ARRC RECOMMENDATIONS
REGARDING MORE ROBUST LIBOR FALLBACK CONTRACT LANGUAGE FOR
NEW CLOSED-END, RESIDENTIAL ADJUSTABLE RATE MORTGAGES

November 15, 2019

TABLE OF CONTENTS

Part I: Background on the ARRC and its Recommendations for Fallback Language

The Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York convened the Alternative Reference Rates Committee ("ARRC") in 2014 to identify alternative reference rates for U.S. dollar (USD) LIBOR ("LIBOR"), identify best practices recommendations for contract robustness in interest rate markets that currently use LIBOR, and create an implementation plan to support an orderly adoption of new reference rates. After accomplishing its initial set of objectives by selecting a recommended alternative reference rate (which is the Secured Overnight Financing Rate or "SOFR") and setting out a Paced Transition Plan with respect to derivatives, the ARRC was reconstituted by the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York in 2018 with an expanded membership to help ensure the successful implementation of the Paced Transition Plan and to serve as a forum to coordinate cash and derivatives markets as they address the risk that LIBOR may not exist beyond 2021. The ARRC now serves as a forum to address the impact of a possible LIBOR cessation on market participants currently using LIBOR and the development of SOFR-based products across cash and derivatives markets.

The ARRC's Second Report noted that most contracts referencing LIBOR do not appear to have envisioned a permanent or indefinite cessation of LIBOR and have fallbacks that would not be economically appropriate if this event occurred. Current contract language in closed-end, residential mortgages allows lenders to replace the index if LIBOR is no longer available, but provides little guidance to the parties about the process for making any such replacement. As a result, both consumers and investors may benefit from contract language that more clearly specifies what they should expect to happen if LIBOR is no longer published or is materially disrupted.

To meet its mandate to act as a forum for developing recommendations for voluntary transition, the ARRC formed a number of working groups to focus on various markets and published its Guiding Principles for More Robust LIBOR Fallback Contract Language to create a framework for fallback language in cash products. The ARRC has already consulted on and recommended fallback language for floating-rate notes, syndicated and bilateral business loans, and securitizations. These recommendations set forth robust fallback provisions that define the trigger events[1], and allow for the selection of a replacement index[2] and a spread adjustment between LIBOR and the replacement index to account for differences between these two benchmarks.

The ARRC formed its Consumer Products Working Group (Working Group) this year. The ARRC also established a set of guiding principles that it believes are uniquely applicable for consumer loan products. In order to meet its mandate, the Working Group includes a diverse array of lenders, consumer groups, investors, and servicers. The Working Group was tasked with recommending modified language for new consumer loans, and several key principles were set out to guide that work:

- In determining recommended fallbacks for LIBOR in consumer products, the choice of the replacement index, spread or margin adjustment to the replacement index, succession timing, and mechanics should be easily comprehensible in order to be effectively communicated to all

[1] A trigger event is an occurrence that precipitates the conversion from LIBOR to a new reference rate.
[2] The replacement index is the reference rate that would replace LIBOR in contracts.

stakeholders in advance of the transition away from LIBOR, and should seek to minimize expected value transfer based on observable, objective rules determined in advance.

- Where flexibility or discretion are incorporated in fallbacks, it should be carefully considered and limited to the extent possible to ensure ease of application and to minimize the potential for disputes.

In accordance with these principles and the results of the consultations discussed in ***Part IV: Summary of Responses to the ARRC's Consultations***, the ARRC is publishing recommended fallback language for market participants to consider for new closed-end, residential adjustable rate mortgages ("ARMs"). To the extent market participants continue to enter into LIBOR-based contracts, the ARRC recommends the fallback language and related guidance herein and believes the cash markets will benefit by adopting a more consistent, transparent and resilient approach to contractual fallback arrangements for new LIBOR products. It is important to note that regardless of this recommendation, the extent to which any market participant decides to implement or adopt any suggested contract language is completely voluntary. Therefore, each market participant should make its own independent evaluation and decision about whether or to what extent any suggested contract language is adopted.

