The decisions made now around the selection of alternative rates will determine whether some of LIBOR's shortcomings may be replicated through the use of alternative rates that lack sufficient underlying transaction volumes. I am concerned about recent use, and potential future growth in use, of these rates in derivatives, where the volume of derivatives contracts referencing these alternative rates could quickly outnumber the transaction volumes underlying the reference rate, leaving it vulnerable to manipulation and disruption – one of the primary issues with LIBOR." The remarks can be found at https://home.treasury.gov/news/press-releases/jy0224.

[11] In addition to the upcoming discontinuation of the COFI index, on May 29, 2019, the FHFA published its final Monthly Interest Rate Survey (MIRS), due to dwindling participation by financial institutions. See https://www.fhfa.gov/DataTools/Downloads/Pages/Monthly-Interest-Rate-Data.aspx.

in-Charge will confer with DBR executive management prior to offering DBR's views regarding the FHLBank's use of such an alternative reference rate.

Should you have questions, please contact your respective Associate Director of Examination, Gary L. Bucher at Gary.Bucher@fhfa.gov, Karen S. Burk at Karen.Burk@fhfa.gov, or Louis M. Scalza at Louis.Scalza@fhfa.gov; your respective Examiner-in-Charge; or Senior Advisor Daniel E. Coates at Daniel.Coates@fhfa.gov.

Sincerely,

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Deputy Director

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