Alternative Reference Rates Committee (ARRC)
Minutes for the November 15, 2019 Meeting

1. The ARRC Chair welcomed the release of the Federal Reserve Bank of New York and Treasury Department Office of Financial Research consultation on SOFR averages and a SOFR index and encouraged members to provide feedback during the public comment period, which ends on December 4th. In addition, the ARRC Chair highlighted that the Committee achieved an important milestone by releasing its recommended fallback language for residential adjustable rate mortgages (ARMs).

2. The ARRC Chair noted that the Committee had reached a basic consensus in the form of a "common ground" approach to begin exploring a potential legislative solution to address the trillions of dollars of existing LIBOR-linked contracts that either lack contractual provisions to deal with the end of LIBOR or have contractual provisions that do not effectively address a permanent cessation of LIBOR. The co-Chairs of the Legal working group encouraged ARRC members to continue to provide feedback on the draft legislation that the working group is developing. The Legal working group co-Chairs and members also highlighted a presentation (Attachment 1) prepared by the working group aimed at providing an overview of why a legislative solution is needed and how such legislation could work. The co-Chair of the Legal working group's Impact Analysis subgroup briefly described the subgroup's initial conclusions concerning the likely adverse economic and financial impacts on consumers, businesses, and other market participants that would materialize in the event that LIBOR ceases in the absence of a legislative solution. The ARRC agreed that it was appropriate to discuss a potential legislative solution with relevant New York State authorities and to begin engaging more publicly on the issue.

Attendance at the November 15, 2019 Meeting

ARRC Members

American Bankers Association	Andrew Guggenheim*
AXA	Julien Zusslin*
Bank of America	Sonali Theisen*
BlackRock	Jack Hattem*
Citigroup	Dina Faenson*
Citigroup	Jeannine Hyman*
CME Group	Fred Sturm*
CRE Finance Council	Lisa Pendergast*
CRE Finance Council	Raj Aidasani*
Deutsche Bank	Adam Eames*
Deutsche Bank	Vishal Mahadkar*
Fannie Mae	Bob Ives*
Fannie Mae	Wells Engledow*
Federal Home Loan Bank	Kyle Lynch*
Federal Home Loan Bank	Phil Scott*
Freddie Mac	Ameez Nanjee*
Goldman Sachs	Gigi Chavez de Arnavat*
HSBC	Shirley Hapangama*
Independent Community Bankers of America	James Kendrick*
Intercontinental Exchange	Harvey Flax*
International Swaps and Derivatives Association	Ann Battle*
JP Morgan Chase & Co.	Alice Wang*
JP Morgan Chase & Co.	Andrew Gray*
JP Morgan Chase & Co.	Emilio Jimenez*
JP Morgan Chase & Co.	Katie Morgan*
Loan Syndications and Trading Association	Meredith Coffey*
Loan Syndications and Trading Association	Tess Virmani*
MetLife	Alex Strickler*
MetLife	Kevin Budd*
Morgan Stanley	Maria Douvas-Orme*
Morgan Stanley	Matt Ochs*
Morgan Stanley	Tom Wipf*
National Association of Corporate Treasurers	Tom Deas*
Prudential Financial	Chris McAlister*
Prudential Financial	Gary Horbacz*
Securities Industry and Financial Markets Association	Chris Killian*
Securities Industry and Financial Markets Association	Nancy Lancia*
Structured Finance Association	Sairah Burki*
TD Bank	Greg Moore*
TD Bank	Priya Misra*
Wells Fargo	Alexis Pederson*

Ex-Officio ARRC Members

Federal Deposit Insurance Corporation	Irina Leonova*
Federal Reserve Bank of New York	Adhiraj Dutt*
Federal Reserve Bank of New York	Betsy Bourassa*
Federal Reserve Bank of New York	Caren Cox*
Federal Reserve Bank of New York	Fatima Madhany*
Federal Reserve Bank of New York	Jamie Pfeifer*
Federal Reserve Bank of New York	Justine Hansen*
Federal Reserve Bank of New York	Matt Lieber*
Federal Reserve Bank of New York	Megan Zirinsky *
Federal Reserve Bank of New York	Nathaniel Wuerffel*
Federal Reserve Bank of New York	Ray Check*
Federal Reserve Bank of New York	William Riordan*
Federal Reserve Board of Governors	Chiara Scotti*
Federal Reserve Board of Governors	David Bowman*
Federal Reserve Board of Governors	Diana Iercosan*
Federal Reserve Board of Governors	Erik Heitfield*
Federal Reserve Board of Governors	Evan Winerman*
Federal Reserve Board of Governors	Jeff Huther*
Office of Financial Research	Matt McCormick*
Office of the Comptroller of the Currency	Kevin Walsh*
U.S. Securities and Exchange Commission	David Metzman*
U.S. Securities and Exchange Commission	Michelle Danis*
U.S. Treasury	Chloe Cabot*
U.S. Treasury	Daniel Harty*
U.S. Treasury	Peter Phelan*