The ARRC's final recommendation for ARMs is intended to be consistent with its recommendations for other cash products, but it recognizes the need for simpler contract language in consumer products. The final recommendation for ARMs refers to a replacement index "selected or recommended for use in consumer products, including residential adjustable-rate mortgages, by the Board of Governors of the Federal Reserve System, the Federal Reserve Bank of New York, or a committee endorsed or convened by the Board of Governors of the Federal Reserve System or the Federal Reserve Bank of New York." It is anticipated that the ARRC will work with all stakeholders to develop and recommend a spread adjustment and corresponding spread-adjusted SOFR-based replacement that reflects and adjusts for the differences between LIBOR and SOFR; thus, minimizing the impact to the borrower's interest rate if LIBOR is no longer available. It is important to be aware that the ARRC has committed to see that any rates and any spread adjustments it recommends are published and made publicly available. This will include seeing the rate and spread adjustment published jointly as a single "spread-adjusted" rate. These published spread adjusted rates, which could be either based on averages of SOFR or on a SOFR term rate, would be the recommended replacement index for LIBOR in ARMs.

To facilitate use of SOFR in financial products, the Federal Reserve Bank of New York is preparing to publish averages of daily SOFRs beginning in 2020.[3]

[3] The technical differences between the "simple average" and "compounded average" as well as other models for using SOFR in cash products are described in *A User's Guide to SOFR* available at https://www.newyorkfed.org/arrc/publications. There are plans to produce indicative backward-looking compounded average SOFR rates that could help market participants understand how these rates are likely to behave (before the Federal Reserve Bank of New York publishes such rates for use in contracts, which is expected in 2020).

<u>Part II: Fallback Language for New Closed-End, Residential Adjustable Rate Mortgages</u>

[Excerpts from] FIXED/ADJUSTABLE RATE NOTE
(LIBOR One-Year Index (As Available Via *The Wall Street Journal*)–Rate Caps)

[Sections Intentionally Omitted]

2. INTEREST

Interest will be charged on unpaid principal until the full amount of Principal has been paid. I will pay interest at a yearly rate of ___________%. The interest rate I will pay may change in accordance with Section 4 of this Note.

The interest rate required by this Section 2 and Section 4 of this Note is the rate I will pay both before and after any default described in Section 7(B) of this Note.

[Sections Intentionally Omitted]

4. ADJUSTABLE INTEREST RATE AND MONTHLY PAYMENT CHANGES

(A) Change Dates

The initial fixed interest rate I will pay will change to an adjustable interest rate on the first day of ____________________, ____, and the adjustable interest rate I will pay may change on that day every 12th month thereafter. The date on which my initial fixed interest rate changes to an adjustable interest rate, and each date on which my adjustable interest rate could change, is called a "Change Date."

(B) The Index

Beginning with the first Change Date, my adjustable interest rate will be based on an Index that is calculated and provided to the general public by an administrator (the "Administrator"). The "Index" is a benchmark, known as [the one-year U.S. dollar (USD) LIBOR][4] index. The Index is currently published in, or on the website of, *The Wall Street Journal*. The most recent Index value available as of the date 45 days before each Change Date is called the "Current Index," provided that if the Current Index is less than zero, then the Current Index will be deemed to be zero for purposes of calculating my interest rate.

If the Index is no longer available, it will be replaced in accordance with Section 4(G) below.

(C) Calculation of Changes

Before each Change Date, the Note Holder will calculate my new interest rate by adding _______________ percentage points (___________%) (the "Margin") to the Current Index. The Margin may change if the Index is replaced by the Note Holder in accordance with Section 4(G)(2) below. The Note Holder will then round the result of the Margin plus the Current Index to the nearest one-eighth of one percentage point (0.125%). Subject to the limits stated in Section 4(D) below, this rounded amount will be my new interest rate until the next Change Date.

[4] The recommend fallback language reflects revisions to excerpts from the Fannie Mae/Freddie Mac Uniform Multistate Adjustable Rate – One-Year LIBOR Index Note. The one-year USD LIBOR index language is placed in brackets as the intent is that the recommended fallback provisions could be implemented in any residential mortgage ARM, including those that do not reference LIBOR and those that reference term LIBOR indices other than one-year in duration.

