ARRC RECOMMENDATIONS
REGARDING MORE ROBUST FALLBACK LANGUAGE FOR
NEW ORIGINATIONS OF LIBOR SYNDICATED LOANS
APRIL 25, 2019

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Part I: Background about the ARRC and LIBOR Fallback Language

U.S. dollar LIBOR ("LIBOR") is widely used in the global financial system in a large volume and broad range of financial products and contracts. In 2014 as a response to concerns about the reliability and robustness of LIBOR and other term wholesale unsecured bank borrowing rates, the Financial Stability Oversight Council and Financial Stability Board ("FSB") called for the development of alternative interest rate benchmarks. Against this backdrop, the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York convened the Alternative Reference Rates Committee ("ARRC") later that year to identify an alternative reference rate for LIBOR, create an implementation plan to support voluntary adoption of the alternative rate, and identify best practices for contract robustness in the interest rate market. After selecting an alternative rate (the Secured Overnight Financing Rate or "SOFR") and setting out a Paced Transition Plan with respect to the adoption of SOFR in the derivatives market, the ARRC was reconstituted in 2018 with an expanded membership, including regulators, trade associations, exchanges and other intermediaries, and buy side and sell side market participants, to oversee the implementation of the Paced Transition Plan and coordinate with cash and derivatives markets as they address the risk that LIBOR may not exist beyond 2021.[1] This includes both minimizing the potential disruptions associated with a LIBOR cessation on market participants and supporting a voluntary transition away from LIBOR by promoting the development of SOFR-based cash and derivatives products.

The smoothest transition away from LIBOR will be one in which new contracts are written and existing contracts are amended to reference rates other than LIBOR. However, LIBOR-based products continue to be issued and, as the ARRC's Second Report noted, 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.[2] To address this issue in derivatives and at the request

[1] Additional information about the ARRC and the Paced Transition Plan is available at: https://www.newyorkfed.org/arrc.

[2] Prior to 2016, global groups focusing on benchmark reform had noted the need for more robust fallback provisions in derivatives and other financial instruments. Principle 13 of the *IOSCO Principles for Financial Benchmarks* provides that users should be encouraged by administrators to "take steps to make sure that contracts or other financial instruments that reference a benchmark have robust fallback provisions in the event of

of the FSB's Official Sector Steering Group, the International Swaps and Derivatives Association, Inc. ("ISDA") is working on implementing new fallbacks for LIBOR and other key interest rate benchmarks in its standard definitions for derivatives.[3] In view of its mandate, the ARRC has endeavored to deliver recommendations for contractual fallback language for new cash (non-derivatives) products with the goal of reducing the risk of serious market disruption following a LIBOR cessation. In furtherance of this objective, the ARRC published [Guiding Principles for More Robust LIBOR Fallback Contract Language in Cash Products] in July 2018. Following these overall principles, the ARRC launched consultations seeking market-wide feedback on specific fallback language proposals for four types of cash products: floating rate notes, syndicated business loans, bilateral business loans, and securitizations. Generally, the consultations proposed that following a trigger event the product would pay interest at a SOFR-based rate, with an adjustment so that the successor rate would be more comparable to LIBOR. The ARRC consultations recognized that certain differences are necessary for different cash products and derivatives, but strived for uniformity across products as much as possible.

In accordance with 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 issuances of floating rate notes, syndicated business loans, bilateral business loans, and securitizations referencing LIBOR.[4] To the extent market participants continue to enter into LIBOR-based contracts, the ARRC recommends and endorses 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.

While the ARRC's final recommendations include a forward-looking term rate as the primary potential successor rate, it is important to note that although such rate may be the optimal fallback for products that were initially referencing LIBOR, the ARRC does not recommend that financial market participants wait until a forward-looking term SOFR exists to begin using SOFR in cash products. Cash products can be designed to use either a simple average or compounded average of daily SOFRs for an interest period in lieu of a term rate. 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.[5]

[cessation of] the referenced benchmark." See https://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf, page 24.

[3] Additional information about ISDA's work is available at: https://www.isda.org/category/legal/benchmarks.

[4] The ARRC is simultaneously publishing recommended fallback language for syndicated business loans referencing LIBOR. The ARRC plans to subsequently publish recommended fallback language for bilateral business loans, and securitizations referencing LIBOR.

[5] 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).

The ARRC notes that derivatives and floating rate notes based on SOFR are increasing in volume. SOFR over-the-counter swaps are being quoted by dealers and cleared by central counterparties such as LCH and CME Group. CME and Intercontinental Exchange have listed SOFR-linked futures. Over $70 billion in SOFR-linked floating rate financing has been issued in all sectors of the debt markets. As it is likely in many market participants' best interest to begin issuing products based on SOFR rather than LIBOR, the ARRC also intends to provide further guidance for market participants on use of SOFR in cash products.

Part II: Fallback Language for New Originations of LIBOR Syndicated Loans

The ARRC is recommending two sets of fallback language for new originations of LIBOR-referenced U.S. dollar-denominated syndicated business loans[6] ("syndicated loans"). The reasons for and differences between the two approaches, as well as certain drafting alternatives and related guidance, are discussed in detail in ***Part III: User's Guide to Fallback Language for Syndicated Loans***.

A. "Hardwired Approach" Fallback Language

Effect of Benchmark Transition Event

(a) *Benchmark Replacement*. Notwithstanding anything to the contrary herein or in any other Loan Document[7], if a Benchmark Transition Event or an Early Opt-in Election, as applicable, and its related Benchmark Replacement Date have occurred prior to the Reference Time in respect of any determination of the Benchmark on any date, the Benchmark Replacement will replace the then-current Benchmark for all purposes hereunder or under any Loan Document in respect of such determination on such date and all determinations on all subsequent dates. If the Benchmark Replacement is determined in accordance with clause (1) or (2) of the definition of "Benchmark Replacement," such Benchmark Replacement will become effective as of the Reference Time on the applicable Benchmark Replacement Date without any amendment to, or further action or consent of any other party to, this Agreement. If the Benchmark Replacement is determined in accordance with clause (3) of the definition of "Benchmark Replacement," such Benchmark Replacement will become effective at 5:00 p.m. on the fifth (5^{th}) Business Day after the date notice of such Benchmark Replacement is provided to the Lenders without any amendment to, or further action or consent of any other party to, this Agreement so long as the Administrative Agent has not received, by such time, written notice of objection to such Benchmark Replacement from Lenders comprising the Required Lenders [of each Class][8].

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[6] Both sets of language assume a U.S. dollar-denominated only facility. Adjustments to these provisions will need to be made for multicurrency facilities.
[7] The following capitalized terms not defined herein will have the meanings ascribed in the relevant credit agreement: "Loan Document," "Agreement," "Business Day," "Lenders," "Administrative Agent," "Class," "Required Lenders," "Borrower," "Interest Period," "Eurodollar Borrowing," "Eurodollar Loans," "Borrowing," "ABR Loans," "ABR," and "LIBOR." Such terms are included herein for illustrative purposes only and should be coordinated with definitions in the relevant credit agreement.
[8] Include if applicable and agreed by the parties.

(b) *Benchmark Replacement Conforming Changes*. In connection with the implementation of a Benchmark Replacement, the Administrative Agent will have the right to make Benchmark Replacement Conforming Changes from time to time and, notwithstanding anything to the contrary herein or in any other Loan Document, any amendments implementing such Benchmark Replacement Conforming Changes will become effective without any further action or consent of any other party to this Agreement.

(c) *Notices; Standards for Decisions and Determinations*. The Administrative Agent will promptly notify the Borrower and the Lenders of (i) any occurrence of a Benchmark Transition Event or an Early Opt-in Election, as applicable, and its related Benchmark Replacement Date, (ii) the implementation of any Benchmark Replacement, (iii) the effectiveness of any Benchmark Replacement Conforming Changes, (iv) the removal or reinstatement of any tenor of Term SOFR pursuant to clause (d) below and (v) the commencement or conclusion of any Benchmark Unavailability Period. Any determination, decision or election that may be made by the Administrative Agent pursuant to this Section titled "Effect of Benchmark Transition Event," including any determination with respect to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action or any selection, will be conclusive and binding absent manifest error and may be made in its sole discretion and without consent from any other party hereto, except, in each case, as expressly required pursuant to this Section titled "Effect of Benchmark Transition Event."

(d) *Unavailability of Tenor of Term SOFR*. Notwithstanding anything to the contrary herein or in any other Loan Document, at any time and with respect to any Interest Period, if the Benchmark at such time is Term SOFR and Term SOFR for the applicable tenor is not displayed on a screen or other information service that publishes such rate from time to time as selected by the Administrative Agent in its reasonable discretion, the Administrative Agent may (i) modify the definition of "Interest Period" for all determinations of interest at or after such time to remove such unavailable tenor and (ii) if Term SOFR, as applicable, for the applicable tenor is displayed on such screen or information service after its removal pursuant to clause (i) above, modify the definition of "Interest Period" for all determinations of interest at or after such time to reinstate such previously removed tenor.

(e) *Benchmark Unavailability Period*. Upon the Borrower's receipt of notice of the commencement of a Benchmark Unavailability Period, the Borrower may revoke any request for a Eurodollar Borrowing of, conversion to or continuation of Eurodollar Loans to be made, converted or continued during any Benchmark Unavailability Period and, failing that, the Borrower will be deemed to have converted any such request into a request for a Borrowing of or conversion to ABR Loans. During any Benchmark Unavailability Period, the component of ABR based upon the then-current Benchmark will not be used in any determination of ABR.

(f) *Certain Defined Terms*. As used in this Section titled "Effect of Benchmark Transition Event":

"*Benchmark*" means, initially, LIBOR; provided that if a Benchmark Transition Event or an Early Opt-in Election, as applicable, and its related Benchmark Replacement Date have occurred with respect to LIBOR or the then-current Benchmark, then "Benchmark" means the applicable Benchmark Replacement to the extent that such Benchmark Replacement has become effective pursuant to clause (a) of this Section titled "Effect of Benchmark Transition Event."

"*Benchmark Replacement*" means, for any Interest Period, the first alternative set forth in the order below that can be determined by the Administrative Agent as of the Benchmark Replacement Date:

(1) the sum of: (a) Term SOFR or, if the Administrative Agent determines that Term SOFR for the applicable Corresponding Tenor cannot be determined, Next Available Term SOFR, and (b) the Benchmark Replacement Adjustment;

(2) the sum of: (a) Compounded SOFR and (b) the Benchmark Replacement Adjustment;

(3) the sum of: (a) the alternate rate of interest that has been selected by the Administrative Agent and the Borrower as the replacement for the then-current Benchmark for the applicable Corresponding Tenor giving due consideration to (i) any selection or recommendation of a replacement rate or the mechanism for determining such a rate by the Relevant Governmental Body at such time or (ii) any evolving or then-prevailing market convention for determining a rate of interest as a replacement for the then-current Benchmark for U.S. dollar-denominated syndicated credit facilities at such time and (b) the Benchmark Replacement Adjustment;

provided that, in the case of clauses (1) and (2) above, such rate, or the underlying rates component thereof, is or are displayed on a screen or other information service that publishes such rate or rates from time to time as selected by the Administrative Agent in its reasonable discretion. If the Benchmark Replacement as determined pursuant to clause (1), (2) or (3) above would be less than zero, the Benchmark Replacement will be deemed to be zero for the purposes of this Agreement.

