# Alternative Reference Rates Committee (ARRC) Minutes for the March 22, 2018 Meeting

- The ARRC Chair delivered opening remarks underscoring the importance of the Committee's
  work now that it had been reconstituted, thanking existing ARRC members for their continued
  participation, and welcoming new ARRC members. ARRC members in attendance introduced
  themselves.
- 2. The ARRC received updates from ISDA, the Regulatory Issues working group, the Market Structures working group, LCH, and CME.
  - ISDA noted that it is continuing work on adapting more robust fallback language into its
    LIBOR definitions and would provide a fuller presentation of its progress at the next ARRC
    meeting. ISDA also noted that it was drafting a global response to regulators as they
    considered exemptions for qualified financial contracts and other related issues, noting in
    particular that the response would also address the need for similar exemptions related to
    the LIBOR protocol and LIBOR closeouts to SOFR. The ARRC Chair asked the Regulatory
    Issues group to coordinate with ISDA on this issue.
  - A summary was provided of the potential regulatory issues related to the adoption of SOFR as a new reference rate that had been identified by the Regulatory Issues working group.
  - A summary was provided of the feedback that the Market Structures working group had received from ISDA and SIFMA on their outreach to market participants seeking to understand preferences over the structure of SOFR OIS and basis swaps (Attachment 1). There was general preference for compounding, but while there were some differences of opinion along other dimensions, none of the respondents felt that those choices were crucial for take-up. It was also noted that the working group would begin considering how robust fallbacks could be best incorporated into coming SOFR definitions and that it would also consider market mechanisms for facilitating closeouts of LIBOR positions.
    LCH and CME both noted that, subject to regulatory approvals, they expected to begin clearing SOFR OIS, SOFR-LIBOR basis swaps, and SOFR-Effective Fed Funds Rate basis swaps in the third quarter of 2018 (Attachments 2 and 3).
- 3. The ARRC Chair proposed chairs or co-chairs for eight of the eleven individual working groups, which were unanimously approved by the ARRC members. The ARRC Chair asked for volunteers to chair the remaining three working groups and noted that the membership of all working groups should be finalized in the near-term.
- 4. The ARRC discussed the merits of continuing to retain legal counsel to advise it on antitrust matters. ARRC members agreed that Morgan Lewis should continue to be retained to provide such antitrust counsel. The ARRC Chair requested that members notify the Secretariat if their organization had any constraints prohibiting sharing the cost of retaining outside counsel.

- 5. The ARRC Chair and Federal Reserve staff provided an overview of the ARRC's work to date, including the instabilities seen in LIBOR and reasons for the Federal Reserve's convening of the ARRC, the ARRC's choice of SOFR, and its Paced Transition Plan. They emphasized that the ARRC had been charged with developing plans to promote the voluntary adoption of the ARRC's recommended rate and that many cash-product participants had seemed likely to continue using LIBOR for some time. However, they observed that following the UK Financial Conduct Authority's announcements concerning LIBOR in 2017, it had become clear that many cash-market participants were now interested in mitigating their risks related to LIBOR. As a result, the decision was made by the Federal Reserve to reconstitute the ARRC, with a broader group of members and ex-officio participants, in order to better address the issues and needs of participants in cash products seeking to mitigate their risk through more robust contract language or through transitions away from LIBOR.
- 6. The ARRC Chair summarized feedback that ARRC members had provided prior to the meeting on the most important issues they see facing the Committee, including raising awareness about the risks associated with LIBOR, building liquidity and take-up in SOFR, and creating durable fallback language for all types of contracts across different asset classes.
- 7. The ARRC discussed recent trends and issues in contract language for certain cash products, including business loans, floating rate notes, and securitized products identified by ARRC working groups (Attachment 4). The working groups found that, while it seemed that most new broadly syndicated loans, some new floating rate notes, and some securitizations were incorporating more robust contract language, other products such as bilateral loans and CMBS did not appear to yet be doing so. They also found that, where there was new contract language, it was not always consistent across product types. It was noted that the ARRC's goal to avoid a market disruption associated with a potential cessation of LIBOR would be best met if more robust contract language was adopted in new securities quickly, allowing many contracts with older and less robust language to roll off before the end of 2021. Given the many hedging and other interactions across cash products and derivatives, members also observed that consistency in language across products, where appropriate, could help to minimize any potential disruptions. The ARRC Chair asked the relevant working groups to discuss these issues and propose a work plan to the ARRC at its next meeting.
- 8. Members were reminded that the next ARRC meeting will take place on April 17, 2018 from 3-5pm.