The Note Holder will then determine the amount of the monthly payment that would be sufficient to repay the unpaid principal that I am expected to owe at the Change Date in full on the Maturity Date at my new interest rate in substantially equal payments. The result of this calculation will be the new amount of my monthly payment.

(D) Limits on Interest Rate Changes

The interest rate I am required to pay at the first Change Date will not be greater than ___________% or less than ___________%. Thereafter, my adjustable interest rate will never be increased or decreased on any single Change Date by more than _____ percentage points from the rate of interest I have been paying for the preceding 12 months. My interest rate will never be greater than ___________% or less than _________%.

(E) Effective Date of Changes

My new interest rate will become effective on each Change Date. I will pay the amount of my new monthly payment beginning on the first monthly payment date after the Change Date until the amount of my monthly payment changes again.

(F) Notice of Changes

The Note Holder will deliver or mail to me a notice of any changes in my initial fixed interest rate to an adjustable interest rate and of any changes in my adjustable interest rate before the effective date of any change. The notice will include the amount of my monthly payment, any information required by law to be given to me and also the title and telephone number of a person who will answer any question I may have regarding the notice.

(G) Replacement Index and Replacement Margin

The Index is deemed to be no longer available and will be replaced if any of the following events (each, a "Replacement Event") occur: (i) the Administrator has permanently or indefinitely stopped providing the Index to the general public; or (ii) the Administrator or its regulator issues an official public statement that the Index is no longer reliable or representative.

If a Replacement Event occurs, the Note Holder will select a new index (the "Replacement Index") and may also select a new margin (the "Replacement Margin"), as follows:

> (1) If a replacement index has been selected or recommended for use in consumer products, including residential adjustable-rate mortgages, by the Board of Governors of the Federal Reserve System, the Federal Reserve Bank of New York, or a committee endorsed or convened by the Board of Governors of the Federal Reserve System or the Federal Reserve Bank of New York at the time of a Replacement Event, the Note Holder will select that index as the Replacement Index.
>
> (2) If a replacement index has not been selected or recommended for use in consumer products under Section (G)(1) at the time of a Replacement Event, the Note Holder will make a reasonable, good faith effort to select a Replacement Index and a Replacement Margin that, when added together, the Note Holder reasonably expects will minimize any change in the cost of the loan, taking into account the historical performance of the Index and the Replacement Index.

The Replacement Index and Replacement Margin, if any, will be operative immediately upon a Replacement Event and will be used to determine my interest rate and monthly payments on Change Dates that are more than 45 days after a Replacement Event. The Index and Margin could be replaced more than once during the term of my Note, but only if another Replacement Event occurs. After a Replacement Event, all references to the "Index" and "Margin" shall be deemed to be references to the "Replacement Index" and "Replacement Margin."

The Note Holder will also give me notice of my Replacement Index and Replacement Margin, if any, and such other information required by applicable law and regulation.

[Sections Intentionally Omitted]

<u>Part III: User's Guide to Fallback Language for New Closed-End, Residential Adjustable-Rate Mortgages</u>

A. <u>General Approach of the ARM Fallback Provisions</u>

Based on the recommendations of its Consumer Products Working Group, the ARRC is recommending more robust fallback language for new ARMs. The recommended fallback language for ARMs is set forth in Part II herein. This ***Part III*** contains a description of the ARM fallback provisions and specific questions that market participants were asked to consider.

Note that in most current ARM notes or ARM riders, there is existing fallback language that specifies that "if the Index is no longer available, the Note Holder will choose a new index which is based upon comparable information." This language has been used several times in the past to facilitate other index replacements; however, the ARRC's recommended contract language is meant to provide greater clarity to consumers on when and how a Replacement Index will be chosen.