"*Benchmark Replacement Adjustment*" means, for any Interest Period:

(1) for purposes of clauses (1) and (2) of the definition of "Benchmark Replacement," the first alternative set forth in the order below that can be determined by the Administrative Agent as of the Benchmark Replacement Date:

(a) the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that has been selected or recommended by the Relevant Governmental Body for the applicable Unadjusted Benchmark Replacement;

(b) the spread adjustment (which may be a positive or negative value or zero) that would apply to the fallback rate for a derivative transaction referencing the ISDA Definitions to be effective upon an index cessation event with respect to USD LIBOR for the Corresponding Tenor; and

(2) for purposes of clause (3) of the definition of "Benchmark Replacement," the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that has been selected by the Administrative Agent and the Borrower for the applicable Corresponding Tenor giving due consideration to (i) any selection or recommendation of a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the then-current Benchmark with the applicable Unadjusted Benchmark Replacement by the Relevant Governmental Body at such time or (ii) any evolving or then-prevailing market convention for determining a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the then-current Benchmark with the applicable Unadjusted Benchmark Replacement for U.S. dollar-denominated syndicated credit facilities at such time;

provided that, in the case of clause (1) above, such adjustment is displayed on a screen or other information service that publishes such Benchmark Replacement Adjustment from time to time as selected by the Administrative Agent in its reasonable discretion.

"Benchmark Replacement Conforming Changes" means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the definition of "ABR," the definition of "Interest Period," timing and frequency of determining rates and making payments of interest and other administrative matters) that the Administrative Agent decides may be appropriate to reflect the adoption and implementation of such Benchmark Replacement and to permit the administration thereof by the Administrative Agent in a manner substantially consistent with market practice (or, if the Administrative Agent decides that adoption of any portion of such market practice is not administratively feasible or if the Administrative Agent determines that no market practice for the administration of the Benchmark Replacement exists, in such other manner of administration as the Administrative Agent decides is reasonably necessary in connection with the administration of this Agreement).

"Benchmark Replacement Date" means the earliest to occur of the following events with respect to the then-current Benchmark:

(1) in the case of clause (1) or (2) of the definition of "Benchmark Transition Event," the later of (a) the date of the public statement or publication of information referenced therein and (b) the date on which the administrator of the Benchmark permanently or indefinitely ceases to provide the Benchmark;

(2) in the case of clause (3) of the definition of "Benchmark Transition Event," the date of the public statement or publication of information referenced therein; or

(3) in the case of an Early Opt-in Election, the first Business Day after the Rate Election Notice is provided to each of the other parties hereto.

For the avoidance of doubt, if the event giving rise to the Benchmark Replacement Date occurs on the same day as, but earlier than, the Reference Time in respect of any determination, the Benchmark Replacement Date will be deemed to have occurred prior to the Reference Time for such determination.

"Benchmark Transition Event" means the occurrence of one or more of the following events with respect to the then-current Benchmark:

(1) a public statement or publication of information by or on behalf of the administrator of the Benchmark announcing that such administrator 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;

(2) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark, the central bank for the currency of the Benchmark, an insolvency official with jurisdiction over the administrator for the Benchmark, a resolution authority with jurisdiction over the administrator for the Benchmark or a court or an entity with similar insolvency or resolution authority over the administrator for the Benchmark, which states that the administrator of the Benchmark 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; or

(3) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark announcing that the Benchmark is no longer representative.

"Benchmark Unavailability Period" means, if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to the then-current Benchmark and solely to the extent that the then-current Benchmark has not been replaced with a Benchmark Replacement pursuant to clauses (1) or (2) of the definition of "Benchmark Replacement," the period (x) beginning at the time that such Benchmark Replacement Date pursuant to clauses (1) or (2) of that definition has occurred if, at such time, no Benchmark Replacement has replaced the then-current Benchmark for all purposes hereunder or under any Loan Document in accordance with the Section titled "Effect of Benchmark Transition Event" and (y) ending at the time that a Benchmark Replacement has replaced the then-current Benchmark for all purposes hereunder or under any Loan Document in accordance with the Section titled "Effect of Benchmark Transition Event."

"Compounded SOFR" means the compounded average of SOFRs for the applicable Corresponding Tenor, with the rate, or methodology for this rate, and conventions for this rate (which may include compounding in arrears with a lookback and/or suspension period as a mechanism to determine the interest amount payable prior to the end of each Interest Period) being established by the Administrative Agent in accordance with:

(1) the rate, or methodology for this rate, and conventions for this rate selected or recommended by the Relevant Governmental Body for determining compounded SOFR; provided that:

(2) if, and to the extent that, the Administrative Agent determines that Compounded SOFR cannot be determined in accordance with clause (1) above, then the rate, or methodology for this rate, and conventions for this rate that the Administrative Agent determines are substantially consistent with at least [five][9] currently outstanding U.S. dollar-denominated syndicated credit facilities at such time (as a result of amendment or as originally executed) that are publicly available for review;

provided, further, that if the Administrative Agent decides that any such rate, methodology or convention determined in accordance with clause (1) or clause (2) is not administratively feasible for the Administrative Agent, then Compounded SOFR will be deemed unable to be determined for purposes of the definition of "Benchmark Replacement."

"Corresponding Tenor" with respect to a Benchmark Replacement means a tenor (including overnight) having approximately the same length (disregarding business day adjustment) as the applicable tenor for the applicable Interest Period with respect to the then-current Benchmark.

"Early Opt-in Election" means the occurrence of:

(1) a notification by the Administrative Agent to (or the request by the Borrower to the Administrative Agent to notify) each of the other parties hereto that at least [five][10] currently outstanding U.S. dollar-denominated syndicated credit facilities at such time contain (as a result of amendment or as originally executed) as a benchmark interest rate, in lieu of LIBOR, Term SOFR plus a Benchmark Replacement Adjustment (and such syndicated credit facilities are identified in such notice and are publicly available for review), and

(2) the joint election by the Administrative Agent, the Borrower and the Required Lenders by affirmative vote to declare that an Early Opt-in Election has occurred and the provision by the

[9] Parties may choose to set a different threshold.
[10] Parties may choose to set a different threshold.

Administrative Agent of written notice of such election to each of the other parties hereto (the "***Rate Election Notice***").

"Federal Reserve Bank of New York's Website" means the website of the Federal Reserve Bank of New York at http://www.newyorkfed.org, or any successor source.

"*ISDA Definitions*" means the 2006 ISDA Definitions published by the International Swaps and Derivatives Association, Inc. or any successor thereto, as amended or supplemented from time to time, or any successor definitional booklet for interest rate derivatives published from time to time.

"Next Available Term SOFR" means, at any time, for any Interest Period, Term SOFR for the longest tenor that can be determined by the Administrative Agent that is shorter than the applicable Corresponding Tenor.

"Reference Time" with respect to any determination of the Benchmark means (1) if the Benchmark is LIBOR, 11:00 a.m. (London time) on the day that is two London banking days preceding the date of such determination, and (2) if the Benchmark is not LIBOR, the time determined by the Administrative Agent in accordance with the Benchmark Replacement Conforming Changes.

"Relevant Governmental Body" means the Federal Reserve Board and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York or any successor thereto.

"SOFR" with respect to any day means the secured overnight financing rate published for such day by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve Bank of New York's Website.

"Term SOFR" means the forward-looking term rate for the applicable Corresponding Tenor based on SOFR that has been selected or recommended by the Relevant Governmental Body.

"Unadjusted Benchmark Replacement" means the Benchmark Replacement excluding the Benchmark Replacement Adjustment.

B. "Amendment Approach" Fallback Language

Effect of Benchmark Transition Event

(a) *Benchmark Replacement*. Notwithstanding anything to the contrary herein or in any other Loan Document[11], upon the occurrence of a Benchmark Transition Event or an Early Opt-in Election, as applicable, the Administrative Agent and the Borrower may amend this Agreement to replace LIBOR with a Benchmark Replacement. Any such amendment with respect to a Benchmark Transition Event will become effective at 5:00 p.m. on the fifth (5^{th}) Business Day after the Administrative Agent has posted such proposed amendment to all Lenders and the Borrower so long as the Administrative Agent has not received, by such time, written notice of objection to such amendment from Lenders comprising

[11] The following capitalized terms not defined herein will have the meanings ascribed in the relevant credit agreement: "Loan Document," "Administrative Agent," "Borrower," "Agreement," "LIBOR," "Business Day," "Lenders," "Required Lenders," "Class," "Eurodollar Borrowing," "Eurodollar Loans," "Borrowing," "ABR Loans," "ABR," and "Interest Period." Such terms are included herein for illustrative purposes only and should be coordinated with definitions in the relevant credit agreement.

the Required Lenders [of each Class][12]. Any such amendment with respect to an Early Opt-in Election will become effective on the date that Lenders comprising the Required Lenders [of each Class] have delivered to the Administrative Agent written notice that such Required Lenders accept such amendment. No replacement of LIBOR with a Benchmark Replacement pursuant to this Section titled "Effect of Benchmark Transition Event" will occur prior to the applicable Benchmark Transition Start Date.

(b) *Benchmark Replacement Conforming Changes*. In connection with the implementation of a Benchmark Replacement, the Administrative Agent will have the right to make Benchmark Replacement Conforming Changes from time to time and, notwithstanding anything to the contrary herein or in any other Loan Document, any amendments implementing such Benchmark Replacement Conforming Changes will become effective without any further action or consent of any other party to this Agreement.

(c) *Notices; Standards for Decisions and Determinations*. The Administrative Agent will promptly notify the Borrower and the Lenders of (i) any occurrence of a Benchmark Transition Event or an Early Opt-in Election, as applicable, and its related Benchmark Replacement Date and Benchmark Transition Start Date, (ii) the implementation of any Benchmark Replacement, (iii) the effectiveness of any Benchmark Replacement Conforming Changes and (iv) the commencement or conclusion of any Benchmark Unavailability Period. Any determination, decision or election that may be made by the Administrative Agent or Lenders pursuant to this Section titled "Effect of Benchmark Transition Event," including any determination with respect to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action, will be conclusive and binding absent manifest error and may be made in its or their sole discretion and without consent from any other party hereto, except, in each case, as expressly required pursuant to this Section titled "Effect of Benchmark Transition Event."

(d) *Benchmark Unavailability Period*. Upon the Borrower's receipt of notice of the commencement of a Benchmark Unavailability Period, the Borrower may revoke any request for a Eurodollar Borrowing of, conversion to or continuation of Eurodollar Loans to be made, converted or continued during any Benchmark Unavailability Period and, failing that, the Borrower will be deemed to have converted any such request into a request for a Borrowing of or conversion to ABR Loans. During any Benchmark Unavailability Period, the component of ABR based upon LIBOR will not be used in any determination of ABR.

(e) *Certain Defined Terms*. As used in this Section titled "Effect of Benchmark Transition Event":

"Benchmark Replacement" means the sum of: (a) the alternate benchmark rate (which may include Term SOFR) that has been selected by the Administrative Agent and the Borrower giving due consideration to (i) any selection or recommendation of a replacement rate or the mechanism for determining such a rate by the Relevant Governmental Body or (ii) any evolving or then-prevailing market convention for determining a rate of interest as a replacement to LIBOR for U.S. dollar-denominated syndicated credit facilities and (b) the Benchmark Replacement Adjustment; provided that, if the Benchmark Replacement as so determined would be less than zero, the Benchmark Replacement will be deemed to be zero for the purposes of this Agreement.

"Benchmark Replacement Adjustment" means, with respect to any replacement of LIBOR with an Unadjusted Benchmark Replacement for each applicable Interest Period, the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that has been selected by the Administrative Agent and the Borrower giving due consideration to

[12] Include if applicable and agreed by the parties.

(i) any selection or recommendation of a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of LIBOR with the applicable Unadjusted Benchmark Replacement by the Relevant Governmental Body or (ii) any evolving or then-prevailing market convention for determining a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of LIBOR with the applicable Unadjusted Benchmark Replacement for U.S. dollar-denominated syndicated credit facilities at such time.