### Attendance at the March 22, 2018 Meeting

#### **ARRC Members**

AXA Charles Schwartz
Bank of America Paul Scurfield\*
BlackRock Jack Hattem
Citigroup Deirdre Dunn
CME Agha Mirza\*
CME Fred Sturm\*
Deutsche Bank Adam Fames

CME Fred Sturm\*

Deutsche Bank Adam Eames

Deutsche Bank Vishal Mahadkar

Fannie Mae Nadine Bates\*

Fannie Mae Kiran Kini\*

Freddie Mac Ameez Nanjee

GE Capital Michael Taets

Goldman Sachs Scott Rofey

Government Finance Officers Association Paul Acerra
HSBC Gregory Pierce

Intercontinental Exchange Chris Edmonds\*
International Swaps and Derivatives Association Ann Battle\*

JP Morgan Sandie O'Connor
JP Morgan Alice Wang
JP Morgan Emilio Jimenez
LCH Phil Whitehurst
Met Life Jason Manske
Morgan Stanley Tom Wipf

National Association of Corporate Treasurers

Tom Deas

Pacific Investment Management Company William De Leon\*

TD Bank Paul Beltrame
The Federal Home Loan Banks, through FHLBNY Phil Scott
The Independent Community Bankers of America Chris Cole\*
The Independent Community Bankers of America James Kendrick
The Loan Syndications and Trading Association Meredith Coffey

The Securities Industry and Financial Markets Association Randy Snook\*
The Securities Industry and Financial Markets Association Chris Killian

Wells Fargo Brian Grabenstein
World Bank Group Don Sinclair\*

#### **Ex-Officio ARRC Members**

Consumer Financial Protection Bureau Abhishek Agarwal\*
Federal Deposit Insurance Corporation Irina Leonova
Federal Housing Finance Agency Dan Coates
Federal Reserve Bank of New York Matt Lieber
Federal Reserve Bank of New York Josh Frost
Federal Reserve Bank of New York William Riordan

## Attendance at the March 22, 2018 Meeting

Federal Reserve Bank of New York
Federal Reserve Bank of New York
Federal Reserve Board of Governors
Office of Financial Research

Office of the Comptroller of the Currency Office of the Comptroller of the Currency U.S. Securities and Exchange Commission

U.S. Treasury
U.S. Treasury

#### Observers

Bank of Canada BNP Paribas

\* Indicates participation by telephone

Justine Hansen
Adhiraj Dutt
Evan Winerman\*
David Bowman
Chiara Scotti
Erik Heitfield
Joshua Louria
Matt McCormick
Kevin Walsh\*
Michael Killick\*
David Metzman
Brian Smith
Chloe Cabot

Sheryl King Simon Winn

# ISDA and SIFMA AMG Consultation Feedback

At the recommendation of the Market Structures working group, the ARRC had previously requested that ISDA and SIFMA AMG jointly conduct a public consultation of market participants seeking views and preferences on the potential structure of OIS and basis swaps referencing SOFR. ISDA and SIFMA AMG provided the following summary of the results of their consultation to the Market Structures working group in March.

