

Federal Housing Finance Agency
Office of Inspector General



Update on Enterprise Transition from LIBOR to an Alternative Index for Single-Family ARMs

White Paper • WPR-2021-002 • March 17, 2021



WPR-2021-002

March 17, 2021

Executive Summary

The London Interbank Offered Rate (LIBOR) is an interest rate benchmark that reflects the cost at which large banks can borrow on an unsecured basis in wholesale financial markets. An adjustable-rate mortgage (ARM) is a mortgage with an interest rate that adjusts periodically over the lifetime of the loan. ARM interest rates are set by the index and the margin. The index is a variable market interest rate, such as LIBOR, to which the ARM is tied. Fannie Mae and Freddie Mac (the Enterprises) had combined exposure to LIBOR-indexed single-family ARMs of \$61 billion as of December 31, 2020.

In July 2017, due to concerns about LIBOR's sustainability, the United Kingdom's Financial Conduct Authority, the regulator of LIBOR, announced it would not compel panel banks to sustain LIBOR past 2021. This decision, according to the Federal Housing Finance Agency (FHFA), could result in a declaration that LIBOR is no longer representative of market activity, or "unavailable." That same year, the Alternative Reference Rates Committee (ARRC) identified the Secured Overnight Financing Rate (SOFR) as its preferred alternative reference rate in the United States.

In their 2019 10-Ks, both Enterprises recognized that a move away from LIBOR was a risk, and in internal documents they characterized it as a top or key risk. In March 2020, the Federal Housing Finance Agency Office of Inspector General (OIG) issued a white paper that discussed the Enterprises' efforts to transition their single-family ARMs from LIBOR. That paper also described the operational, market, financial, legal, regulatory, and other risks presented by the transition at that time.

In their 2020 10-Ks, Fannie Mae and Freddie Mac continued to recognize the LIBOR transition for ARMs as a risk. Both recognized, in internal documents, that the risk decreased during 2020 but that some risk remains. FHFA identified the transition as a key ongoing initiative in the Agency's 2020 and 2021 Conservatorship Scorecards. This white paper updates information on the Enterprises' LIBOR transition for their single-family ARMs since publication of our March 2020 white paper.

TABLE OF CONTENTS

EXECUTIVE SUMMARY2

ABBREVIATIONS4

BACKGROUND5

UPDATE ON TRANSITION FROM LIBOR.....6

 Enterprise Transition to New SOFR-based ARM Product.....6

 Enterprise Transition for Legacy LIBOR ARMs7

 Publication of Certain LIBOR Settings Extended Through June 20238

 Determination of Replacement Index8

 ARRC Spread-Adjustment Methodology8

 Stakeholder Readiness9

 Risk Considerations9

CONCLUSION.....10

OBJECTIVE, SCOPE, AND METHODOLOGY11

ADDITIONAL INFORMATION AND COPIES12

ABBREVIATIONS

ARM	Adjustable-rate mortgage
ARRC	Alternative Reference Rates Committee
Enterprises	Fannie Mae and Freddie Mac
FAQs	Frequently Asked Questions
FHFA or Agency	Federal Housing Finance Agency
LIBOR	London Interbank Offered Rate
OIG	Federal Housing Finance Agency Office of Inspector General
SOFR	Secured Overnight Financing Rate

BACKGROUND.....

LIBOR is an interest rate benchmark that reflects the cost at which large banks can borrow on an unsecured basis in wholesale financial markets. An ARM is a mortgage with an interest rate that adjusts periodically over the lifetime of the loan.¹ The terms of that adjustment are set in the mortgage note. ARM interest rates are set by the index and the margin. The index is a variable market interest rate, such as LIBOR, to which the ARM is tied.² The Enterprises had combined exposure to LIBOR-indexed single-family ARMs of \$61 billion as of December 31, 2020.

In July 2017, due to concerns about LIBOR’s sustainability, the United Kingdom’s Financial Conduct Authority, the regulator of LIBOR, announced it would not compel panel banks to sustain LIBOR past 2021. According to FHFA, this decision could result in a declaration that LIBOR is no longer representative of market activity, or “unavailable.” That same year, the ARRC identified SOFR as its preferred alternative reference rate in the United States.³ SOFR is produced by the Federal Reserve Bank of New York based on observable transactions rather than estimates.⁴ It is a broad measure of the cost of borrowing cash overnight, collateralized by Treasury securities.