"Benchmark Replacement Conforming Changes" means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the definition of "ABR," the definition of "Interest Period," timing and frequency of determining rates and making payments of interest and other administrative matters) that the Administrative Agent decides may be appropriate to reflect the adoption and implementation of such Benchmark Replacement and to permit the administration thereof by the Administrative Agent in a manner substantially consistent with market practice (or, if the Administrative Agent decides that adoption of any portion of such market practice is not administratively feasible or if the Administrative Agent determines that no market practice for the administration of the Benchmark Replacement exists, in such other manner of administration as the Administrative Agent decides is reasonably necessary in connection with the administration of this Agreement).

"Benchmark Replacement Date" means the earlier to occur of the following events with respect to LIBOR:

(1) in the case of clause (1) or (2) of the definition of "Benchmark Transition Event," the later of (a) the date of the public statement or publication of information referenced therein and (b) the date on which the administrator of LIBOR permanently or indefinitely ceases to provide LIBOR; or

(2) in the case of clause (3) of the definition of "Benchmark Transition Event," the date of the public statement or publication of information referenced therein.

"Benchmark Transition Event" means the occurrence of one or more of the following events with respect to LIBOR:

(1) a public statement or publication of information by or on behalf of the administrator of LIBOR announcing that such administrator has ceased or will cease to provide LIBOR, permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide LIBOR;

(2) a public statement or publication of information by the regulatory supervisor for the administrator of LIBOR, the U.S. Federal Reserve System, an insolvency official with jurisdiction over the administrator for LIBOR, a resolution authority with jurisdiction over the administrator for LIBOR or a court or an entity with similar insolvency or resolution authority over the administrator for LIBOR, which states that the administrator of LIBOR has ceased or will cease to provide LIBOR permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide LIBOR; or

(3) a public statement or publication of information by the regulatory supervisor for the administrator of LIBOR announcing that LIBOR is no longer representative.

"Benchmark Transition Start Date" means (a) in the case of a Benchmark Transition Event, the earlier of (i) the applicable Benchmark Replacement Date and (ii) if such Benchmark Transition Event is a public statement or publication of information of a prospective event, the [90th][13] day prior to the expected

[13] Parties may choose to set a different number of days.

date of such event as of such public statement or publication of information (or if the expected date of such prospective event is fewer than [90] days after such statement or publication, the date of such statement or publication) and (b) in the case of an Early Opt-in Election, the date specified by the Administrative Agent or the Required Lenders, as applicable, by notice to the Borrower, the Administrative Agent (in the case of such notice by the Required Lenders) and the Lenders.

"Benchmark Unavailability Period" means, if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to LIBOR and solely to the extent that LIBOR has not been replaced with a Benchmark Replacement, the period (x) beginning at the time that such Benchmark Replacement Date has occurred if, at such time, no Benchmark Replacement has replaced LIBOR for all purposes hereunder in accordance with the Section titled "Effect of Benchmark Transition Event" and (y) ending at the time that a Benchmark Replacement has replaced LIBOR for all purposes hereunder pursuant to the Section titled "Effect of Benchmark Transition Event."

"Early Opt-in Election" means the occurrence of:

(1) (i) a determination by the Administrative Agent or (ii) a notification by the Required Lenders to the Administrative Agent (with a copy to the Borrower) that the Required Lenders have determined that U.S. dollar-denominated syndicated credit facilities being executed at such time, or that include language similar to that contained in this Section titled "Effect of Benchmark Transition Event," are being executed or amended, as applicable, to incorporate or adopt a new benchmark interest rate to replace LIBOR, and

(2) (i) the election by the Administrative Agent or (ii) the election by the Required Lenders to declare that an Early Opt-in Election has occurred and the provision, as applicable, by the Administrative Agent of written notice of such election to the Borrower and the Lenders or by the Required Lenders of written notice of such election to the Administrative Agent.

"Federal Reserve Bank of New York's Website" means the website of the Federal Reserve Bank of New York at http://www.newyorkfed.org, or any successor source.

"Relevant Governmental Body" means the Federal Reserve Board and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York or any successor thereto.

"SOFR" with respect to any day means the secured overnight financing rate published for such day by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve Bank of New York's Website.

"Term SOFR" means the forward-looking term rate based on SOFR that has been selected or recommended by the Relevant Governmental Body.

"Unadjusted Benchmark Replacement" means the Benchmark Replacement excluding the Benchmark Replacement Adjustment.

Part III: User's Guide to Fallback Language for Syndicated Loans

While ***Part II.A.*** sets forth the ARRC's recommendation for "hardwired approach" fallback provisions for LIBOR in new originations of syndicated loans and ***Part II.B.*** sets forth the ARRC's recommendation for "amendment approach" fallback provisions for LIBOR in new originations of syndicated loans, this ***Part***

III contains a detailed description of both sets of syndicated loan fallback provisions and guidance for market participants to consider in the adoption of these fallbacks.

Historically, most syndicated loans provided for a fallback waterfall that would, upon LIBOR not being available, first revert to either the average of quotes in the London interbank market obtained by polling banks or the unsecured borrowing rate in the London interbank market for the administrative agent and then would ultimately fall back to the alternate base rate[14] if such quotes cannot be obtained. Because most observers now believe that banks would be unable or unwilling to provide the quotes implementing the first stage of this waterfall, it would appear that most syndicated loans would effectively convert to ABR upon a cessation of LIBOR (an average of 300 bps higher than current three-month LIBOR). After the speech in July 2017 by Andrew Bailey, chief executive officer of the UK's Financial Conduct Authority ("FCA") (which has been the regulator of LIBOR since 2013), that indicated that LIBOR may not continue after 2021, syndicated loan market participants swiftly began to incorporate new contractual language designed to allow for a streamlined amendment process to select a successor rate if LIBOR were permanently discontinued. The formulation, however, varied across agreements.

The syndicated loan fallback provisions try to balance several goals of the ARRC. Flexible fallback provisions, particularly where one party is given discretion to make future determinations, could result in divergent outcomes, depending on, among other things, the way in which the provisions are drafted and the circumstances that exist at the time a determination is made. To provide clarity and consistency, the "hardwired approach" syndicated loan fallback language therefore uses clear and observable triggers and successor rates with spread adjustments, subject to some flexibility to fall back to an amendment if the designated successor rates and adjustments with higher priority in the waterfalls are not available at the time a trigger event becomes effective. Upon a LIBOR cessation event, neither borrowers nor lenders will be able to take advantage of the then-current market environment to capture economic value. However, the certainty of the "hardwired approach" must be juxtaposed against the uncertainty of future rates. Thus, for the reasons explained in ***Part IV: Summary of Responses to the ARRC's Consultations***, ARRC has also recommended the "amendment approach" fallback language, which parties may find appropriate before the market has further visibility into a replacement rate, a replacement spread, the related mechanics and implications, and related hedging tools. The ARRC "amendment approach" fallback language is drafted to offer standard language which provides specificity with respect to the fallback trigger events, explicitly includes an adjustment to be applied to the successor rate, if necessary, to make the successor rate more comparable to LIBOR, and includes an objection right for "Required Lenders"[15]. In the "amendment approach" language, all decisions about the successor rate and adjustment will be made in the future. In contrast, the ARRC "hardwired approach" fallback language seeks to offer certainty as to what the successor rate and adjustment will be and, in many cases, obviates the need for seeking consent for an amendment. For that reason, many consultation respondents who prefer the use of the amendment approach at the

[14] The "Alternate Base Rate" or ABR is typically defined in syndicated loan credit agreements as the highest of (x) Prime Rate, (y) Federal Funds Rate + 0.50% and (z) 1-month LIBOR + 1% (prong (z) would be disregarded if LIBOR is no longer available).

[15] "Required Lenders" is most commonly defined as a majority of the lenders.

current time generally believe that eventually some version of a hardwired approach will be more appropriate.

Finally, lenders and borrowers may enter into interest rate derivatives to offset or hedge their floating rate loan exposure. In order to reduce a mismatch between syndicated loans and derivatives instruments, the "hardwired approach" fallback language for syndicated loans is consistent in many ways with the approach ISDA presently anticipates implementing for derivatives. In certain key respects, however, the "hardwired approach" fallback language differs, including with respect to the primary successor rate, which market participants may choose to adjust for greater consistency across products, as described below. Under the "amendment approach" fallback language, because the decision of which rate (and adjustment) will replace LIBOR only happens in the future, parties will be able to ensure alignment with derivatives, if desired, at the time of transition.

The paragraphs below describe in detail the operative provisions of these two sets of fallback language as well as important considerations market participants should bear in mind when reviewing and implementing the recommended fallback language. Before addressing each set of fallback language in turn, a discussion of the trigger events – which are common in substance across both sets of fallback language and across many cash products – follows.

A. Triggers

Permanent Cessation Triggers

The triggers specified in the syndicated loan fallback language that precipitate the transition away from LIBOR are set forth in the defined term "Benchmark Transition Event." The first two triggers require a public statement or publication of information that the actual cessation of LIBOR has occurred or is expected by the administrator of LIBOR (the ICE Benchmark Administration or "IBA"), the regulatory supervisor of the administrator of LIBOR (the Financial Conduct Authority or "FCA"), the central bank for the currency of LIBOR (the U.S. Federal Reserve System) or a bankruptcy/resolution official or court with jurisdiction over the administrator of LIBOR. The first and second clauses of "Benchmark Transition Event" read as follows:

> *(1) a public statement or publication of information by or on behalf of the administrator of the Benchmark announcing that such administrator 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;*
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> *(2) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark, the central bank for the currency of the Benchmark, an insolvency official with jurisdiction over the administrator for the Benchmark, a resolution authority with jurisdiction over the administrator for the Benchmark or a court or an entity with similar insolvency or resolution authority over the administrator for the Benchmark, which states that the administrator of the Benchmark 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;

These triggers are intended to align with the triggers included in ISDA's 2018 Consultation[16] and, according to the definition of "Benchmark Replacement Date" do not lead to a move away from LIBOR until the date that LIBOR ceases to be published (if that date is later than the date of the announcement/public information).

Pre-cessation Trigger - Benchmark is "No Longer Representative"

The third trigger recommended by the ARRC for syndicated loans is a "pre-cessation" trigger found in clause (3) of the definition of "Benchmark Transition Event," which is set forth below:

(3) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark announcing that the Benchmark is no longer representative.

This trigger institutes a transition to an alternative rate upon a determination by a regulatory supervisor that the quality of the Benchmark has deteriorated such that it would likely have a significant negative impact on its liquidity and usefulness to market participants. As noted above, the regulator with authority over the administrator of LIBOR is the FCA. The EU Benchmark Regulation requires the FCA to make an assessment of LIBOR's representativeness in certain circumstances, such as the departure of one or more panel banks, or in any event, every two years. If the FCA determines that LIBOR is "no longer representative of the underlying market or economic reality," under the EU Benchmark Regulation LIBOR may in some circumstances continue to be published in order to avoid a disruptive cessation and potential financial instability, however in these circumstances EU-supervised entities could be prohibited from referencing LIBOR in new derivatives and securities. The FCA has publicly stated that market participants may prefer to include a trigger "based on an announcement of non-representativeness rather than triggers based on cessation alone"[17] and the FSB's Official Sector Steering Group expressed a similar view in a letter to ISDA noting that such a trigger "would offer market participants with LIBOR-referencing derivative contracts the opportunity to move to new benchmarks rather than remain on a non-representative LIBOR rate."[18]

Although ISDA intends to consult on pre-cessation issues, including the inclusion of a similar trigger in its definition amendments for derivatives, parties should understand that if ISDA does not include a similar provision and this third trigger results in a "Benchmark Replacement Date" occurring with respect to the syndicated loans, a party seeking to effectively hedge LIBOR-based syndicated loans may be obligated

[16] In 2018, ISDA conducted a market-wide consultation on fallbacks for derivatives referencing Sterling LIBOR, Swiss Franc LIBOR, Japanese Yen LIBOR and TIBOR, and the Australian BBSW rate (referred to herein as the "ISDA 2018 Consultation"). See the ISDA 2018 Consultation at https://www.isda.org/2018/12/20/benchmark-fallbacks-consultation/.