The recommended ARM fallback provisions try to balance several goals of the ARRC principles described in ***Part I***. To provide clarity and consistency, the ARM fallback provisions use clear and observable triggers and use a replacement index selected or recommended by the Board of Governors of the Federal Reserve System, the Federal Reserve Bank of New York, or a body convened or endorsed by the Board of Governors of the Federal Reserve System or the Federal Reserve Bank of New York, if such rate is available. If such a rate is not available, the Note Holder will continue to be responsible for choosing a replacement index as is the case in current fallback language for ARMs; however, the ARRC's recommendation includes language addressing any necessary adjustment of a loan's margin and provides a standard of reasonableness and good faith for the Note Holder's choice of the replacement index and margin.

Investors often enter into interest rate swaps to offset or hedge their floating rate exposure. In order to reduce a mismatch between ARMs and swap instruments, the recommended fallback language for ARMs is generally consistent with the approach ISDA presently anticipates implementing for derivatives for cessation triggers. However, the recommendation for ARM fallbacks differs in some respects, which are covered below.

Future-Proofing: It is important to note that the fallback provisions refer to the "Index" throughout and define the Index as, initially, the one-year USD LIBOR; <u>provided</u> that if LIBOR has been replaced in the contract, then the term "Index" means the applicable "Replacement Index". This drafting is intended to allow the fallback provisions to apply again in the unlikely event that during the term of a mortgage loan, the replacement to LIBOR is later discontinued. Nonetheless, since most mortgages are 30-year term contracts, the language must be able to stand the test of time.

Furthermore, we have placed the one-year USD LIBOR Index language in brackets in the recommended fallback provisions. The intent here is that the recommended fallback provisions could be implemented in any residential mortgage ARM, including those that do not reference LIBOR and those that reference term LIBOR indices other than one-year in duration.

B. Triggers

A "trigger" is an objective, observable event that will require the Note Holder to convert from LIBOR (or another "Index"[5]) to a new reference rate. The triggers are set out in the definition of "Replacement Events" in the recommendation (See Part II, section 4(G)). The ARRC's recommendation sets out two separate triggers that define when an Index is no longer available for purposes of calculating the interest rate on an ARM loan.

As described in greater detail below, the first trigger would only be invoked if LIBOR ceased publication. The second trigger would apply in situations in which LIBOR may still be published, but its quality had materially deteriorated.

Index is Unavailable

The first trigger in the ARRC's recommended ARM fallback provisions ("Replacement Event" clause 4(G)(i)) would move to a replacement index in the event that the Administrator of the current Index has stopped providing the Index to the general public. It is intended to be consistent with the first two fallback triggers in the ARRC's recommended fallback language for other cash products and language that ISDA anticipates incorporating into its definition for USD LIBOR. The ARRC-recommended fallback triggers for those cash products would move to a replacement index in the event that the Administrator of the current Index *has ceased or will cease to provide the Benchmark, permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark*. Relative to the ARRC's recommended language in other cash products or ISDA documents, the recommended ARM fallback trigger is written more simply and emphasizes the need for the Index to be provided to the general public if it is to be used in an ARM product.

Index is No Longer Reliable or Representative

The second trigger in the ARRC's recommended ARM fallback provisions ("Replacement Event" clause 4(G)(ii)) would occur if the Administrator of the Index or the regulator with authority over the administrator of the Index announces that the Index is no longer reliable or representative. This trigger is modeled after language in Article 20(3) of the EU Benchmark Regulation, under which EU-supervised entities may be prohibited from new use of a Benchmark if it is determined that the Benchmark is *no longer representative of the underlying market or economic reality*. In the case of LIBOR, the relevant regulator is the UK Financial Conduct Authority. As such, a determination by another regulator (such as a US regulator) would not satisfy the trigger in section 4(G)(ii) of the recommended ARM fallback provision.

This trigger is consistent with the pre-cessation trigger included in the ARRC's recommended fallback language for other cash products. Note that ISDA is currently consulting on pre-cessation triggers and may elect to include one trigger of this nature; however, if ISDA does not include any pre-cessation trigger, then including such triggers in ARMs could result in basis risk with standard derivatives (i.e. if the

---

[5] In the recommended fallback provisions, "Index" is defined as LIBOR or its replacement, including any spread adjustments thereto (the "Replacement Index").