In their 2019 10-Ks, both Enterprises recognized that a move away from LIBOR was a risk, and in internal documents they characterized it as a top or key risk. The transition from LIBOR has two components. First, the Enterprises’ new ARM products must be indexed to an alternative reference rate. Second, they must transition legacy LIBOR ARMs already on their books to an alternative reference rate. In March 2020, we issued a white paper that discussed the Enterprises’ efforts to transition their single-family ARMs from LIBOR.⁵ That

¹ ARMs have an initial period—usually between six months and ten years—during which the interest rate and payment do not change, followed by periods of variable rates and payments until the loan is paid off. For more information on Enterprise ARMs, see OIG, *Fannie Mae and Freddie Mac Purchases of Adjustable-Rate Mortgages* (Jan. 4, 2018) (WPR-2018-001) (available online at www.fhfa.gov/sites/default/files/WPR-2018-001.pdf).

² The margin is an additional rate, usually constant, that the lender adds above the index.

³ The ARRC was convened by the Federal Reserve Board of Governors and the Federal Reserve Bank of New York to identify a new reference rate to replace LIBOR. Fannie Mae and Freddie Mac have been voting members of the ARRC since March 2018, and FHFA is an ex officio and non-voting member.

⁴ LIBOR is calculated and published daily across five currencies and seven maturities by the Intercontinental Exchange Benchmark Administration based on submissions from panel banks. The volume of unsecured wholesale lending has been significantly reduced, requiring the panel banks to submit estimates based on expert judgment rather than actual market activity.

⁵ See OIG, *Enterprises’ Transition from LIBOR to an Alternative Index for Single-Family ARMs* (Mar. 19, 2020) (WPR-2020-004) (online at www.fhfa.gov/sites/default/files/WPR-2020-004.pdf).

paper also described the operational, market, financial, legal, regulatory, and other risks presented by the transition at that time.

In their 2020 10-Ks, Fannie Mae and Freddie Mac continued to recognize the LIBOR transition for ARMs as a risk. Both recognized, in internal documents, that the risk decreased during 2020 but some risk remains. That risk has two elements: for risk related to new ARM products, both Enterprises reported that they began to purchase SOFR-indexed ARMs and ceased purchase of LIBOR-indexed ARMs; for risk related to legacy ARMs, there was a notable decrease in the volume of Enterprise legacy LIBOR ARMs that need to be transitioned to a replacement index. According to Enterprise data, each Enterprise’s exposure to single-family legacy LIBOR ARMs decreased by about 30 percent between year-end 2019 and year-end 2020. Fannie Mae internally reported in July 2020 that its single-family LIBOR ARMs are “paying down at approximately \$1 billion per month” and may be paying down faster due to recent low interest rates. Freddie Mac reported to us that LIBOR ARM prepayments far outweighed new LIBOR ARM originations in 2020.

FHFA identified the transition as a key ongoing initiative in the Agency’s 2020 and 2021 Conservatorship Scorecards. This white paper updates information on the Enterprises’ LIBOR transition for their single-family ARMs since publication of our March 2020 white paper.

UPDATE ON TRANSITION FROM LIBOR

According to public information and internal documents, FHFA and the Enterprises continue to work with the ARRC and other industry stakeholders on the LIBOR transition for both new and legacy ARMs. The Enterprises submit regular LIBOR transition updates to FHFA and have issued joint materials to inform external stakeholders on LIBOR transition impacts.⁶

Enterprise Transition to New SOFR-based ARM Product

At the time of our earlier white paper, the Agency’s priority for the Enterprises was the development of a new SOFR-based ARM product. Pursuant to guidance from FHFA, the Enterprises began purchasing SOFR ARMs during the second half of 2020: Fannie Mae began purchasing single-family SOFR ARMs in August 2020 and Freddie Mac began in

⁶ In May 2020, pursuant to FHFA guidance, the Enterprises jointly published a LIBOR transition playbook and Frequently Asked Questions (FAQs) as part of their external outreach for stakeholders impacted by the transition. Both documents are publicly available online at capitalmarkets.fanniemae.com/libor-transition and www.freddiemac.com/about/libor-transition.html.

November 2020. The Enterprises stopped purchasing single-family LIBOR ARMs after December 31, 2020.

The Enterprises report that they are monitoring market adoption of new SOFR-based ARMs and associated risks. In a September 2020 LIBOR transition report to FHFA, Fannie Mae stated that it was conducting formal surveys and targeted discussions to monitor readiness and appetite. In Freddie Mac’s September 2020 transition report to FHFA, the Enterprise noted potential operational risks related to new SOFR-based offerings. According to the report, operational risk can arise from failure to properly make required system changes to accommodate the new product. The report noted that various market participants, including servicers and certain data vendors, “must make significant changes” to adopt new SOFR products. FHFA officials explained that some lenders, such as large national banks, may have longer lead times for product take-up but are committed to moving to SOFR-based ARMs. FHFA informed us in March 2021 that Enterprise sellers have been originating and servicing SOFR ARMs for the past several months.