[17] See speech by Edwin Schooling Latter, Director of Markets and Wholesale Policy at FCA, delivered at ISDA Annual Legal Forum on January 28, 2019.

[18] See the FSB letter to ISDA dated March 12, 2019.

(for contractual reasons) or may choose (for economic reasons) to terminate or amend its LIBOR-linked hedges to reference the benchmark replacement.

Moreover, because of the unique role of the administrative agent in a syndicated loan, an administrative agent may choose to include an additional fallback trigger that would allow for a transition away from LIBOR in the highly unlikely event that there is a public statement by any governmental authority having jurisdiction over the administrative agent announcing that LIBOR is no longer representative or may no longer be used by the administrative agent. Many credit agreements contain illegality provisions that customarily address a situation where one or more lenders determine that making or funding LIBOR loans is unlawful, but they do not extend to a similar situation impacting the administrative agent. While administrative agents in many credit agreements have the option to resign, this could be a disruptive event or a sub-optimal outcome from the point of view of the participants in the facility. Upon such an announcement being made, the borrower and lenders could agree (with the usage of any ARRC-approved fallback language) to voluntarily amend their credit agreement to implement a successor rate, however such amendments typically require an all-lender vote, which could be difficult to obtain. The inclusion of an additional fallback trigger addressing this point could provide a means to more easily transition into a benchmark replacement upon the occurrence of such an event. The ARRC has not included a trigger like the one described above in the recommended fallback language because these triggers are intended to describe market-wide events and align as closely as possible with derivatives while recognizing the needs of cash products.

Early "Opt-in" Trigger

Both sets of syndicated loan fallback language include an "early opt-in trigger" that is available even though LIBOR still is being published and none of the other enumerated triggers have been met, as set forth in the respective definition of "Early Opt-in Election." This mechanism takes advantage of a syndicated loan's natural flexibility to reduce risk by helping to reduce the inventory of LIBOR-based loans prior to an actual LIBOR discontinuance event.

The "amendment approach" fallback language early opt-in trigger found in the definition of "Early Opt-in Election" is set forth below:

(1) (i) a determination by the Administrative Agent or (ii) a notification by the Required Lenders to the Administrative Agent (with a copy to the Borrower) that the Required Lenders have determined that U.S. dollar-denominated syndicated credit facilities being executed at such time, or that include language similar to that contained in this Section titled "Effect of Benchmark Transition Event," are being executed or amended, as applicable, to incorporate or adopt a new benchmark interest rate to replace LIBOR, and

(2) (i) the election by the Administrative Agent or (ii) the election by the Required Lenders to declare that an Early Opt-in Election has occurred and the provision, as applicable, by the Administrative Agent of written notice of such election to the Borrower and the Lenders or by the Required Lenders of written notice of such election to the Administrative Agent.

This trigger allows the administrative agent or Required Lenders, at its or their election, to determine that syndicated loans in the market are being executed or amended to incorporate or adopt a LIBOR replacement (which need not be Term SOFR) (see clause (1) of the definition of "Early Opt-in Election"). An early opt-in election is only successful if agreed by the borrower, administrative agent and affirmed by a Required Lender vote as set forth in clause (a) of the section titled "Effect of Benchmark Transition Event."

For the same reasons, the "hardwired approach" language also includes an early opt-in election, however, the trigger itself is defined differently. The "hardwired approach" fallback language's early opt-in trigger is found in the definition of "Early Opt-in Election" and is set forth below:

(1) a notification by the Administrative Agent to (or the request by the Borrower to the Administrative Agent to notify) each of the other parties hereto that at least [five] currently outstanding U.S. dollar-denominated syndicated credit facilities at such time contain (as a result of amendment or as originally executed) as a benchmark interest rate, in lieu of LIBOR, Term SOFR plus a Benchmark Replacement Adjustment (and such syndicated credit facilities are identified in such notice and are publicly available for review), and

(2) the joint election by the Administrative Agent, the Borrower and the Required Lenders by affirmative vote to declare that an Early Opt-in Election has occurred and the provision by the Administrative Agent of written notice of such election to each of the other parties hereto (the "Rate Election Notice").

The hardwired early opt-in trigger may be initiated by either the administrative agent or the borrower if, at such time, there are in existence at least "[five]" publicly available new or amended syndicated loan facilities referencing Term SOFR plus a Benchmark Replacement Adjustment. The rationale for this drafting is to provide for an objective trigger that limits administrative agent discretion. Parties are encouraged to consider whether "five" is the appropriate threshold number when drafting their own agreements and may choose a higher or lower number depending on their tolerance levels. Market participants should carefully consider the choice of threshold number to ensure that it is high enough to allow for objective, clear direction, but low enough to not force parties to wait before being able to transition to a successor rate if so desired. As a second step, the "hardwired approach" requires a joint election by the administrative agent, the borrower and Required Lenders by affirmative vote to trigger an early opt-in election (see clause (2) of the definition of "Early Opt-in Election"). In the case of the "Early Opt-in Election," the successor rate and applicable adjustment would be determined as they would be under any of the other triggers, but because the early opt-in is limited in availability to a time when Term SOFR plus adjustment is being used in the market, by virtue of the Benchmark Replacement waterfall, the successor rate would be Term SOFR plus adjustment.

B. Introduction to the "Hardwired Approach" Fallback Language

Future-proofing

It is important to note that the "hardwired approach" fallback provisions refer to the "Benchmark" throughout and define the Benchmark as, initially, LIBOR; provided that if LIBOR has been replaced in the contract, then the term "Benchmark" means the applicable "Benchmark Replacement" (which is a defined term that combines the successor rate and the spread adjustment). This drafting is intended to allow the "hardwired approach" fallback provisions to apply a second time in the highly unlikely event that during the term of a contract, the successor for LIBOR is later discontinued. If that were to occur, the successor rate would be chosen through the streamlined amendment process (as presumably neither Term SOFR nor Compounded SOFR would be available).

Operative Provisions

The recommended fallback provisions begin with operative provisions specifying what is to happen if one or more of the trigger events have occurred with respect to the Benchmark.[19]

(1) **Benchmark Replacement**: If one or more events that trigger a move to the successor rate (including an "Early Opt-in Election") have occurred, then the syndicated loan will reference the Benchmark Replacement thereafter.
(2) **Benchmark Replacement Conforming Changes**: At the time of the Benchmark replacement, and from time to time thereafter, certain conforming changes will be needed to account for the move to the Benchmark Replacement.
(3) **Streamlined Amendment Process**: At the bottom of the "Benchmark Replacement" and "Benchmark Replacement Adjustment" waterfalls, the final step is for the borrower and administrative agent to select a proposed rate and spread adjustment under procedures similar to those found in the "amendment approach" described below. Once the proposed amendment has been posted for lender review, lenders have five business days in which they can object. Unless the administrative agent receives an objection from lenders constituting Required Lenders, the amendment becomes effective at 5pm on the fifth business day after the amendment was posted.
(4) **Notices; Decisions and Determinations**: In addition, standards are set forth for the various decisions that must be made in connection with a Benchmark transition. The fallback language also specifies when the administrative agent is required to send notices to the borrower and the lenders.

It is the Benchmark's replacement that the ARRC's recommended fallback language is chiefly aimed at addressing. Making this operational involves specifying a set of triggers, a successor rate, a spread adjustment, and some description of the conforming changes that could be made. How each of these is specified in the recommended "hardwired approach" fallback language is discussed in turn.

Use of Screen Rates

The ARRC consultation on syndicated loans requested feedback from market participants on whether it was necessary that any successor rate and/or applicable spread adjustment be published on a screen by a third party. Respondents were unanimous in identifying the availability of screen rates and screen

[19] If it is not possible to determine LIBOR but none of the events that would trigger a move to a successor rate have occurred (that is, LIBOR has not been permanently or indefinitely discontinued nor has the regulator of the benchmark found that it is not representative), then the syndicated loan will reference whatever is currently specified in the current sections of contract language for the *temporary* unavailability of LIBOR.

adjustments for any successor rate as necessary for smooth market transition. Similarly, the Business Loans Working Group unanimously concurred. The ARRC has stated that it supports publishing screen rates for SOFR and spread adjustments.

The requirement that Term SOFR and Compounded SOFR (the first two steps of the respective waterfalls), or the underlying rates components, and the spread adjustment be available on a screen is set forth at the end of the "Benchmark Replacement" and the "Benchmark Replacement Adjustment" definitions:

> *…and, in the case of clauses (1) and (2) above [referencing Term SOFR and Compounded SOFR], such rate, or the underlying rates component thereof, is or are displayed on a screen or other information service that publishes such rate or rates from time to time as selected by the Administrative Agent in its reasonable discretion.*
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> … *and, in the case of clause (1) above [referencing the spread adjustment recommended by ARRC and the spread adjustment recommended by ISDA], such adjustment is displayed on a screen or other information service that publishes such Benchmark Replacement Adjustment from time to time as selected by the Administrative Agent in its reasonable discretion.*

While it is anticipated that Term SOFR, if developed, will be available as a screen rate much like LIBOR is now, it is not as certain what form of Compounded SOFR will be displayed on a screen. The language is drafted to allow for either Compounded SOFR itself or the underlying daily SOFRs to be displayed on a screen. This flexibility is important because we do not yet know how loan systems will consume the rate or what tools, such as published calculators, may be available in the future.

If the first two steps in the waterfall (Term SOFR and Compounded SOFR) are not available, it is still expected that a rate and adjustment (if applicable) that is selected by the borrower and administrative agent would be preferred to appear on a screen. However, to avoid fallback language failure, the drafting would allow for an unpublished rate and/or adjustment (if applicable) to be selected by the administrative agent and the borrower at the time.

Unavailability of Tenor of Term SOFR

Because credit facilities permit borrowings under the credit agreement in different interest rate tenors, the "hardwired approach" syndicated loans fallback language provides for the administrative agent to have the ability *at its option* to remove tenors for which Term SOFR is not available as a screen rate. The administrative agent can then elect to reinstate certain tenors if Term SOFR later becomes available as a screen rate. The relevant provision is set forth in clause (d) of the Section titled "Effect of Benchmark Transition Event." Given the stated preference of the syndicated loan market to transition to forward-looking term SOFR if possible, this ability helps ensure that parties stay in the first step of the benchmark replacement waterfall, i.e. Term SOFR, as long as possible. It also prevents a split in the loan facility where certain maturities would transition to Term SOFR while others, for which Term SOFR is unavailable, would move to Compounded SOFR.

C. “Hardwired Approach” Benchmark Replacement

In the ARRC-recommended hardwired fallback language for syndicated loans, if a trigger event and its related effective date with respect to a Benchmark occur, all references to the Benchmark will be replaced throughout the documentation with the “Benchmark Replacement.” Note that the defined term “Benchmark Replacement” in the fallback language encompasses the successor rate and any spread adjustment, which is discussed separately below; the defined term for the successor rate prior to adjustment is “Unadjusted Benchmark Replacement.”