LIBOR-based interest rate was hedged, the hedge may no longer match the new SOFR-based interest rate, unless parties bilaterally agree to include the same pre-cessation triggers in the hedge).

C. Replacement Index and Margin

In the recommended contract language, references to LIBOR will be replaced by references to an alternative rate upon a "Replacement Event." As described below, the recommended ARM fallback provisions contain a waterfall within the defined term "Replacement Index" to select the particular index to be used as a replacement. The table below displays the ARM fallback Replacement Index waterfall:

ARM Replacement Index Waterfall
***Step 1*: Replacement index selected or recommended by Board of Governors of the Federal Reserve System, the Federal Reserve Bank of New York, or a committee endorsed or convened by the Board of Governors of the Federal Reserve System or the Federal Reserve Bank of New York
***Step 2*: Replacement index determined by the Note Holder, with possible adjustment to the loan's margin to account for differences between LIBOR and the chosen replacement index

Step 1: ARRC Replacement Index

The first step of the recommended waterfall is a replacement index selected or recommended for use in consumer products, including residential adjustable-rate mortgages, by the Board of Governors of the Federal Reserve System, the Federal Reserve Bank of New York, or a committee endorsed or convened by the Board of Governors of the Federal Reserve System or the Federal Reserve Bank of New York (e.g., the ARRC).

It is anticipated that the ARRC will work with all stakeholders to develop and recommend a spread adjustment and corresponding spread-adjusted SOFR-based replacement that reflects and adjusts for the differences between LIBOR and SOFR; thus, minimizing the impact to the borrower's interest rate at resets following a Replacement Event.

Step 2: Note Holder Determined Replacement Index and Possible Adjustment to Loan's Margin

If there is not a rate selected or recommended as outlined in the first step, then the second step of the recommended waterfall would require the Note Holder to choose a replacement index, similar to the language in current LIBOR ARM fallbacks. The recommended ARM fallback provision explicitly spells out the possibility that the Note Holder may determine an adjustment to be made to the loan's margin to bring LIBOR and the Replacement Index (or a future Index and its replacement) more in line with each other.

Part IV: Summary of Responses to the ARRC's Consultations

In this section, we discuss the feedback the ARRC received to its consultation and the ARRC's responses to the feedback. As noted, the ARRC's Consumer Products Working Group includes a diverse array of lenders, consumer groups, investors, and servicers, and the draft language presented in the consultation already had the benefit of the input of these groups and represented the wide consensus of the group. The ARRC received further input in the form of 14 formal responses to its consultation, with responses from a set of banks of diverse size and one technology and service provider. Those responses generally supported the proposed language but made several useful technical points that the ARRC has incorporated in to its final recommendations.

Triggers

The ARRC consultation included three trigger events:

> 4(G)
>
> The Index is deemed to be no longer available and will be replaced if any of the following events (each, a "Replacement Event") occur: (i) the Administrator has stopped providing the Index to the general public; (ii) the Administrator or its regulator issues a public statement indicating that the Index is no longer reliable or representative; or (iii) the effective date of an applicable federal or state law, or applicable federal or state regulation that prohibits use of the Index.

One respondent suggested adding "permanently or indefinitely" to 4(G)(i) to clarify that it is not intended to address a temporary cessation of the index. The final recommendation incorporates this suggestion.

Several respondents noted that 4(G)(iii) was superfluous, because any legal prohibition of the use an index by federal or state laws or regulations would supersede any provision in the fallback language. Working group members concurred and felt that the language would be simplified by removing 4(G)(iii).

A few respondents suggested that 4(G)(ii) should be removed because regulators should prohibit use of LIBOR if it was found to no longer be representative by the U.K. Financial Conduct Authority FCA. However, the ARRC notes that (1) FCA has signaled that it may find LIBOR to be no longer representative after 2021, (2) the ARRC cannot control or predict the response of regulators to a finding of this nature, and (3) continued use of a non-representative benchmark in consumer products would be highly problematic. For these reasons, inclusion of a trigger of this type had received widespread support from most respondents in this and the other ARRC consultations on fallback language.

