

Transitions in Financial Instrument Reference Rates

Introduction

For decades, the London Interbank Offered Rate (LIBOR) has been one of the most frequently used interest rate benchmarks, or reference rates, used in pricing assets and liabilities as well as off-balance sheet derivative contracts. While LIBOR is often viewed as a reference rate (a rate used to set other rates) used by larger financial institutions, it is also important to smaller financial institutions, including community banks and savings institutions. Despite its current worldwide use, there are initiatives underway that could transition financial markets away from the use of LIBOR as a reference rate. The FDIC recognizes that the potential transition away from, or reduced usage of, LIBOR may result in some adjustments for financial institutions that have it embedded in their contracts. This article is intended to provide useful information to help such entities understand the potential impact and planning considerations for a possible transition from LIBOR.

What is LIBOR?

LIBOR is a reference rate that represents the interest rate at which large banks would lend to one another on a short-term basis. More specifically, LIBOR is calculated as the average of the rates that panels of large banks doing business in London report that each bank could borrow unsecured from another bank in a given currency for certain specified

periods. As such, LIBOR includes the average credit risk of large banks.

As a reference rate, LIBOR's use has been ubiquitous in the financial markets. LIBOR, plus a spread, is widely used for pricing derivatives and loans. In addition, many financial institutions use LIBOR as a basis for setting interest rates on deposits.

Although the first use of LIBOR was in 1969, it was not until 1986 that the British Bankers Association formalized the data collection for LIBOR.¹ In 2012, UK financial regulators (currently, the Financial Conduct Authority (FCA)) began overseeing LIBOR and required that reports be based on actual transactions, if available. If a panel member does not have actual transactions for its report, the member is allowed to use its best estimates based on models.²

Several problems developed with LIBOR reports, casting doubt on LIBOR's usefulness as a reference rate. First, some banks included in the panels declined to continue their participation, resulting in fewer reporters for the calculation of LIBOR. Second, term interbank unsecured borrowing has declined as banks have started using more overnight **secured** funding from repurchase agreements (the repo market) or from securities lending activities. As more banks have turned to secured borrowing, LIBOR reports are based on even fewer transactions. Although most panel banks have agreed to keep reporting LIBOR rates for now, the FCA and various other

¹ Hou, David and Skeie, David. "LIBOR: Origins, Economics, Crisis, Scandal, and Reform." Federal Reserve Bank of New York Staff Report no. 667, 2014. https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr667.pdf.

² In 2014, a different company (International Exchange (ICE)) began to calculate and administer the rate, now called ICE Libor, subject to FCA regulation.

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authorities have warned that LIBOR may cease to be calculated in 2021.

In addition to the possible discontinuance of LIBOR, it is also possible that LIBOR could continue to be calculated for quite some time and the users may be promised continued LIBOR quotes. Even if LIBOR remains indefinitely, financial institutions may nonetheless be compelled, for economic or other reasons, to move from LIBOR if the reference rate suffers a significant decline in use. This could potentially result in a fundamental change of the LIBOR rate structure, resulting in increased rate volatility and, importantly, an increase in its spread to other rates. Such changes could cause financial institutions to determine to move at a date that is sooner than the potential 2021 termination date of LIBOR.

Why is the potential transition from LIBOR an issue?

Many people associate LIBOR with the vast derivatives market, where use of LIBOR as a reference rate has contributed to the standardization of financial contracts with floating rate terms. As a result, the current estimated outstanding volume of derivatives based on US Dollar LIBOR is \$199 trillion.³ Likewise, many bonds and loans, such as syndicated loans, are LIBOR-based. As such, institutions that buy participations in syndicated loans likely have LIBOR exposure.

Financial institutions also use LIBOR as a reference rate for variable rate commercial and consumer loans. The

most common consumer loans based on LIBOR include home mortgages, student loans, credit card, and auto loans, with approximately \$1.3 trillion outstanding.⁴ Moreover, LIBOR use is not limited to the asset side of the balance sheet. Financial institutions also may set deposit rates based on a spread from LIBOR; others have hedging structures based on LIBOR.