Waterfall

The defined term “Benchmark Replacement” sets forth a waterfall to determine the particular successor rate to be used. It is important to note that for consistency across asset classes, each step in the waterfall must be assessed as of the first time a trigger event with respect to the Benchmark becomes effective (this time is called the “Benchmark Replacement Date”). The availability of each step in the waterfall is not re-evaluated at a later point in time. The table below displays the waterfall:

Benchmark Replacement Waterfall
Step 1a: Term SOFR + Adjustment
Step 1b: Next Available Term SOFR + Adjustment
Step 2: Compounded SOFR + Adjustment
Step 3: Borrower and Administrative Agent Selected Rate + Adjustment

Step 1a: Term SOFR + Adjustment

The first step in the “Benchmark Replacement” waterfall is specified in the fallback language as follows:

> *the sum of (a) Term SOFR … and (b) the Benchmark Replacement Adjustment*[20]

“Term SOFR” is defined as a forward-looking term SOFR for the Corresponding Tenor (meaning a period equivalent to the LIBOR tenor, e.g. 1-month SOFR, 3-month SOFR) that is selected or recommended by the Relevant Governmental Body. The “Relevant Governmental Body” means the Federal Reserve Board and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York (e.g., the ARRC), or any successor thereto.

While the ARRC intends to select a forward-looking term SOFR for use as a fallback rate in cash products that originally referenced LIBOR if a consensus among its members can be reached that an IOSCO-compliant benchmark[21] exists and meets appropriate criteria set by the ARRC, it is not certain that such a benchmark will be produced prior to the discontinuation of LIBOR.

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[20] “Benchmark Replacement Adjustment” is the defined term for the spread adjustment discussed further below.

[21] See the *Principles for Financial Benchmarks*, final report of the Board of the International Organization of Securities Commissions dated July 2013 at: https://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf

In addition, because standard derivatives are not expected to reference a forward-looking term rate,[22] borrowers in the loan market who execute hedges may prefer to remove Term SOFR (and adjust all of the corresponding cross references within the fallback language) in order to fall back to Compounded SOFR, the rate expected to be the same rate that becomes operative under ISDA's standard definitions for derivatives. Note that other conforming changes may also be needed at the time a fallback is activated in order to maintain alignment with hedges.

Step 1b: Next Available Term SOFR + Adjustment

If Term SOFR for the Corresponding Tenor is not available, the waterfall provides for an interim step before proceeding to Compounded SOFR. This step is set forth below:

> *the sum of: (a) …. if the Administrative Agent determines that Term SOFR for the applicable Corresponding Tenor cannot be determined, Next Available Term SOFR, and (b) the Benchmark Replacement Adjustment*

Recognizing that not all administrative agents are prepared operationally to interpolate LIBOR in the case of a temporary LIBOR disruption, there was some concern about requiring interpolation as an interim step in the fallback waterfall (as had been proposed in the consultation). As an alternative, the syndicated loans "hardwired approach" fallback language includes a concept of "Next Available Term SOFR" which is generally defined as "Term SOFR for the longest tenor that can be determined by the Administrative Agent that is shorter than the applicable Corresponding Tenor." As an (unlikely) example, if the "Corresponding Tenor" for the relevant borrowing is for six months, but six-month Term SOFR is not available, then the administrative agent would look at the longest available tenor that is shorter than six months. If three-month Term SOFR were available, for instance, then three-month Term SOFR would be used as the Benchmark Replacement. The corresponding Benchmark Replacement Adjustment that would apply would be such adjustment applicable for the tenor of the rate used. In this example, the applicable adjustment would be either the three-month ARRC adjustment or three-month ISDA adjustment (as further described below). As the Benchmark Replacement is determined once, this mechanism allows the facility to utilize Term SOFR for all tenors, assuming that a shorter tenor is available in the case of an otherwise unavailable tenor, rather than having a permanent split between Term SOFR and Compounded SOFR or another chosen rate (with respect to tenors that are unavailable at the time of the fallback).

Step 2: Compounded SOFR + Adjustment

If the ARRC has concluded that a robust, IOSCO-compliant forward-looking term rate is not available and has therefore not selected or recommended such a rate per the first step of the waterfall, then the second step specified in the "Benchmark Replacement" waterfall is as follows:

> *the sum of: (a) Compounded SOFR and (b) the Benchmark Replacement Adjustment*

[22] See the ISDA consultation on fallbacks for derivatives FAQ, "Why do the choices for calculating the "adjusted RFR" not include a forward-looking term rate?

It is important to note that LIBOR is produced in various tenors (e.g. one-month, three-month, six-month). At each tenor LIBOR acts as a forward-looking rate whereby the interest due at the end of the period is known at the beginning of that interest period. SOFR, however, is currently only an overnight rate, with the SOFR for a given day being published the following day. Because SOFR is only available at this time in an overnight tenor and interest payable by syndicated loans is typically in terms longer than overnight (i.e. monthly, quarterly), daily SOFRs would need to be aggregated in syndicated loans in order to determine an interest amount due for each interest period.[23]

Compounded SOFR as the second step in the waterfall is intended to be a compounded average of daily SOFRs over the relevant period (e.g., one-month, three-month) depending on the tenor of the LIBOR being replaced. For the avoidance of doubt, compounding does not apply to the Benchmark Replacement Adjustment or any margin specified in the underlying terms. Compounded SOFR may be implemented "in arrears," meaning over the relevant interest period (not aggregated over a prior interest period), which may be the fallback rate for LIBOR derivatives referencing the ISDA standard definitions for derivatives.[24] Alternatively, Compounded SOFR may be implemented "in advance." In this scenario, the rate on a SOFR-based loan would be calculated by compounding the overnight SOFRs for the previous relevant period. For instance, for a 30-day SOFR loan beginning April 1st, the rate could be overnight SOFRs compounded daily from March 2nd to March 31st.

Although, as discussed in ***Part IV: Summary of Responses to the ARRC's Consultations***, there was strong consultation feedback in favor of compounded SOFR in arrears as the second step in the successor rate waterfall, some market participants have expressed concerns regarding issues that may arise in connection with implementation of this waterfall step. While a compounding calculation formula (the "methodology") could be specified in the credit agreement, there have been no compounded SOFR syndicated loans originated to date and therefore there is no standard methodology for referencing a compounded rate in syndicated loans at this time. Furthermore, at this time there is no standard set of "conventions" for use of this rate in the loan market. In addition, many loan and securities systems cannot currently operationalize a daily compounded SOFR.[25]

To illustrate a few of the possible conventions we can look to the FRN market where there have been more than $70 billion SOFR-referenced issuances. Most FRNs referencing SOFR to date provide for a "lookback" (also called a "lag"), meaning that in order to achieve certainty regarding cash flows before an interest payment is due, SOFR-referencing FRNs shift backwards the period of time that the rates are observed. Therefore, SOFR is determined for each day during the relevant period of time between payment dates based on a prior day's rate. However, the number of days' lookback has varied by issuance. As a different mechanism to determine the interest amount before an interest payment becomes due, most FRNs referencing SOFR to date have also provided for a "lockout" period (also called

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[23] Various models for using SOFR in cash products as well as the technical difference between simple average and compounded average calculations are described in *A User's Guide to SOFR* available at: https://www.newyorkfed.org/arrc/publications.

[24] However, this is not certain as ISDA has not yet conducted its consultation specifically focused on U.S. dollar LIBOR.

[25] Parties may wish to analyze their operational capabilities when drafting fallback language that includes a SOFR Compounded in Arrears option.

a "suspension" period) of varying lengths (or none at all), meaning that a SOFR rate is repeated for the final few days in each observation period.[26]

Market conventions can develop and change over time according to market-based evolution and/or changes in practice. In order to facilitate a smooth transition within a relatively short timeframe, the ARRC has agreed to raise awareness about the different conventions for referencing SOFR in cash products and provide further clarity in relation to these emerging conventions. Accordingly, the definition of "Compounded SOFR" in the fallback language leaves room for direction from the ARRC and/or market-accepted conventions once they emerge. The relevant definition is set forth below:

> *"**Compounded SOFR**" means the compounded average of SOFRs for the applicable Corresponding Tenor, with the rate, or methodology for this rate, and conventions for this rate (which may include compounding in arrears with a lookback and/or suspension period as a mechanism to determine the interest amount payable prior to the end of each Interest Period) being established by the Administrative Agent in accordance with:*
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> *(1) the rate, or methodology for this rate, and conventions for this rate selected or recommended by the Relevant Governmental Body for determining compounded SOFR; provided that:*
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> *(2) if, and to the extent that, the Administrative Agent determines that Compounded SOFR cannot be determined in accordance with clause (1) above, then the rate, or methodology for this rate, and conventions for this rate that the Administrative Agent determines are substantially consistent with at least [five] currently outstanding U.S. dollar-denominated syndicated credit facilities at such time (as a result of amendment or as originally executed) that are publicly available for review;*
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> *provided, further, that if the Administrative Agent decides that any such rate, methodology or convention determined in accordance with clause (1) or clause (2) is not administratively feasible for the Administrative Agent, then Compounded SOFR will be deemed unable to be determined for purposes of the definition of "Benchmark Replacement."*

Because of the uncertainty around the conventions that the market will adopt, this definition is drafted flexibly with the intention that parties will be able to observe prevailing conventions at the time of transition and, when implementing Compounded SOFR, will adopt conventions that have been accepted in the market, recognizing that market conditions may thereafter continue to evolve. The definition explicitly contemplates that the rate may be implemented "in arrears" meaning that the rate would not be known at the beginning of the relevant interest period. Importantly, provided that interest is compounded and accrued in systems, the accrued interest would be known at any day in the interest period.

The definition of "Compounded SOFR" establishes a two-step analysis. If the ARRC were to make a recommendation for or select a rate/methodology and/or a set of conventions, then the administrative agent would first look to such choices and apply such rate/methodology and/or conventions. In the absence of an ARRC recommendation or selection, or to the extent that the ARRC recommendation or selection did not cover all of the rate/methodology and/or conventions needed, the administrative

[26] This discussion does not capture all potential conventions for using compounded SOFR in the cash markets.

agent would select those that are substantially similar to those adopted in at least five publicly available U.S. dollar syndicated loans. This step is intended to offer administrative agents an objective standard for determining the rate/methodology and/or conventions for the rate which limits administrative agent discretion. Like the definition of "Early Opt-in Election," the exact threshold – five transactions or more or less – can be negotiated and finalized by the parties at the time of loan origination.[27]

Importantly, administrative agents have the ability to decline to use any rate/methodology or convention determined in accordance with these two steps if they determine that such methodology or convention is not administratively feasible. Parties should be aware that, in the event of this determination, the Compounded SOFR step fails and parties must look to implement a successor rate and adjustment through the third step of the waterfall, the streamlined amendment process.

Alternative Step 2: Simple Average SOFR + Adjustment

Market participants may prefer to reference a simple average of SOFRs (rather than a compounded average) in the second step of the successor rate waterfall in order to utilize an uncompounded interest rate that is easier to calculate, regardless of the standard derivatives convention to reference compounded SOFR. This can be accomplished by changing the "Compounded SOFR" definition in the recommended fallback language to the "Simple Average SOFR" definition set forth below and changing all of the corresponding references within the fallback language from "Compounded SOFR" to "Simple Average SOFR." This modification to the fallback language would be aligned with the ARRC's principles.

> ***"Simple Average SOFR"*** *means the simple average of SOFRs for the applicable Corresponding Tenor, with the conventions for this rate (which may include in arrears with a lookback and/or suspension period as a mechanism to determine the interest amount payable prior to the end of each Interest Period) being established by the Administrative Agent in accordance with:*
>
> *(1) the conventions for this rate selected or recommended by the Relevant Governmental Body for determining simple average SOFR; <u>provided</u> that:*
>
> *(2) if, and to the extent that, the Administrative Agent determines that Simple Average SOFR cannot be determined in accordance with clause (1) above, then the conventions for this rate that the Administrative Agent determines are substantially consistent with at least [five][28] currently outstanding U.S. dollar-denominated syndicated credit facilities at such time (as a result of amendment or as originally executed) that are publicly available for review;*
>
> *<u>provided</u>, <u>further</u>, that if the Administrative Agent decides that any such convention determined in accordance with clause (1) or clause (2) is not administratively feasible for the Administrative Agent, then Simple Average SOFR will be deemed unable to be determined for purposes of the definition of "Benchmark Replacement."*

[27] Parties may choose to use the same number threshold here as they do in "Early Opt-in Election," but that need not be the case.
[28] Parties may choose to set a different threshold.