In response to suggestions that the language of 4(G)(ii) could be clearer, the ARRC has clarified that the statement triggering 4(G)(ii) must be an official statement by the administrator or regulator of the index. The ARRC notes that FCA officials have stated that any official finding that LIBOR is no longer representative will be made in a "very clear fashion."[6] One respondent suggested that a longer time should be allowed to move to the successor rate in the event that 4(G)(ii) was triggered "as the nature of the pre-cessation events may not be widely anticipated." The ARRC did not make any changes in this regard but notes that FCA officials have said that they would expect to get some notice before a panel bank departed the LIBOR panel and thus that there would be some advance notice that LIBOR could be found to no longer be representative.

[6] See the FSB Official Sector Steering Group's letter to ISDA dated March 12, 2019, indicating support for ISDA's decision to consult market participants regarding the addition of other trigger events.

Some respondents expressed a desire that trigger events be consistent with other cash products and derivatives. As noted, the trigger events included in these final recommendations are consistent with the ARRC's recommendations for other cash products. ISDA's definition amendments for LIBOR in derivatives contracts are expected to contain triggers similar in nature to 4(G)(i). ISDA has consulted on the inclusion of a trigger that would be similar in nature to 4(G)(ii) and a majority of respondents to ISDA's consultation favored inclusion of a trigger of this type, although there were differences of opinion among those in favor as to how such a trigger should be included. ISDA has not made a decision on whether a trigger of this type will be included at this stage, but two important central clearing counterparties have indicated that they would intend to seek to trigger cleared LIBOR derivatives if FCA found LIBOR to no longer be representative.

Successor Rate

The ARRC consultation included two steps in its ARM fallback Replacement Index waterfall:

> 1) If a replacement index has been selected or recommended by the Federal Reserve Board, the Federal Reserve Bank of New York, or a committee endorsed or convened by the Federal Reserve Board or the Federal Reserve Bank of New York at the time of a Replacement Event, the Note Holder shall select that index as the Replacement Index.
>
> 2) If 1) is not available at the time of a Replacement Event, the Note Holder will make a reasonable, good faith effort to select a Replacement Index and a Replacement Margin that, when added together, the Note Holder reasonably expects will minimize any change in the cost of the loan, taking into account the historical performance of the Index and the Replacement Index.

Step 1: ARRC Replacement Index

Most respondents agreed that a replacement index that "has been selected or recommended by the Federal Reserve Board, the Federal Reserve Bank of New York, or a committee endorsed or convened by the Federal Reserve Board or the Federal Reserve Bank of New York" should be the first step in the replacement index waterfall.

Two respondents believed either that the note holder should have discretion to override this step or that the note holder should have the right to name a successor rate and margin in the first step; one respondent believed that the successor rate should match the rate chosen by ISDA while another believed that Treasury's Constant Maturity Treasury (CMT) rate should be chosen as the successor. The ARRC believed that limiting note holder discretion in this first step would be more consistent with its guiding principles and that limiting discretion was preferred by the majority of the Working Group members, including consumer advocacy groups. The ARRC also believed that matching ISDA's successor rate, a compound average of SOFR in arrears, would be incompatible with current consumer regulations, which require advance notice of any payment change.

Finally, the ARRC did not believe that adding a waterfall step of a CMT rate was appropriate as the ARRC identified SOFR as its recommended alternative to LIBOR after considering a comprehensive list of potential alternatives, including other term unsecured rates, overnight unsecured rates such as the Effective Federal Funds Rate ("EFFR") and the Overnight Bank Funding Rate ("OBFR"), other secured repurchase agreements ("repo") rates, U.S. Treasury bill and bond rates, and overnight index swap rates linked to EFFR. After extensive discussion, the ARRC preliminarily narrowed this list to two rates that it considered to be the strongest potential alternatives: OBFR and some form of overnight Treasury repo rate. The ARRC discussed the merits of and sought feedback on both rates in its 2016 Interim Report and Consultation and in a public roundtable. The ARRC made its final recommendation of SOFR after evaluating and incorporating feedback from the consultation and from the broad set of end users in its Advisory Group. SOFR was recommended because it meets international standards for benchmark quality in light of the depth and liquidity of the markets that underlie it and the manner in which it is produced and administered. The ARRC therefore believes that SOFR is an appropriate fallback rate, a view shared by the majority of respondents both to this consultation and to the other ARRC consultations. However, in the second step of the waterfall, the note holder could evaluate any possible index replacements it deems appropriate in its reasonable good faith effort to select a Replacement Index.