Observers

Cadwalader	Lary Stromfeld*
Deloitte	Alexey Surkov*
Ernst & Young	Roy Choudhury*
Morgan Lewis	Jon Roellke*
Oliver Wyman	Adam Schneider*

*Indicates participation by telephone

Attachment 1

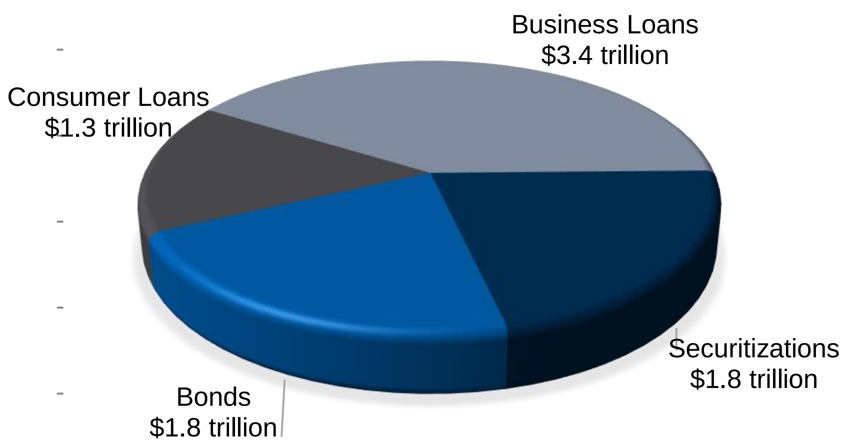
Alternative Reference Rate Committee – LIBOR & Potential New York State Legislation

November 2019

Overview

- LIBOR is an interest rate benchmark that is used across a wide range of financial products (e.g., floating rate bonds, business loans and consumer products, such as mortgages, credit cards and student loans) and commercial contracts (e.g., purchase and sale agreements)
    - It is estimated that U.S. Dollar LIBOR is used in approximately $200 trillion of financial products globally
- LIBOR's regulator, the U.K. Financial Conduct Authority, has announced that LIBOR is likely to be discontinued after December 31, 2021 due to concerns that this benchmark no longer adequately represents actual market rates
- Businesses, consumers, lenders and investors will be faced with legal uncertainty and adverse economic impacts when LIBOR is discontinued, because the relevant documentation does not effectively address a discontinuation of LIBOR
- As a significant portion of financial products and agreements that use LIBOR are governed by New York law, a New York legislative solution would mitigate adverse economic outcomes and minimize disputes that would burden New York courts

LIBOR Cessation Challenges in the U.S. Dollar Cash Market



LIBOR payments have also been incorporated into a wide array of corporate contracts, including in purchase agreements or sales contracts containing provisions applying LIBOR to adjust pricing for delayed payment or in transfer pricing.

Legacy LIBOR Fallback Provisions

	Typical Fallback	Consent Required
Bonds (FRNs)	• Bank poll → Fixed Rate at last published LIBOR	• Unanimous consent among bondholders
Securitized Products	• Bank poll → Fixed Rate at last published LIBOR • Agency MBS allow issuer selection or fallback to last quoted LIBOR	• Unanimous consent
Mortgages / Consumer Loans	• Lender selection	• Chosen by lender
Business Loans	• Bank poll → Alternative Base Rate – Prime Rate or Fed Funds plus spread • Some bilateral loans have no fallback • Recent syndicated loans allow agent to select a replacement	• **Syndicated Loans:** Unanimous consent of lenders • **Bilateral Loans:** Agreement between borrower and lender
Other Payments	• Other contractual payments (e.g..purchase agreements, sales contracts) typically have no fallback provision	• Counterparties must agree

Possible New York State Legislation

- **Purpose:** Reduce the adverse economic outcomes of legacy LIBOR fallbacks if certain events affecting LIBOR occur by applying an ARRC-recommended SOFR rate/spread adjustment to LIBOR contracts governed by NY law <u>across all asset classes</u> as follows:

    - **Silent contracts** – the legislation would apply on a mandatory basis

    - **LIBOR-based fallbacks** – the legislation would apply on a mandatory basis (e.g., floating rate bonds & securitizations that fallback to the last LIBOR fix)