Step 3: Borrower and Administrative Agent Selected Rate + Adjustment

If, however, the Benchmark Replacement cannot be determined under Step 1 or 2, then the third and final step specified in the "Benchmark Replacement" waterfall is:

> *(3) the sum of: (a) the alternate rate of interest that has been selected by the Administrative Agent and the Borrower as the replacement for the then-current Benchmark for the applicable Corresponding Tenor giving due consideration to (i) any selection or recommendation of a replacement rate or the mechanism for determining such a rate by the Relevant Governmental Body at such time or (ii) any evolving or then-prevailing market convention for determining a rate of interest as a replacement for the then-current Benchmark for U.S. dollar-denominated syndicated credit facilities at such time and (b) the Benchmark Replacement Adjustment;*

This final step of the waterfall sets out a streamlined amendment process for selecting a Benchmark Replacement that is aligned with the streamlined amendment process described in the set of "amendment approach" fallback provisions. This is an escape hatch that allows an easier transition from LIBOR in the event that Steps 1 and 2 of the Benchmark Replacement waterfall do not produce a usable rate. The borrower and the administrative agent will select an alternate rate of interest giving due consideration to any selection or recommendation that has been made by the Fed or the ARRC or any evolving or then-prevailing market convention for determining interest rates in U.S. dollar syndicated loans. In addition, such "Benchmark Replacement" will include the applicable Benchmark Replacement Adjustment described below. Once selected, the administrative agent will give notice of the proposed Benchmark Replacement to the lender group. The lenders then have five days in which they can object to the proposed Benchmark Replacement and if lenders constituting Required Lenders do object, then the amendment fails. The process would then begin again and continue until a Benchmark Replacement is successfully selected. In the meantime, after a "Benchmark Replacement Date" and before an amendment selecting the Benchmark Replacement is made effective, outstanding loans (and new loans) will accrue interest at ABR (see the "Benchmark Unavailability Period" provisions and definition).

D. "Hardwired Approach" Benchmark Replacement Adjustment

LIBOR and SOFR are different rates and thus the transition from LIBOR to SOFR will require a spread adjustment to make the rate levels more comparable. As noted above, LIBOR is produced in various tenors and SOFR is currently only an overnight rate. Another critical difference between LIBOR and SOFR is that LIBOR is based on unsecured transactions and is intended to include the price of bank credit risk. SOFR, on the other hand, is a near risk-free rate that does not include any bank credit component, as the transactions underpinning SOFR are fully secured by U.S. Treasuries.

Therefore, the ARRC-endorsed fallback language provides for an adjustment (which may be a positive or negative value or zero) to be included in the determination of any Benchmark Replacement. The particular spread adjustment to be used is selected at the time that the Benchmark Replacement is selected according to a waterfall in the definition of "Benchmark Replacement Adjustment." Note that the fallback adjustment would differ for each LIBOR tenor and would be implemented as part of the

Benchmark Replacement in order to encompass all credit, term and other adjustments that may be appropriate for a given tenor of the benchmark rate. The table below displays the syndicated loan spread adjustment waterfall:

Benchmark Replacement Adjustment Waterfall
Step 1: ARRC Selected Adjustment
Step 2: ISDA Fallback Adjustment
Step 3: Borrower and Administrative Agent Selected Adjustment

Steps 1 and 2 of the Benchmark Replacement Adjustment are applicable to Steps 1 and 2 of the Benchmark Replacement (i.e., Term SOFR/Next Available Term SOFR and Compounded SOFR). Step 3 of the Benchmark Replacement Adjustment is applicable to Step 3 of the Benchmark Replacement (i.e., the rate selected in the streamlined amendment process).

Step 1: ARRC Selected Adjustment

The first step of the adjustment waterfall set forth in clause 1(a) of the definition of "Benchmark Replacement Adjustment" provides that the adjustment will be:

> *the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that has been selected or recommended by the Relevant Governmental Body for the applicable Unadjusted Benchmark Replacement;*

This means that if the ARRC selects or recommends a spread (or its methodology), it is this adjustment that would be incorporated and applied to the successor rate. Market participants that wish to fall back first to Compounded SOFR may consider removing this first step of the Benchmark Replacement Adjustment waterfall.

Step 2: ISDA Fallback Adjustment

If there is no such spread adjustment selected or recommended by the Relevant Governmental Body available, the second step in the waterfall set forth in clause 1(b) of the definition of "Benchmark Replacement Adjustment" is the spread adjustment applicable to fallbacks for derivatives that ISDA anticipates implementing in its definitions.[29] The relevant language is set forth below:

[29] We note that the ISDA spread adjustment will be intended for use with the particular version of the fallback rate selected by ISDA based upon the outcome of its consultations. However, as discussed above, it is very likely that ISDA will implement compounded SOFR in arrears as the fallback in its standard derivatives documentation. Given that a spread adjustment designed to be suitable with Term SOFR and a spread adjustment designed to be suitable for Compounded SOFR in arrears should be economically equivalent, the second step of the spread waterfall could apply to either Term SOFR or Compounded SOFR for the Corresponding Tenor (meaning a period equivalent to relevant LIBOR tenor, e.g. 1-month SOFR, 3-month SOFR). See *A User's Guide to SOFR* available at: https://www.newyorkfed.org/arrc/publications.

the spread adjustment (which may be a positive or negative value or zero) that would apply to the fallback rate for a derivative transaction referencing the ISDA Definitions to be effective upon an index cessation event with respect to USD LIBOR for the Corresponding Tenor;

It is important to note that ISDA has not analyzed, and will not analyze, whether the fallbacks it anticipates implementing, including spread adjustments in the fallbacks, would be appropriate for non-derivatives.[30]

Step 3: Borrower and Administrative Agent Selected Adjustment

If neither Term SOFR nor Compounded SOFR is the proposed successor rate meaning the successor rate is one which is selected by the borrower and the administrative agent, then the third and final step of the spread adjustment waterfall applies. This step requires that the borrower and administrative agent select a Benchmark Replacement Adjustment giving due consideration to any selection or recommendation that has been made by the Fed or the ARRC or any evolving or then-prevailing market convention for determining a spread adjustment for the replacement of the then-current Benchmark in U.S. dollar syndicated loans. This step is found in clause (2) of the definition of "Benchmark Replacement Adjustment" which is set forth below:

the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that has been selected by the Administrative Agent and the Borrower for the applicable Corresponding Tenor giving due consideration to (i) any selection or recommendation of a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the then-current Benchmark with the applicable Unadjusted Benchmark Replacement by the Relevant Governmental Body at such time or (ii) any evolving or then-prevailing market convention for determining a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the then-current Benchmark with the applicable Unadjusted Benchmark Replacement for U.S. dollar-denominated syndicated credit facilities at such time;

E. Introduction to the "Amendment Approach" Fallback Language

The "amendment approach" does not prescribe what the successor rate or spread adjustment would be, rather it provides a streamlined amendment process for negotiating a benchmark replacement in the future. As discussed above, it is similar to the "LIBOR replacement" language that is being included in

[30] As discussed in ***Part IV: Summary of Responses to the ARRC's Consultations,*** it may be the case that ISDA's standard definitions for derivatives do not include a "pre-cessation" trigger for LIBOR's representativeness of the kind that the ARRC is recommending for syndicated loans and that any spread adjustment for derivative fallbacks in the ISDA's standard definitions for derivatives would only become effective upon a permanent discontinuance of LIBOR. However, the methodology used in ISDA's chosen spread adjustment could be utilized in connection with the syndicated loan "pre-cessation" trigger prior to transition of the derivatives market because ISDA anticipates that a third party vendor will publish the spread adjustment on a daily basis up until the time an ISDA trigger event has occurred. Note that spread adjustments for syndicated loans determined based upon the spread methodology for derivatives in the ISDA definitions could result in different spreads if such calculations are performed at a time prior to the activation of fallbacks for standard derivatives.

credit agreements in the market currently. The ARRC's recommended "amendment approach" fallback language builds on this language and includes specificity around trigger events (including an early opt-in trigger), an explicit inclusion of a benchmark replacement adjustment, and an objection right for Required Lenders.[31] While the Benchmark Replacement is not predetermined as it is in the "hardwired approach," the process and parameters for selecting the Benchmark Replacement are set forth with specificity. Unlike the "hardwired approach" fallback language which is future-proofed as described above, the "amendment approach" fallback language as provided above is drafted solely for the replacement of LIBOR; should parties desire to future-proof the "amendment approach" mechanics, the recommended fallback language should be modified accordingly.

Operative Provisions

(1) **Benchmark Replacement**: After a Benchmark Transition Event has occurred or after the exercise of an Early Opt-in Election, the borrower and administrative agent may amend the credit agreement to select a successor rate and spread adjustment, in each case, giving due consideration to any selection or recommendation by the Relevant Governmental Body (the Federal Reserve Board or the Federal Reserve Bank of New York, or committees endorsed or convened by them (e.g., the ARRC)) or any evolving or then-prevailing market convention for determining a successor rate for LIBOR for U.S. dollar syndicated loan facilities.

(2) **Streamlined Amendment Process**: The proposed amendment is subject to negative consent rights of the Required Lenders (for mandatory triggers) and affirmative consent rights of the Required Lenders (for the early opt-in trigger).

(3) **Benchmark Replacement Conforming Changes**: At the time of LIBOR's replacement, and from time to time thereafter, certain conforming changes may be needed to implement the transition to the Benchmark Replacement, as described further below. The definition of "Benchmark Replacement Conforming Changes" is identical in the "amendment approach" language and the "hardwired approach" language.

(4) **Notices; Decisions and Determinations**: In addition, standards are set forth for the various decisions that must be made in connection with a Benchmark transition, as described further below. The fallback language also specifies which events require the administrative agent to send notices to the borrower and the lenders.

F. "Amendment Approach" Benchmark Replacement

In the ARRC-recommended "amendment approach" fallback language for syndicated loans, references to LIBOR will be replaced in the credit agreement pursuant to the terms of an amendment once it has been made effective.

[31] If it is not possible to determine LIBOR but none of the events that would trigger a move to a successor rate have occurred (that is, LIBOR has not been permanently or indefinitely discontinued nor has the regulator of the benchmark found that it is not representative), then the syndicated loan will reference whatever is currently specified in the current sections of contract language for the *temporary* unavailability of LIBOR.