About 82% of the financial instruments and loans outstanding at the end of 2016 will mature before 2021,⁵ but those remaining represent a very large dollar volume. Much of this volume was likely priced to LIBOR, and there have been additional LIBOR-based financial instruments and loans issued since 2016. The end of LIBOR has the potential to create issues for financial institutions, beginning with the legal and financial risk from changing an interest rate specified in legacy financial instrument documentation.

Most loan agreements contain some contingency language that becomes applicable if the reference rate becomes unavailable. The language, however, may not be clear, may not cover the situation if the reference rate becomes permanently unavailable, or may allow a change in reference rate but not in the spread over the reference rate.

To assist in the potential transition away from LIBOR, the International Securities Dealers Association (ISDA) is working on proposed model contract language for financial instruments to facilitate substitution for LIBOR. In addition, the Federal Housing

³ "Second Report of the Alternative Reference Rates Committee (ARRC)," March 2018 (Second ARRC Report), p. 2. ARRC was convened by the Federal Reserve Bank of New York in November 2017, and originally consisted of 15 large interest rate derivatives dealers; its membership has expanded several times. <https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2018/ARRC-Second-report>

⁴ Second ARRC Report, p. 2

⁵ Ibid.

Finance Authority (FHFA) is working on proposed contract language for residential mortgages. However, even if current contract language supports the substitution of the original reference rate, the alternative may result in an interest rate that is fundamentally different than the LIBOR-based rate. Therefore, the potential substitution of one reference rate for another may result in either the borrower or the institution experiencing payments and valuations that differ from expectations.

The Federal Financial Institutions Examination Council (FFIEC) is raising awareness and helping to educate financial institutions and examiners about potential transitional issues and encouraging planning for a potential transition from LIBOR as a reference rate.

Alternatives to LIBOR

Some groups have begun creating alternatives to LIBOR. While two such groups are mentioned below, others exist and more could be created in the future. In the USA, one option is the Alternative Reference Rate Committee (ARRC), established by the Federal Reserve Bank of New York, of which the FDIC is an *ex officio* member. The ARRC is currently composed of 27 full members and ten *ex officio* members. The full members include many large securities dealers and banks while the *ex officio* members include the financial regulators.⁶ While the FDIC is an *ex officio* member of the ARRC, it is important to understand that the FDIC does

not endorse or require the use of any particular reference rate. Rather, the FDIC believes that the use of a particular reference rate is a business decision for each institution based on its needs and unique circumstances.

In 2017, the ARRC developed the Secured Overnight Financing Rate (SOFR) primarily for dollar-denominated derivative products. SOFR is a fully transaction-based rate incorporating tri-party repo data, the Fixed Income Clearing Corporation's (FICC) General Collateral Finance (GCF) Repo data, and bilateral Treasury repo transactions cleared through the FICC.⁷ SOFR is quite different from LIBOR as it is based on actual overnight secured transactions that could vary significantly from LIBOR under some market conditions. The ARRC is also creating a term rate.

Another US-based alternative reference rate is Ameribor, which was created by the American Financial Exchange (AFX), and reflects the borrowing costs of more than 100 US small- and mid-sized banks using a 30-day rolling average of the weighted average daily volume in the AFX overnight unsecured market. Other reference rates also may be created for application to particular products.

International groups have created reference rates for use with other countries and non-US dollar related currencies. Examples include the following: the UK selected the reformed Sterling Overnight Index Average (SONIA); the Swiss National Working Group chose the Swiss Average Rate Overnight (SARON); and the Japanese chose an *unsecured* overnight call

⁶ Bowman, David, Senior Advisor, Federal Reserve Board, "Alternative Reference Rates Committee Update." (ARRC Second Report Update), August 31, 2018, p. 6.

⁷ According to the ARRC Second Report, "The volumes underlying SOFR are far larger than the transactions in any other U.S. money market and dwarf the volumes underlying LIBOR or other term unsecured funding rates. ...Because of its range of coverage, SOFR is a good representation of general funding conditions in the overnight Treasury repo market. As such, it will reflect an economic cost of lending and borrowing relevant to the wide array of market participants active in these markets, including not only broker-dealers, but also money market funds, asset managers, insurance companies, securities lenders, and pension funds. FRBNY has released roughly three years of historical data for SOFR and the other repo rates that it will produce." p. 7-8.

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rate.⁸ Thus far, no reference rate has attained the popularity of LIBOR.