# SOFR OIS ATTACHMENT 1

Specification	Dealer (18)	Buy-side (10)	Other (3)	Commentary
Day count convention	Act/360	Preference for Act/360 (6)  Others: Fixed side: 30/360; Float side: Act/Act Fixed side: 30/360; Float side: Act/360	Act/360	Act/360: Similarity and consistency with EFFR OIS and non-USD OIS  The current market contention is Act/360 for the floating leg of all swaps in USD rates and for the fixed leg of all swaps with maturities of 1 year or less  Others: Follows money market conventions; convexity risk of compounding
Compound versus linear averaging of daily rates	Compound	Compound	No clear preference	Similarity and consistently with EFFR OIS  From a strict theoretical point of view, linear averaging will make the valuation of OIS swaps sensitive to the implied volatility of interest rates. That will also complicate the yield curve building using OIS market rates  Linear averaging requires convexity adjustments to fit a discount curve, which are complex and some systems may not support.  Financially accurate to have compounding because in alignment with returns of underlying transactions
Semiannual versus annual rate convention	Split between annual and quarterly or semiannual	Split between annual and semiannual	No clear preference	Annual: similarity and consistency with EFFR OIS; would not produce a stub  Semi-annual: similarity with US bond markets and LIBOR swaps with maturities > 1 year
Payment/reset frequency	Split between annual and quarterly	Split between annual and quarterly	No clear preference	Annual: similarity and consistency with EFFR OIS; would not produce a stub  Quarterly: similarity with LIBOR swaps with maturities of greater than 1 year
Payment lag	T+2	T+2	T+2	Similarity and consistency with EFFR OIS  For specific use cases there may be a need for additional lags
Look back conventions	None	Split between none, 1 day and 2 day	Split between none and 1 day	
Should SOFR OIS seek to mimic EFFR OIS or LIBOR swaps?	Most prefer EFFR OIS; a small number prefer LIBOR; a few prefer a combination	Majority prefer EFFR OIS; some others prefer LIBOR	No clear preference	EFFR OIS: Maximize compression; ease and speed of implementation; familiarity  LIBOR: LIBOR swaps are traded in higher volumes

**SOFR-LIBOR Basis Swaps** 

ATTACHMENT 1				
Specification	Dealer (18)	Buy-side (10)	Other (3)	Commentary
Day count convention	Act/360	Preference for Act/360  Other: LIBOR: Act/360; SOFR: Act/Act	Actual/360	Act/360: Similarity and consistency with EFFR-LIBOR basis swaps  Others: Follows money market conventions
Compound versus linear averaging of daily rates	Strong majority prefer compound	Strong majority prefer compound	Preference for compound	Similarity and consistently with EFFR-LIBOR basis swaps  Linear averaging requires convexity adjustments to fit a discount curve, which are complex and some systems may not support.  Financially accurate to have compounding because in alignment with returns of underlying transactions
Semiannual versus annual rate convention	Strong majority prefer quarterly	No clear preference	No clear preference	Similarity and consistency with EFFR-LIBOR basis swaps
Payment/reset frequency	Strong majority prefer quarterly	Strong majority prefer quarterly	No clear preference	Similarity and consistency with EFFR-LIBOR basis swaps, which are actively traded
Payment lag	Strong majority prefer T+2	Strong majority prefer T+2	T+2	T+2: Similarity and consistency with EFFR-LIBOR basis swaps.  While T+0 is more appropriate for the LIBOR leg, it is better to match the SOFR conventions on both legs because SOFR is to be the new reference rate. Additionally, SOFR is the limitor given the lag in fixing publication.  T+0: This new contract specification is a good chance to align the payment dates for the two legs of these basis swaps for greater consistency.
Look back conventions	N/A	N/A	N/A	N/A
Should SOFR-LIBOR basis swaps be traded as fixed/fixed treated (as exchanging two separate interest rate swaps), floating/floating (treated as a separate instrument that only exchanges the difference in floating rate payments) or based on a different structure?	s Even split between fixed/fixed and floating/floating	gSlight preference for fixed/fixed	Both should be available	Floating/floating would be easier to implement.  Default should be floating/floating but fixed/fixed should be available to clients who request it.  Fixed/fixed would be simpler for end users holding mostly receive fixed swaps, like life insurers and pension funds.  Some support fixed/fixed for compression but some believe that fixed/fixed is not actually necessary for compression.

## **SOFR-EFFR Basis Swaps**

ATTACHMENT 1				
Specification	Dealer (18)	Buy-side (10)	Other (3)	Commentary
Day count convention	Act/360	Strong majority prefer Act/360	Actual/360	Act/360: Familiarity  Others: Follows money market conventions
Compound versus linear averaging of daily rates	Strong preference for compound	Compound	Compound	Familiarity  Linear averaging requires convexity adjustments to fit a discount curve, which are complex and some systems may not support.  Financially accurate to have compounding because in alignment with returns of underlying transactions
Semiannual versus annual rate convention	Split between quarterly and annual or semiannual	Split between annual and quarterly or semiannual	Annual	Quarterly: Familiarity and ease of implementation
Payment/reset frequency	Strong preference for quarterly	Split between annual and quarterly	No clear preference	Familiarity and ease of implementation
Payment lag	T+2	T+2	T+2	Familiarity
Look back conventions	N/A	N/A	N/A	N/A
To which side of a SOFR-EFFR basis swap should the spread be applied?	Preference for EFFR	Split between SOFR and EFFR	No clear preference	Applying the spread to EFFR ratifies SOFR as the benchmark and EFFR as the index that trades at a spread to the benchmark  Applying the spread to EFFR would be easier for compression.  The main consideration is whether this market will need to be deep, liquid, and long. When PAI changes the need for hedging may only arise in the bilateral market, not the cleared market