More broadly, in February 2021, Freddie Mac publicly reported in its 2020 10-K that “It is still uncertain how soon widespread market adoption of SOFR will occur.” According to FHFA, the Enterprises face risks—financial, basis, and reputational—if SOFR fails to be widely adopted.

Enterprise Transition for Legacy LIBOR ARMs

Although the Enterprises’ exposure to legacy LIBOR ARMs is declining, the vast majority of Enterprise single-family ARMs as of year-end 2020 were LIBOR-based and will now be transitioned away from LIBOR. An internal FHFA document reports that a great deal of work needs to be done to transition legacy LIBOR ARMs to a different standard.⁷ The Agency’s 2021 Scorecard focuses on the transition for legacy products away from LIBOR. According to FHFA, it intends to have the Enterprises continue providing regular updates, including quarterly updates to Enterprise transition plans and LIBOR exposure analyses.

⁷ In October 2020, the Enterprises updated their joint LIBOR Transition FAQs to define legacy LIBOR ARMs as those that do not include the ARRC-recommended fallback language. Enterprise ARM notes contain fallback language that permits the Enterprises “to choose a new index that is based upon comparable information” in the event “the Index is no longer available.” Traditionally, that language did not elaborate on the terms of comparability nor did it explain what might “trigger” index unavailability. In November 2019, the ARRC issued recommended revised fallback language to clarify when and how the new index will be chosen. In February 2020, the Enterprises notified lenders of new mortgage documents for ARMs, which incorporate the new ARRC-recommended fallback language. The Enterprises encouraged lenders to start using the new documents immediately and mandated their use by June 1, 2020. In October 2020, the Enterprises clarified that LIBOR products with the ARRC-recommended fallback language will transition to a SOFR-based index pursuant to their terms.

Publication of Certain LIBOR Settings Extended Through June 2023

As discussed in our prior white paper, legacy LIBOR-based ARMs cannot be transitioned to a new reference rate until LIBOR actually becomes “unavailable.” On March 5, 2021, after a consultation period on the proposal, the United Kingdom’s Financial Conduct Authority confirmed the publication of certain LIBOR settings through June 30, 2023.⁸ This is an 18-month extension of the originally announced date of December 31, 2021. Federal financial regulators noted that this announcement provided clarity for the end of LIBOR and the transition to alternative reference rates.

The settings that make up the Enterprises’ single-family ARM exposures will now be published through June 2023. In January 2021, Enterprise officials told us that they view the then proposed extension as largely beneficial. A Freddie Mac official explained that a delay to June 2023 gives the industry even more time to support the transition and, from an operational perspective, it would lower the residual risk for the legacy conversion. In addition, the extension of the cessation is expected to reduce the legacy LIBOR ARM volume that would need to be transitioned due to runoffs. A Fannie Mae official also noted that the extension helps to mitigate operational risk.

Determination of Replacement Index

The Enterprises have not yet determined what the replacement index will be for their legacy LIBOR ARMs, according to public documents. Fannie Mae and Freddie Mac are working with FHFA and the ARRC to strategize the transition to an alternative reference rate when LIBOR becomes unavailable.

The 2021 Conservatorship Scorecard includes a goal for implementation of an effective legacy LIBOR product transition. FHFA reported to us that as part of this transition, the ARRC will make a recommendation on the replacement rate for legacy LIBOR ARMs. After that, FHFA will work with Fannie Mae and Freddie Mac to determine whether to follow ARRC’s recommendation as the solution for Enterprise legacy LIBOR ARMs.

ARRC Spread-Adjustment Methodology

In our prior white paper on the Enterprises’ transition for single-family ARMs, we noted that the ARRC was at that time in a consultation period soliciting comments on the creation of a

⁸ LIBOR is published in various currency and maturity “settings.” In its March 5, 2021 announcement, the United Kingdom’s Financial Conduct Authority confirmed that all LIBOR settings will either cease to be provided or will no longer be representative after: a) December 31, 2021 for all sterling, euro, Swiss franc and Japanese yen settings, and the 1-week and 2-month US dollar settings; and b) June 30, 2023 for the remaining US dollar settings (overnight and 1-, 3-, 6- and 12-month).