The consultation also asked respondents if they preferred that the ARRC recommend a forward-looking SOFR term rate as the successor rate for ARMs. As described in the Paced Transition Plan, the ARRC has set the goal of the development of forward-looking term rates based on SOFR derivatives markets by the end of 2021; however, the ARRC has also noted that the production of a robust, IOSCO-compliant term rate that could be recommended will depend on the depth of liquidity in SOFR derivatives markets and cannot be guaranteed.[7] The ARRC has committed to recommending spread adjustments and spread-adjusted rates for cash products, and it will consult with market participants before making any such recommendations that could apply to consumer products, including ARMS. While the ARRC's recommendations will be clear, to avoid any ambiguity, one respondent asked that the fallback language explicitly refer to a recommendation for ARMs; the final recommended fallback language has been revised to specifically reference consumer products.

Step 2: Note Holder Determined Replacement Index and Possible Adjustment to Loan's Margin

Most respondents agreed that the note holder should determine the replacement index as the second and final step in the waterfall and be able to adjust the loan's margin at the time of index replacement in order to account for differences between the current index and the replacement. One respondent believed that, prior to this step, the ISDA replacement rate and spread adjustment be specified as an intermediate step in the waterfall, while another respondent believed that an industry group should choose the replacement index. The ARRC again notes that it does not believe that the ISDA fallback, which will be a compound average of SOFR in arrears, is consistent with current consumer regulations, and it notes that the Board of Governors of the Federal Reserve System or the Federal Reserve Bank of New York may convene or endorse a group of industry participants in the first step of the waterfall.

One respondent believed that the note holder should not have the ability to adjust the margin in this step and that instead the language for ARM's fallbacks should match the language that the ARRC has recommended for bilateral business loans. The ARRC notes that its ARM fallback recommendations should lead to broadly similar outcomes as its recommended "hardwired" language for bilateral loans and other cash products and that those recommendations also allow the note holder to select a successor rate and spread as the last step in the waterfall. However, the ARRC notes that certain terms

[7] Federal Reserve Board staff have released a paper on Inferring Term Rates from SOFR Futures Prices: Finance and Economics Discussion Series (FEDS) dated February 5, 2019 that contains a link to indicative term rates that may help market participants understand how a forward-looking term rate might behave https://www.federalreserve.gov/econres/feds/files/2019014pap.pdf.

of the bilateral loans recommendations, such as an "early opt-in" negotiation process and the possibility of referencing a compound average of SOFR in arrears, do not appear appropriate for ARMs.

Other Comments

Certain respondents requested clearer language in defining the role of the Administrator. Another noted that the replacement index would not necessarily be published in *The Wall Street Journal* and recommended that 4(b) be revised to: "The Index is published in, or on the website of, *The Wall Street Journal* or on the website of the Federal Reserve Board." The final recommendations have responded to these comments by more clearly defining the role of the Administrator and stating that the index is currently published in *The Wall Street Journal*, leaving open the possibility that the index or its replacement may not be in the future.

Another respondent believed the implications of the language were unclear in the unlikely situation that the second step of the successor rate waterfall had become operative but then subsequently a rate was recommended by the Federal Reserve Board, Federal Reserve Bank of New York, or a group selected or endorsed by the Federal Reserve Board or Federal Reserve Bank of New York. The final recommended fallback language is revised to make clear that the successor rate and changes to the loan's margin, if any, once selected by the note holder, would remain operative until another replacement event occurs.