# USD SOFR Swaps

Clearing at LCH

Q3 2018 Launch



# Introducing SOFR clearing ATTACHMENT 2

- ✓ Federal Reserve Bank of New York to begin publishing SOFR Index 3 April, 2018
- ✓ LCH to clear Outright OIS and Basis Swaps referencing SOFR as of Q3 2018
- ✓ All OIS and Basis Swaps referencing SOFR will be daily compounding on the SOFR leg
- ✓ EFFR PAI / EFFR discounting will apply to this initial phase
- ✓ Portfolio margining with all other USD products & risk factors (USD LIBOR, EFFR, US CPI)



# SOFR Swap Clearing – Product Scope

## LCH will clear SOFR in the following 3 structures:

## OIS style – Fixed v SOFR (compounded daily)

- Constant notional only with a 51 year max maturity
- Fixed leg will default to annual payments if >=1 yr maturity and 1T if less than 1 year to maturity
- Floating SOFR leg will be compounded daily, and paid on the same frequency as the Fixed leg
- Payment lag flexibility on fixed allows for more efficient compression

## 2. Basis – SOFR (compounded daily) v USD LIBOR

- Constant notional only with a 51 year maximum maturity
- Default will be 3 month USD LIBOR v SOFR paid quarterly, both on Act/360 day count
- Spread allowed at the end of the compounding/payment period
- Payment lag flexibility on LIBOR leg allows for more efficient compression

### Basis – SOFR (compounded daily) v FF OIS

- Constant notional only with a 31 year max maturity
- Default will be annual payments or 1T if less than 1 year, with both legs on Act/360 day count
- Spread allowed at end of compounding/payment period
- Payment lag on both legs by default



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## **Cleared OTC Secured Overnight Financing Rate (SOFR) Swaps**

Endorsed by the Alternative Reference Rate Committee (ARRC) in June 2017, the Secured Overnight Financing Rate (SOFR) is a broad Treasuries overnight repo financing rate to be published by the Federal Reserve Bank of New York and the Office of Financial Research starting on April 3 2018. CME Group is targeting Q3-2018 for clearing OTC SOFR-based swaps.

Clearing OTC SOFR Swaps further extends CME Group's leadership as the only clearing house to offer clearing for Interest Rate Swaps, Swaptions and Interest Rate futures within a single netting pool. The deep liquidity and potential offsets found in our Interest Rate franchise makes CME the natural home for SOFR clearing.

## **Initial Product Scope**

CME Group will launch clearing for SOFR-based interest rate swaps for both the outright OIS and Basis Swaps to facilitate tradir between SOFR and the existing benchmarks.

Field	Description
Swap Types	OIS:
	Fixed versus SOFR
	Basis:
	1M USD-LIBOR versus SOFR
	3M USD-LIBOR versus SOFR
	6M USD-LIBOR versus SOFR
	Fed Funds versus SOFR
Floating Rate Index	USD-SOFR-OIS-Compound
	USD-SOFR
Maximum Maturity	5 Years
Settlement Convention	T+1
Forecasting Curve	SOFR Futures + Convexity Bias Adjustment
Discounting Curve	Existing USD Fed Funds Curve
Price Alignment Rate	USD daily effective federal funds rate
Holiday Calendars & Business Day Conventions	Flexible support for business days, calendars and adjustments



## **Secured Overnight Financing Rate (SOFR) Futures**

SOFR futures will launch May 7, pending regulatory review, and trade alongside highly liquid Eurodollar, Fed Fund and Treasury futures to offer enhanced spread trading capabilities via CME Globex intercommodity spreads and capital efficiencies through margin offsets.