Benchmark Replacement and Benchmark Replacement Adjustment

Once a trigger event has occurred, as described above, the borrower and the administrative agent select a successor rate (which may, but need not, be a SOFR term rate) and a spread adjustment (the "Benchmark Replacement Spread"). The defined term "Benchmark Replacement" refers to both the rate and spread together. Unlike the predetermined waterfalls in the "hardwired approach" fallback language, the definition of "Benchmark Replacement" and "Benchmark Replacement Adjustment" only include "guardrails" with respect to the successor rate and spread adjustment. In their selection of the Benchmark Replacement, the administrative agent and borrower are required to give due consideration to any selection or recommendation by the Fed or the ARRC or any evolving or then-prevailing market convention for U.S. dollar syndicated loans. The definition of "Benchmark Replacement" and the definition of "Benchmark Replacement Adjustment" for the "amendment approach" are set forth below:

> *"**Benchmark Replacement**" means the sum of: (a) the alternate benchmark rate (which may include Term SOFR) that has been selected by the Administrative Agent and the Borrower giving due consideration to (i) any selection or recommendation of a replacement rate or the mechanism for determining such a rate by the Relevant Governmental Body or (ii) any evolving or then-prevailing market convention for determining a rate of interest as a replacement to LIBOR for U.S. dollar-denominated syndicated credit facilities and (b) the Benchmark Replacement Adjustment; provided that, if the Benchmark Replacement as so determined would be less than zero, the Benchmark Replacement will be deemed to be zero for the purposes of this Agreement.*
>
> *"**Benchmark Replacement Adjustment**" means, with respect to any replacement of LIBOR with an Unadjusted Benchmark Replacement for each applicable Interest Period, the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that has been selected by the Administrative Agent and the Borrower giving due consideration to (i) any selection or recommendation of a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of LIBOR with the applicable Unadjusted Benchmark Replacement by the Relevant Governmental Body or (ii) any evolving or then-prevailing market convention for determining a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of LIBOR with the applicable Unadjusted Benchmark Replacement for U.S. dollar-denominated syndicated credit facilities at such time.*

This flexibility means that future developments with respect to spread adjustments are more easily captured. For instance, the market could in time develop a so-called "break-the-glass" feature that is triggered during times of credit market stress pursuant to which the all-in interest rate is increased to reflect lenders' increased cost of funds during such times. Key aspects of how a feature like this would work have not been fleshed out; however, the "amendment approach" is likely flexible enough to accommodate such a feature while the "hardwired approach" would not be unless the successor rate and spread adjustment were selected through the amendment process. It should be noted, however, that the additional flexibility may have implications for the administrative agent. Under both sets of fallback language the administrative agent is involved in selecting and administering the successor rate, but the administrative agent arguably exercises more discretion under the "amendment approach" because the successor rate and spread adjustment are not pre-determined.

Amendment Process

Once the selection has been made, the administrative agent provides notice to the lenders of the proposed amendment identifying the Benchmark Replacement. If the amendment is a result of a mandatory trigger, the lenders then have the opportunity to object to the rate and, if lenders comprising Required Lenders object to the amendment within the five business day window, the amendment fails. The loan would then accrue interest at ABR until a Benchmark Replacement is successfully chosen. However, if after five business days from the posting of the proposed amendment the administrative agent has not received objections from lenders comprising the Required Lenders, then the amendment becomes effective at 5pm on the fifth business day after the amendment was posted.

Alternatively, if the amendment is a result of the early opt-in trigger, then upon notice by the agent of the amendment, Required Lenders would have to affirmatively accept the Benchmark Replacement for the amendment to be effective. If successful, the amendment is effective on the date that the Required Lenders have submitted their acceptances to the administrative agent.

Finally, the fallback language recognizes that it is challenging operationally to have a large number of credit agreements being amended simultaneously and so provides in the definition of "Benchmark Transition Start Date," in the context of a preannounced cessation of LIBOR, that the relevant amendment can take place at any time during a certain window of time. The language suggests up to 90 days before the expected date of transition in the definition of "Benchmark Transition Start Date," but parties can specify a different length of time depending on preferences and operational needs. This 90-day period, however, is reduced if the announcement occurs less than 90 days before a trigger event becomes effective. In that case, the relevant amendment can take place at any time after the date of the announcement.

G. Conforming Changes

As noted above, both sets of fallback language provide the administrative agent the ability to execute certain conforming changes to the syndicated loan in order to appropriately implement and administer the successor rate. An example of such a change may be moving from months to day count (1 month vs. 30 days) or perhaps an adjustment to the length of interest accrual periods or frequency of determining rates. The definition of "Benchmark Replacement Conforming Changes" is set forth below:

> *"**Benchmark Replacement Conforming Changes**" means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the definition of "ABR," the definition of "Interest Period," timing and frequency of determining rates and making payments of interest and other administrative matters) that the Administrative Agent decides may be appropriate to reflect the adoption and implementation of such Benchmark Replacement and to permit the administration thereof by the Administrative Agent in a manner substantially consistent with market practice (or, if the Administrative Agent decides*

> *that adoption of any portion of such market practice is not administratively feasible or if the Administrative Agent determines that no market practice for the administration of the Benchmark Replacement exists, in such other manner of administration as the Administrative Agent decides is reasonably necessary in connection with the administration of this Agreement).*

Because conventions may evolve over time, the administrative agent's ability to implement conforming changes is not only available at the time of transition, but also from time to time thereafter. With respect to the "hardwired approach" language, it is expected that "Benchmark Replacement Conforming Changes" will be particularly important in connection with implementation of Compounded SOFR.

H. Notices and Standards for Decisions and Determinations

Because it is important that the borrower and lenders, as applicable, are properly notified of changes resulting from the cessation of LIBOR and transition to a Benchmark Replacement, clause (c) of the Section titled "Effect of Benchmark Transition Event" in both the "amendment approach" and the "hardwired approach" enumerates the events which require the administrative agent to promptly notify the borrower and lenders. The requirement that the administrative agent send such notices is narrow, but includes (i) any occurrence of a trigger event, including an early opt-in election, as applicable (and the related "Benchmark Replacement Date" and "Benchmark Transition Start Date"), (ii) the implementation of any Benchmark Replacement, (iii) the effectiveness of any "Benchmark Replacement Conforming Changes," (iv) the removal or reinstatement of any Term SOFR tenor ("hardwired approach" only) and (v) the commencement or conclusion of any "Benchmark Unavailability Period," i.e. when the loans would accrue interest at ABR.

The fallback provisions specify that the administrative agent must make certain decisions and determinations, for example, whether a trigger has occurred and what is the applicable successor rate and spread adjustment (together with the borrower, in the case of the "amendment approach"). The fallback language specifies in the operative provisions that such decisions regarding whether to take action or refrain from taking action may be made "in the sole discretion" of the administrative agent. The standard set forth for any determinations by the administrative agent is "conclusive and binding absent manifest error." Similarly, with respect to an early opt-in election, the lenders may also make a determination that the trigger has been met. The same standard applies to this determination.

I. General Considerations

This ARRC recommendation provides two complete sets of fallback language – the "amendment approach" and the "hardwired approach." While each set of language offers a complete fallback solution, it was not possible to address every aspect of a credit agreement that would be impacted when LIBOR is replaced and such other changes to operative provisions fall outside the scope of this project. For example, recognizing that changes to interest rates would typically require the consent of all lenders, it is the assumption here that changes to the fallback language once included in a credit agreement would require the consent of all lenders. Additionally, it is also important to keep in mind that the current LIBOR-based lending model was envisioned as a "cost-plus" funding model and SOFR may not be reflective of a bank's internal funding costs. There are a number of customary credit agreement provisions that have developed around the historical construct of LIBOR and such provisions, e.g. break-funding, increased costs, and illegality, may need to be reconsidered if LIBOR is not the reference rate.

Furthermore, with respect to Compounded SOFR implemented "in arrears," parties will need to consider what changes may be necessary to accommodate not knowing the interest rate at the beginning of the interest period, for instance, the impact on calculating interest due on loans that are repaid prior to the end of the interest period. It is the intention that future changes such as these would be able to be implemented through an administrative agent's ability to make "Benchmark Replacement Conforming Changes."

Finally, there are certain decisions and determinations that must be made by administrative agents in connection with a transition to a Benchmark Replacement. Administrative agents may deem it prudent to include general disclaimer language with respect to LIBOR or any successor rate. While such provisions are individual to each administrative agent, the ARRC understands the needs of administrative agents and the ARRC does not consider the inclusion of such language to be at odds with its principles.

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

In this section, we discuss the feedback the ARRC received to its consultations published in 2018 for floating rate notes, syndicated business loans, bilateral business loans, and securitizations and how these responses affected the crafting of the ARRC's final fallback language recommendations. The consultations generally set forth proposed fallback provisions that defined:

- ***A set of trigger events.*** Trigger events are the occurrences that precipitate the conversion from LIBOR to a new reference rate.
- ***The selection of a successor rate.*** The successor rate is the reference rate that would replace LIBOR in contracts.
- ***The selection of a spread adjustment.*** The adjustment is added to the successor rate to account for differences between LIBOR and the successor rate.

The proposed provisions also sought to address timing and operational mechanics so that the fallbacks would function effectively. Market participants were invited to comment on these details of the ARRC's proposed fallback provisions. Comment was also sought on the general appropriateness of the proposals, potential operational challenges, and any barriers to implementation. Below is an overview of the feedback with respect to each of the key components of the proposed fallback language in the consultations.

Triggers

The ARRC consultations included five baseline trigger events[32]: The first and second triggers in the ARRC's proposed fallback provisions matched the fallback triggers in the ISDA 2018 Consultation[33]. These two triggers would cause a move to the successor rate in the event that LIBOR was permanently or indefinitely discontinued, as announced either by the benchmark administrator or an official body.

[32] The securitizations consultation included two additional triggers that are not discussed herein.

[33] See the ISDA 2018 Consultation at https://www.isda.org/2018/12/20/benchmark-fallbacks-consultation.

The ARRC consultations also included additional "pre-cessation triggers" that were not included in the ISDA 2018 Consultation but were intended to describe events that signaled either an unannounced stop to LIBOR, a material downgrade in the quality of LIBOR as signaled by a permanent or indefinite decline in the number of submitting banks to below the number required by its administrator's internal policies, or a determination by a regulatory supervisor that LIBOR was not representative of the underlying market.

Although many respondents to the ARRC consultations noted that consistency with ISDA was desirable where possible, a clear majority of consultation respondents (84 percent) supported the inclusion of one or more of the pre-cessation triggers, with 77 percent supporting the inclusion of a trigger for a regulatory finding that LIBOR was no longer representative. Many respondents to the FRN and securitization consultations (72 percent of respondents) believed they would have no other options available to manage the potential risks that could be involved if triggers of this type were not included in fallback language.

Since the ARRC's consultations were released, other information has also been received that was relevant for the ARRC's considerations of trigger events. The regulatory supervisor for the administrator of LIBOR, the FCA has indicated that it may be likely to determine that LIBOR was no longer representative of underlying markets at, if not before, the time that the benchmark's insufficient submissions policy was ever invoked.[34] And ISDA has indicated that it is also moving to solicit market-wide feedback on pre-cessation issues, including those related to a statement by the FCA that LIBOR was no longer representative.[35]

Based on the feedback to its consultations and the ARRC's belief that some form of trigger that attempts to address a further decline in the quality of LIBOR is desirable, the ARRC has determined that the inclusion of at least one pre-cessation trigger is appropriate, but that it is also appropriate to seek consistency with ISDA's standard definitions for derivatives where it is feasible. Although the results of ISDA's work cannot be known at this time, and it is not certain that ISDA will ultimately include a pre-cessation trigger in its standard definitions, the ARRC has also concluded that it is appropriate to seek potential consistency with ISDA by recommending a pre-cessation trigger in cash product contracts for the event that the FCA finds LIBOR to no longer be representative. In this way, as has been supported by the FCA, FSB, and other regulatory organizations, the ARRC's recommendations can hope to effectively address a deterioration in LIBOR's quality while also seeking as much consistency with ISDA as may be possible.[36]

Successor Rate

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

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[34] See speech by Edwin Schooling Latter, Director of Markets and Wholesale Policy at FCA, delivered at ISDA Annual Legal Forum on January 28, 2019.

[35] 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.

[36] The final fallback language for securitizations may include additional pre-cessation triggers.

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 choice of SOFR after evaluating and incorporating feedback from the consultation and from the broad set of end users on its Advisory Group. SOFR was selected 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.

SOFR is a broad measure of the cost of borrowing cash overnight collateralized by U.S. Treasury securities and reflects an economic cost of lending and borrowing relevant to the wide array of market participants active in the financial markets. SOFR is determined based on transaction data composed of: (i) tri-party repo, (ii) General Collateral Finance (GCF) repo, and (iii) bilateral Treasury repo transactions cleared through Fixed Income Clearing Corporation (FICC). Averaging nearly $800 billion of daily trading since it began publication, transaction volumes underlying SOFR are far larger than the transactions in any other U.S. money market and dwarf the volumes underlying LIBOR.[37] Further, SOFR has a combined set of other advantages that are difficult to match: it is fully IOSCO compliant and produced by the public sector with the public interest in mind, it is now included in FASB's list of hedge accounting markets[38], and it should be expected to become a highly liquid benchmark in derivatives markets.