SOFR-based index that incorporated a spread-adjustment to minimize the changes in value compared to LIBOR. In April 2020, the ARRC announced its recommended spread-adjustment methodology, which would be used to produce a version of SOFR comparable to LIBOR. The Financial Stability Oversight Council, of which FHFA is a member, referred to this as “a significant step” in its 2020 annual report.

In September 2020, the ARRC released a request seeking one or more institutions to: use the ARRC’s recommended methodology to calculate spreads for LIBOR; apply the calculated spreads to corresponding rates (e.g., the various forms of SOFR); and publish the calculated spreads and the resulting rates “in a format that meets the needs of U.S. regulatory agencies.” In its 2020 10-K, Freddie Mac noted the risk that there is not yet a generally accepted or endorsed methodology for adjusting SOFR so that it will be substantially comparable to LIBOR.

Stakeholder Readiness

The 2021 Conservatorship Scorecard specifies that the Enterprises are to announce plans and milestones for the legacy ARM products. The ARRC, of which the Enterprises are members, explained that the LIBOR ARMs transition will require diligent planning and the transition activities of many different stakeholders. For example, the Enterprises said in their joint FAQs that servicers for the LIBOR ARMs owned by the Enterprises will inform borrowers of the replacement index after each Enterprise provides notices of the replacement index to its servicers. According to Freddie Mac’s internal transition plan, the alternative index must be integrated into the processes and systems of servicers and other stakeholders.

Risk Considerations

In its LIBOR ARM Transition Resource Guide, the ARRC observed that the transition can have operational, reputational, financial, litigation, compliance, and other risks. Similarly, Fannie Mae, in its 2020 10-K, advised that it “continue[s] to analyze potential risks associated with the LIBOR transition, including financial, operational, legal, reputational and compliance risks.” Freddie Mac, in its 2020 10-K reported that the discontinuance of LIBOR and transition to an alternative rate could present financial, operational, and litigation risks.

At the time of our last white paper, both Enterprises emphasized legal risks in the transition for legacy ARMs from LIBOR to an alternative rate. The transition for legacy ARMs will require each Enterprise to make certain decisions on changes to existing loans. Legal risk could arise if borrowers or investors believe the decisions were made in a manner that is inconsistent with applicable laws and the terms of the loan documents. In their 2020 10-Ks, both Enterprises again highlighted the legal risk associated with the transition for legacy ARMs.

CONCLUSION.....

In their 2020 10-Ks, Fannie Mae and Freddie Mac continued to recognize the LIBOR transition for ARMs as a risk. Both recognized, in internal documents, that the risk decreased during 2020, while they also acknowledged that some risk remains. That risk has two elements: for risk related to new ARM products, both Enterprises reported that they began to purchase SOFR-indexed ARMs and ceased purchase of LIBOR-indexed ARMs; for risk related to legacy ARMs, there was a notable decrease in the volume of Enterprise legacy LIBOR ARMs that need to be transitioned to a replacement index.

FHFA identified the transition as a key ongoing initiative in the Agency's 2021 Conservatorship Scorecard. According to the Agency, the Enterprises face financial, basis, and reputational risks if SOFR fails to be widely adopted. Additionally, the transition for legacy ARMs will require each Enterprise to make certain decisions on changes to existing loans. Legal risk could arise if borrowers or investors believe the decisions were made in a manner that is inconsistent with applicable laws and the terms of the loan documents.

OBJECTIVE, SCOPE, AND METHODOLOGY

The objective of this white paper was to update information on the Enterprises' transition from LIBOR to an alternative index for single-family ARMs. To achieve this objective, we reviewed internal FHFA, Fannie Mae, and Freddie Mac documents as well as publicly available documents. We also interviewed FHFA, Fannie Mae, and Freddie Mac officials.

We provided FHFA with the opportunity to respond to a draft of this white paper. We appreciate the cooperation of FHFA staff, as well as the assistance of all those who contributed to the preparation of this white paper.

ADDITIONAL INFORMATION AND COPIES.....

For additional copies of this report:

- Call: 202-730-0880
- Fax: 202-318-0239
- Visit: www.fhfaoig.gov

To report potential fraud, waste, abuse, mismanagement, or any other kind of criminal or noncriminal misconduct relative to FHFA's programs or operations:

- Call: 1-800-793-7724
- Fax: 202-318-0358
- Visit: www.fhfaoig.gov/ReportFraud
- Write:

FHFA Office of Inspector General
Attn: Office of Investigations – Hotline
400 Seventh Street SW
Washington, DC 20219