Planning Considerations

At this point, it appears that LIBOR will likely be around for at least several more years. FDIC examiners will not be examining financial institutions for LIBOR planning or criticize risk management of loans or deposits merely because they use LIBOR as a reference rate. The FDIC will provide additional awareness materials to the industry as appropriate. Institutions should feel free to discuss any concerns they may have about the potential transition with their primary federal regulator.

Some institutions are beginning to plan for the change by evaluating their use of LIBOR. Institutions conducting their own proactive assessments will likely focus first on the potential impact to LIBOR linked assets and liabilities and derivative contracts that mature after 2021. Additionally, institutions may consider using a different reference rate when making new loans that mature after 2021, or begin incorporating language in new contracts that would facilitate a smooth transition to an alternative reference rate, if needed. For residential real estate mortgages intended to be sold on the secondary market, an institution may want to consider waiting to change interest rate language until the FHFA recommends or adopts standard language. The FDIC does not recommend or require the use of any particular reference rate.

Institutions might also review the structure of their assets and liabilities to determine how they would be affected by a change from the LIBOR reference rate. In particular, institutions might consider what commercial and consumer loans are priced using LIBOR, evaluate what contracts need revision because they do not contain acceptable language if LIBOR is no longer available, consider which loans might need prudent renegotiation to avoid issues arising from a change to an interest rate not based on LIBOR, and evaluate any hedging relationships that might be affected by a move away from LIBOR.

Sound planning goes beyond selecting interest rates to also assessing the comprehensive effect of the risks associated with a potential transition in reference rates on the whole institution in areas such as information technology, management information systems, accounting (including hedge accounting and valuation), governance, compliance, and internal control structures.

⁸ ARRC Second Report, p. 14.

Summary

LIBOR may or may not be available after 2021, resulting in a possible transition from LIBOR as a reference rate. Institutions that begin analyzing how a change from LIBOR will affect the pricing of loans, deposits, or derivatives used to hedge interest rate risk, as well as the impact on all systems and controls, will be better prepared to facilitate a smooth transition. Institution management should feel free to discuss any concerns about the transition with their primary federal regulator.

There are no plans to examine financial institutions for the status of LIBOR planning or criticize loans merely because they use LIBOR

as a reference rate. The FDIC does not require any institution to use any particular reference or interest rate. Institutions can plan for a potential change by understanding how a discontinuation in the LIBOR rate may impact the institution and considering whether any action is necessary to prepare for the potential transition and to protect themselves from related risks.

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Table 1

Selected references:
FSOC 2013 Annual Report, Section 3.1.3 <i>Reforms Relating to Reference Rates</i> : https://www.treasury.gov/initiatives/fsoc/Documents/FSOC%202013%20Annual%20Report.pdf
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Financial Stability Board - July 2014 report "Reforming Major Interest Rate Benchmarks": http://www.fsb.org/2014/07/r_140722/
Financial Stability Board - Reforming major interest rate benchmarks Progress report on implementation of July 2014 FSB recommendations (October 2017; report on IBOR reforms): http://www.fsb.org/2017/10/reforming-major-interest-rate-benchmarks-4/
LIBOR Alternatives under Development (Office of Financial Research): https://www.financialresearch.gov/data/libor-alternatives/
Alternative Reference Rates: SOFR, LIBOR, and Issues for Transitions (July 2018): https://www.cftc.gov/sites/default/files/2018-07/mrac071218_AlternativeReferenceRates.pdf
Alternative Reference Rate Committee (ARRC) Frequently Asked Questions: https://www.newyorkfed.org/arrc/faq
Second Report of The Alternative Reference Rates Committee (March 2018): https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2018/ARRC-Second-report
Ask the Fed Webinar - LIBOR and Reference Rate Reform https://www.webcaster4.com/Webcast/Page/584/26025 . Registration is required.
Federal Financial Institutions Examination Council (FFIEC) webinar: The FFIEC held a webinar on December 6, 2018, to promote awareness and understanding of efforts to develop alternative reference rates to LIBOR, because of the uncertainty as to continued availability of LIBOR after 2021. To access the archived webinar broadcast, select the registration tab within the press release announcement. https://www.ffiec.gov/press/pr111918.htm . Registration is required.