However, SOFR is fundamentally different from LIBOR. SOFR is an overnight, secured, nearly risk-free rate, while LIBOR is an unsecured rate published at several different maturities (overnight/spot, one week, one month, two months, three months, six months and one year). Although many market participants should be able to use SOFR as an overnight rate, as evidenced by recent issuances of SOFR-based FRNs, some may find this difficult, and in particular market participants that executed securities and loans linked to LIBOR may find it difficult to transition such legacy contracts from a term LIBOR to an overnight SOFR. For these reasons, 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.[39]

Recognizing that it may be more difficult for parties to legacy cash products to move from a term LIBOR rate to an overnight rate, this forward-looking term rate was proposed as the primary potential successor rate for new cash products in the ARRC's consultations. A clear majority (80 percent) of

[37] Additional information about SOFR and other Treasury repo reference rates is available at https://www.newyorkfed.org/markets/treasury-repo-reference-rates-information. As the administrator and producer of SOFR, the Federal Reserve Bank of New York began publishing SOFR on April 3, 2018. SOFR is published on a daily basis on the Federal Reserve Bank of New York's website at approximately 8:00 a.m. eastern time. To view the rate, visit: https://apps.newyorkfed.org/markets/autorates/sofr.

[38] The Financial Accounting Standards Board ("FASB") issued ASU 2018-16 to permit the use of the overnight index swap rate based on SOFR as a U.S. benchmark interest rate for purposes of hedge accounting under Topic 815, *Derivatives and Hedging*.

[39] The ARRC also plans to produce indicative term rates that could help market participants understand how these rates are likely to behave before it is possible to produce a set of robust, IOSCO-compliant term reference rates that could be used in financial contracts. Preliminary data can be found in slide 6 of the presentation by the Chair of the ARRC at its July 2018 roundtable (www.newyorkfed.org/medialibrary/Microsites/arrc/files/2018/OConnor-Slides-ARRC-Roundtable.pdf). The Federal Reserve Board released a paper on Inferring Term Rates from SOFR Futures Prices: Finance and Economics Discussion Series (FEDS), Divisions of Research & Statistics and Monetary Affairs, dated February 5, 2019 at https://www.federalreserve.gov/econres/feds/files/2019014pap.pdf.

respondents to the consultations agreed with this proposal, although other respondents believed that a compound average of SOFR was more appropriate as the primary fallback.

Consistent with the feedback received from a majority of respondents to the consultations, the final fallback provisions reference a forward-looking term SOFR "selected or recommended by the Relevant Governmental Body" as the primary fallback rate. As noted above, the ARRC has set a goal of seeing a forward-looking term SOFR rate produced by the end of 2021; however, it is also important to understand that the ARRC will only select or recommend any reference rate as a fallback for LIBOR based cash products if a consensus can be reached among its members that such rate is a robust, transaction-based IOSCO-compliant benchmark.

If the ARRC has concluded that a robust, IOSCO-compliant forward-looking term rate is not available and has therefore not selected or recommended such a rate, then the next successor rate proposed in the consultations was a compound average of SOFR. Respondents to the consultations approved of this choice, and all respondents to the FRNs consultation (and the majority of respondents to other consultations) believed that the compound average should be calculated "in arrears," i.e. not known at the beginning of the interest period. The third proposed fallback rate, spot SOFR, received little support – only 22 percent of consultation respondents believed it would be appropriate to include one single day's observation of SOFR held for the duration of the interest period as a successor rate, and the ARRC has not included spot SOFR in its final recommendations.

The remaining steps included in the FRN and securitization consultations' waterfall of successor rates are primarily aimed at addressing the risk that SOFR might someday cease to be published. While this seems an unlikely event in the current environment, FRNs and securitizations can have very long maturities and the ARRC believed it was important to include a robust set of fallback provisions that would protect issuers and investors beyond the potential end to LIBOR itself. Respondents generally supported the ARRC's proposals at this stage of the successor rate waterfall and the ARRC has kept them in its final recommendations. On the other hand, the ARRC has removed from the penultimate step of the FRN fallback language the right of the issuer or its designee to override the ISDA fallback rate. The provision was opposed by the majority of respondents to the FRN consultation, although it is not inconsistent with the ARRC's principles.

The final step in each of the successor rate waterfalls in all of the consultations allowed agents and borrowers, lenders, and issuers or their designees discretion to select a successor rate, sometimes with negative consent of other parties. This flexibility is intended to ensure the successor rate waterfalls do not fail and has remained in the final ARRC-recommended fallback language.

Spread Adjustment

As described above, LIBOR and SOFR are different rates and thus the ARRC consultation fallback proposals included a spread adjustment, intended to make the successor rate level more comparable to LIBOR. The ARRC proposed that the primary spread adjustment at the top of a waterfall would be an adjustment selected or recommended by the "Relevant Governmental Body." The majority of consultation respondents (91 percent) indicated that it would be helpful for the ARRC to make recommendations for spread adjustments for cash products. Although an ARRC-recommended spread adjustment does not exist today, the ARRC has agreed to make such a spread adjustment recommendation one of its goals.

Respondents believed that the spread adjustment for derivatives that ISDA intends to include in its standard documentation should be used as the second step in the waterfall. While ISDA expects to include SOFR as the successor rate for USD LIBOR, it has not yet finalized the term and spread adjustments that will apply in the ISDA standard definitions for derivatives.

Consistent with the successor rate waterfall, the final step of the spread adjustment waterfall also provides one or more parties the discretion to select a spread adjustment to ensure the waterfall does not fail.

"Amendment Approach" for Loans

The description of consultation proposals and feedback above generally applies to the FRNs, securitizations and the "hardwired approach" in the syndicated and bilateral loan consultations. These hardwired approaches for cash products provide more clarity upfront. Market participants that adopt these fallback provisions can know that they will pay or receive a version of SOFR plus a spread adjustment upon a trigger event and parties will not be able to take advantage of the then-current market environment to capture economic value. The "hardwired approach" will likely be more executable on a large number of transactions at LIBOR transition.

However, another approach was included in the consultations for syndicated and bilateral loans called the "amendment approach." The "amendment approach" uses loans' flexibility to create a simpler, streamlined amendment process. It maximizes flexibility and does not reference rates or spread adjustment methodologies that do not yet exist. However, it may simply not be feasible to use the "amendment approach" if thousands of loans must be amended simultaneously due to an unexpected LIBOR cessation. This could create the very real possibility of disruption in the loan market. Additionally, as described in the loan consultations, the "amendment approach" is likely to create winners and losers in different market cycles. In a borrower-friendly market, a borrower may be able to extract value from the lenders by refusing to include a compensatory spread adjustment when transitioning to SOFR. Non-consenting lenders still would be subject to the lower rate. In a lender-friendly market, lenders might block a new proposed rate, forcing the borrower to pay a higher interest rate, such as ABR for a period of time. A number of respondents to the consultations also noted the operational risk associated with amending a large number of loans in a short period of time.

For these reasons, most consultation respondents that indicated they would prefer to implement the "amendment approach" acknowledged they would likely later find the "hardwired approach" more appropriate. Market participants who choose to adopt the "amendment approach" should therefore expect that future amendments to those provisions, if possible, may be desirable prior to any LIBOR cessation. Furthermore, the potential risks related to the "amendment approach" support a general recommendation that whenever the "amendment approach" is used, negotiation of a fallback benchmark replacement between the lenders and the borrower should be targeted well in advance of an expected LIBOR demise, i.e. through use of the "Early Opt-in Election."

Part V: Differences Among Fallback Provisions Across Products

As described in the ARRC's guiding principles, there are several benefits to consistency across cash and derivatives products. Specifically, if fallbacks are aligned across the derivatives, loan, bond and securitization markets such that products operate in a consistent fashion upon a LIBOR cessation, then operational, legal and basis risk (particularly where derivatives are used to hedge interest rate risk in cash products) will be reduced. Therefore, the fallback language developed by the ARRC working groups for cash products is intended to be consistent in certain respects with the approach ISDA intends to take for derivatives.

Despite the benefits of consistency across markets, ISDA has not analyzed the appropriateness of its proposed fallbacks for non-derivatives and many market participants provided feedback to the ARRC consultations that cash product fallbacks should differ in some respects from derivative fallback provisions. Further, the ARRC recognizes that there are differences among floating rate notes, syndicated business loans, bilateral business loans, and securitizations that may warrant differences in their fallback provisions.

One area of potential divergence is the “triggers” that precipitate the conversion away from LIBOR. As noted above, while ISDA is moving to consult on pre-cessation issues, including those related to a statement by the FCA that LIBOR is no longer representative, there can be no presumption that ISDA will include such a trigger in its standard definitions for derivatives, and this could cause some divergence between the ARRC’s recommended fallback language for inclusion in cash products and the fallbacks in ISDA’s standard definitions for derivatives. Nonetheless, based on feedback to its consultations, the ARRC is recommending this type of trigger for cash products.

A second area of divergence between the ARRC-recommended fallback language for cash products and those for derivatives is the primary fallback rate. The ARRC-recommended fallback language references a forward-looking term SOFR as the primary fallback rate in response to feedback from the vast majority of respondents to the consultations that a rate with a similar term structure would be the most workable fallback rate for LIBOR. Although ISDA’s amendments to its standard definitions are not final, it is a certainty that forward-looking term SOFR will not be the primary fallback rate for derivatives in ISDA’s standard definitions for derivatives.[40] The ISDA 2018 Consultation proposals attracted broad derivatives market consensus that the primary fallback for LIBOR should be an average of the applicable overnight risk-free rates compounded in arrears for a comparable period plus a spread adjustment based on the historical differences with LIBOR.

As noted above, while a clear majority of respondents to the ARRC consultations believed that it was appropriate to fall back first to a forward-looking term SOFR (if the ARRC had recommended or selected such a rate), a minority of respondents believed it was more appropriate to fall back to a compound average of SOFR (to achieve greater alignment with derivatives). In light of this issue, the ARRC wishes to make it clear that choosing to fall back to a compound average of SOFR in cash products would in no way be in conflict with its recommendations. Any choice to remove references to term SOFR and the related ARRC-recommended spread adjustment should be viewed as fully aligned with the ARRC’s principles and recommendations. However, market participants should consult their counsel and other advisors regarding whether to modify the ARRC-recommended fallback language in cash products in consideration of their own hedging objectives and basis risk tolerance levels.

[40] See the ISDA consultation on fallbacks for derivatives FAQ, “Why do the choices for calculating the “adjusted RFR” not include a forward-looking term rate?”

In addition to potential difference between fallbacks for derivatives and cash products, there are some differences in the ARRC's recommendations across cash products. Although the ARRC has sought to minimize these differences, it also recognizes that different cash products can have idiosyncratic features that in some cases warrant different treatment. One key difference is that many floating rate notes and securitizations have quite long maturities and are difficult to modify. For this reason the ARRC's recommendations for these asset classes have several lower levels of the successor rate waterfall to ensure that a rate can be determined under *any* contingency, even ones that at the moment are remote. These lower levels of the waterfall are unlikely to be operative at the time of a LIBOR cessation, and thus are not anticipated to lead to different outcomes in that event. Other differences relate to the relative ease of amending loans. For this reason, the "amendment approach" described above as well as "early opt-in" provisions that allow the parties to switch the reference rate any time that certain conditions are met (even prior to a trigger) are both specific to loans and are not recommended for other cash products.