    - **Contracts with Discretion** – the legislation would apply on a permissive basis (e.g., a calculation agent or administrative agent who is required under the contract to determine what alternative rate to apply may elect to use the ARRC-recommended rate/spread adjustment under the statute and benefit from a safe harbor from legal action)

- **Contracts with fallbacks to rates other than LIBOR** (e.g., prime) would remain in place and not be affected by the statute

- The statute would also use the **trigger events** adopted in:

    - **Cash markets** by the ARRC under its recommended new USD LIBOR fallbacks (both cessation and pre-cessation for U.K. Financial Conduct Authority non-representativeness determination), and

    - **Derivatives markets** by ISDA (cessation and TBD re pre-cessation).

**** See appendix for further details***

Sample Scenario #1

Floating Rate Bond With Dealer Poll/Last LIBOR Contract Fallback Provisions (Assume Statutory Trigger Event Occurs)

Legacy fallback provisions:

In the event of a LIBOR cessation, the calculation agent conducts a dealer poll to request quotes for LIBOR and, if the dealer poll fails, the interest rate on the bond is fixed at the last applicable LIBOR rate

Treatment under proposed legislation:

- The calculation agent would not be required to conduct a dealer poll.
- Because the fallback provisions would reference a LIBOR based rate, the ARRC-recommended SOFR fallback rate/spread adjustment for bonds would apply

Sample Scenario #2

Loan Agreement With No Contractual Fallback Provisions (Assume Statutory Trigger Event Occurs)

Legacy fallback provisions:

Loan agreement simply says “borrower pays interest at LIBOR” (and does not have any contractual fallback provisions)

Treatment under proposed legislation:

In the absence of any fallback provisions, the ARRC-recommended SOFR fallback rate/spread adjustment for loans would apply

Sample Scenario #3

Loan Agreement With Administrative Agent Selection Fallback Provisions (Assume Statutory Trigger Event Occurs)

Legacy fallback provisions:

Administrative Agent has the right to choose the replacement benchmark when LIBOR is "unavailable"

Treatment under proposed legislation:

If the Administrative Agent elects to use the ARRC-recommended SOFR fallback rate/spread adjustment for loans, the choice would be protected by the safe harbor.

- irrespective of whether Lender consent is obtained
- safe harbor would apply to all persons, not just the Administrative Agent (*e.g.*, the Lenders and the Borrower)

If Administrative Agent elects to use a different replacement benchmark, no safe harbor protection, but also no negative inference with respect to the Agent's election.

Decision to use the ARRC-recommended SOFR fallback rate/spread adjustment must be made within a specified time frame and cannot be changed

Appendix: Summary of Possible N.Y. State Legislation

Possible New York State Legislation

Key Components	Possible Legislation Structure
"Mandatory" v. "Permissive" Application of the Statute	• **Mandatory**: If the legacy contract is *silent* as to fallbacks. • **Mandatory**: If the legacy language falls back to a *Libor-based rate* (such as last-quoted Libor). • **Permissive**: If the legacy language gives a party the right to exercise *discretion or judgment* regarding the fallback, that party can decide whether to avail itself of the statutory safe-harbor.
Degree of Override of Legacy Contract Fallback Provisions	• **Override**: Where the legacy language falls back to *a Libor-based rate* (such as last quoted Libor). • **Override**: If the legacy language includes a fallback to *polling for Libor or other interbank funding rate*, the statute would mandate that the polling not occur. • **No Override**: Where the legacy language is *silent* as to fallbacks or gives a party the right to exercise *judgment or discretion* regarding the fallback. *In these instances, there is nothing to override.* • **No Override**: The statute would not override legacy language that falls back to an express *non-Libor based rate* (such as Prime).
Mutual "Opt-Out"	• Parties would be permitted to mutually opt-out of the application of the statute, in writing, at any time *before or after* the occurrence of the Trigger Event.

Trigger Events	• The statute would become applicable or available (as described in "Mandatory" v. "Permissive" above) upon the occurrence of statutory trigger events
	    • **Cash Products**: The statutory trigger events for cash products would be based on the ARRC permanent cessation and pre-cessation trigger events
	    • **Derivatives**: The statutory trigger events for derivatives would be based on what ISDA does

"All Products"	• **No Exclusions**: No product would be categorically excluded from the statute. Parties can opt-out as described above.
Conforming Changes	• The statute would be drafted to provide safe-harbor protection for parties who add conforming changes to their documents to accommodate administrative/operational adjustments for the statutory endorsed benchmark rate.