Endorsed by the Alternative Reference Rate Committee (ARRC) in June 2017, the Secured Overnight Financing Rate (SOFR) is broad Treasuries overnight repo financing rate to be published by the Federal Reserve Bank of New York in cooperation with the U.S. Office of Financial Research beginning on April 3, 2018.

## **SOFR Futures Contract Specifications**

Based on extensive customer input, CME Group will launch 3-Month and 1-Month SOFR futures contracts. The 1-Month SOFR futures strip will prove useful to market participants who seek finer granularity in framing market expectations of future SOFR values over the nearby 1-month to 7-month interval during which the front 3-Month contract becomes more set each day from da SOFR fixings.

Download full contract specifications ->

	3-Month SOFR Futures	1-Month SOFR Futures
Contract Unit	Compounded daily Secured Overnight Financing Rate ("SOFR") interest during contract Reference Quarter, such that each basis point per annum of interest = \$25 per contract.	Average daily Secured Overnight Financing Rate ("SOFR") interest during futures contract delivery month, such that each basis point per annum of interest is worth \$41.67 per futures contract.
Price Basis	Contract-grade IMM Index: 100 minus R	Contract-grade IMM Index: 100 minus R
Contract Size	\$25 per basis point per annum	\$41.67 per basis point per annum
Minimum Price Fluctuation	Nearby Delivery Month: 0.0025 IMM Index points (1/4 basis point per annum) equal to \$6.25 per contract  All Other Delivery Months: 0.005 IMM Index points (1/2 basis point per annum) equal to \$12.50 per contract	Nearby Delivery Month: 0.0025 IMM Index points (1/4 basis point per annum) equal to \$10.4175 per contract  All Other Delivery Months: 0.005 IMM Index points (1/2 basis point per annum) equal to \$20.835 per contract

Delivery Nearest 20 March Quarterly months Nearest 7 calendar months

Months

(Mar, Jun, Sep, Dec)

Product Codes SR3 SR1

## **Why Trade SOFR Futures**

- SOFR endorsed by the Fed-sponsored ARRC as a robust alternative rate to U.S. dollar LIBOR
- · Reliable indicator of market expectations of SOFR along the curve
- · Financially distinct but highly correlated with benchmark Eurodollar and Fed Fund futures
- · Easy spread trading against Eurodollar and Fed Fund futures via CME Globex inter-commodity spreads
- · Margin efficiencies against Eurodollar, Fed Fund and Treasury futures
- · Will become eligible for efficient portfolio margining against CME-cleared swaps

### **About the Rate: SOFR Features and Mechanics**

- To be published by the Federal Reserve Bank of New York and the U.S. Office of Financial Research beginning on April 3, 2018
- Underpinned by the U.S. Treasury overnight repurchase (repo) market, for which the pool of eligible transactions is ~\$800 billion per day\*\*
- · Calculated as a transaction-volume-weighted median repo rate
- Data to be sourced from tri-party repo data from Bank of New York Mellon (BNYM), and cleared bilateral and GCF Repo dat from the Depository Trust & Clearing Corporation (DTCC)

### **SOFR Timeline**



<sup>\*\*</sup>Joshua Frost, Introducing the Secured Overnight Financing Rate (SOFR), presentation to Alternative Reference Rates Committee Roundtable, Federal Reserve Bani of New York, 2 November 2017, available here.

# Contract Language in Cash Products

Summary of new contract languages observed and issues identified by the Business Loans/CLOs, Securitizations, and Floating Rate Notes working groups for the March 22, 2018 ARRC Meeting

## **Syndicated Loans**

Most respondents reported that new language was prevalent in broadly-syndicated new lending agreements along the following lines:

If the Agent determines that (i) adequate and reasonable means do not exist for ascertaining LIBOR, and such circumstances are unlikely to be temporary, or (ii) the supervisor for ICE or other LIBOR administrator or a Governmental Authority has made a public statement identifying a specific date after which LIBOR will no longer be used for determining interest rates for loans, then the Agent and the Borrower will endeavor to establish a successor rate to LIBOR that gives due consideration to the then prevailing market convention for determining a rate of interest for syndicated loans in the U.S. at such time. Until such new rate is determined, the fallback for U.S. dollar loans is the Alternative Base Rate.

Consent: There seem to be a variety of languages. The proposed rate may become effective if no written notice of objections is received from required lenders or a majority of lenders within a certain number (examples provided were 5 or 10) of days. In some instances objection was objections were required by a majority of lenders in each class of a loan. Other languages may not provide an opportunity to object (this may be prevalent for smaller loans), or may instead require positive affirmation of the required lenders.

Spread: New contract language typically allows for "such other related changes to [the credit agreement] to reflect such alternate rate of interest and such other related changes to [the credit agreement] as may be applicable." However, in some cases changes to the spread or margin or excluded are explicitly excluded from this. In some cases, reductions in the spread are prohibited.

## Bilateral Loans and Smaller-Syndicate Loans

Most new bilateral loans appear to continue to use existing language. For bilateral lending transactions with new language, the contracts appear to be granting lenders discretion to handle the fallback. In some cases they may refer to the then market standard for similar commercial loans or stipulates that the successor rate be chosen after consultation with the borrower or that the lender choose a comparable rate to replace LIBOR. Other examples mention the replacement rate "designated by the Alternative Reference Rates Committee ('ARRC') or such other index as is generally recognized in the marketplace as the replacement for USD LIBOR."

Some language allows for amendments necessary to yield a comparable return on investment, but in other examples it does not appear that an adjustment of the spread is mentioned.

There was less sense of what contract language changes were occurring in Club or smaller-syndicate loans.

## **CLOs**

There was a sense that language in new CLOs had coalesced around fairly standard language allowing for the issuer or collateral manager to name a successor to the base rate that is the rate proposed or recommended by the ARRC, or acknowledged by LSTA as a standard replacement in the loan market for LIBOR, or the rate that is used by at least 50% of collateral or CLO liabilities. One respondent reported seeing language where more than 50% of note holders consent is needed to modify the Alternative Base Rate, as opposed to requiring more than two-thirds of note holders.

## Business Loans/CLOs -- Issues Identified

- 1. Lack of Term Rate: Finding an acceptable index and getting vendors to use it is an issue. For the loan market, the primary issue in developing new contract language is the lack of a term replacement rate. Waiting until the end of 2021 as currently identified in the Paced Transition Plan is too late.
- Credit Adjustment: Loans based on SOFR or some other risk-free rate would need to have two components the standard
  component reflecting the borrower's creditworthiness and a new component (relative to LIBOR) compensating lender's additional
  funding risks over the life of the loan.
- 3. Trigger Event: one issue that has come up is whether the LIBOR replacement language should provide for flexibility for the Agent and the Borrower to adopt a replacement rate prior to LIBOR becoming permanently unavailable or there being a public announcement that LIBOR will no longer be available after a certain date. There may be a scenario in which the replacement rate is published ahead of LIBOR's cessation and credit agreements for newly originated loans begin to adopt this new replacement rate and borrowers/lenders wish to trigger a move to the new rate. Any trigger event should be coordinated across products.
- 4. Control: Who controls the selection of the new rate and what form of consent is needed? Who determines whether the trigger event has occurred? In some cases, it is the Agent, in others the Borrower, and in others there is flexibility in terms of who may determine that the event has occurred. This could be especially important in contracts that allow for a successor rate prior to a LIBOR discontinuation.
- 5. Legacy Contracts: Consent of a majority of lenders is generally required for syndicated lending, and not all counterparties may agree to amend outstanding bilateral loan terms. Changes to pricing could have a number of indirect impacts that need to be looked into, including but not limited to tax and accounting impacts. Further, floating rate loans that are hedged have the potential for divergent outcomes between how the RFR is determined by the swap provider and by the lender. There are a number of issues beyond just getting to an agreed upon RFR that need to be addressed holistically. While most bilateral loans have fallback language going to Prime, some loans may have no fallback language at all.

## Business Loans/CLOs -- Issues Identified Continued

- 6. Interpretation of Language: What is meant by terms like "due consideration to the then prevailing market convention for determining a rate of interest for syndicated loans in the United States at such time."
- 7. Communication: Since SOFR (assuming that becomes the new index) is a secured overnight rate and LIBOR isn't, adding ~11 bps to the spread will be difficult to communicate. In the meantime, spelling out specific reasons for moving away from LIBOR has been a challenge.
- 8. Disagreements: We have not observed language addressing what happens if there is an impasse where borrower, lender and administrative agent are unable to agree on a way forward in legacy syndicated loans (implying that they would fall back to Prime). There is a concern that lenders could use a potential move to Prime to renegotiate other terms of the loan, perhaps particularly if the borrower is near bankruptcy and lenders desire more control.
- 9. Tax and Accounting Issues: While FASB is moving to add SOFR to its hedge accounting list, it will also need to recognize the use of instruments such as SOFR basis swaps in constructing effective hedging. Municipal loans might lose tax exempt status if the move to a fallback is treated as a contract change. If the overall rate inclusive of associated hedges changes by more than 25 basis points, muni loans may be treated as a reissuance and lose tax exemption.
- 10. Consistency of spread adjustments: While any potential spread adjustment was expected to move on a daily basis depending on market conditions, there was concern that, at a given point in time, different Agents might choose different adjustments.

## Securitizations

Among those responding, working group members are seeing new language in most new CLO, CMBS and some RMBS.

- For CMBS, some contracts referred to Prime as the successor rate or to the index being used on assets underlying the bonds rather than the last published value of LIBOR.
- RMBS already typically gave the noteholder the right to name a successor rate if LIBOR was not published, but some RMBS now also include the right to name a successor rate if LIBOR no longer represents standard market practice.
- Much less change in fallback language has been seen in ABS, one recent credit card deal appeared to have no fallback language at all. However, there are more disclosures of risks around LIBOR. SFIG is currently working to coordinate more uniform disclosure language for securitizations.

In most cases, the new language does not directly address the issue of the spread, but requires the Issuer/Collateral Manager to make such other amendments as are necessary to facilitate the change. The key exception is in some RMBS, which does provide language allowing the issuer to adjust the spread.

Even in securitizations that simply pass-through a weighted average of rates receive on collateral, there is an issue in considering how the successor rates on the collateral are chosen, or when they are triggered. One submitted example of language on a securitized loan allowed the Lender to convert the floating rate on the loan in the event that LIBOR could not be determined and had been succeeded by an alternate index, subject to opinion from a nationally-recognized REMIC counsel that such conversion was compliant with REMIC requirements, or rating agency confirmation, or evidence that it does not violate the Employee Retirement Income Security Act.

## Securitizations -- Issues Identified

- 1. Legacy contracts: How can new language be incorporated into seasoned deals. Trustees will be reluctant to take any discretion. Where investor consent is needed, how would the full set of investors even be contacted to obtain consent, and how could unanimous consent possibly be obtained?
- 2. Avoiding gridlock: Could there be some form of dispute resolution process, or could industry best practices help with transition?
- 3. Consistency: Any change in rates paid on liabilities need to match the change in rates on the underlying assets if hedges are to work. Need consistent triggers and successor rates across asset classes. Also need consistency in moving assets with embedded derivatives so that the underlying and the derivative both move to the successor rate.
  - There is also a need for consistency in operational details. For example, firms are seeking a uniform treatment for LIBOR so that some customers or market segments are not treated in a way that could be seen as receiving preferential treatment. Certain deals may have multiple servicers would different servicers implement changes at different speeds after a trigger?
- 3. Legal uncertainties: There is a potential argument that current fallbacks did not envision a permanent discontinuation of LIBOR and that they do not apply to such an event in which case there is no fallback. Also, documents define LIBOR differently and there was some concern that more detailed definitions (for example, defining LIBOR as an interbank rate) might trigger if LIBOR's definition was changed but the rate continued to be published.
- 4. Coming up with a rate formula that is based on comparable information to the information that LIBOR is based on

## Floating Rate Notes

Samples of new language were provided for several FRNs, but it was unclear how prevalent new language was.

In existing legacy contracts, a successor rate can only be designated with the unanimous consent of all note holders. In the examples of new language provided, if LIBOR has been discontinued, then the Calculation Agent has sole discretion to designate a successor or substitute rate.

In some of the examples, the Calculation Agent was constrained to use an "industry-accepted successor base rate" if the Calculation Agent determined that such a successor rate existed. Some recent issuances specified that LIBOR be replaced by "the alternative reference rate selected by the central bank, reserve bank, monetary authority or any similar institution (including any committee or working group thereof)" and others the effective fed funds rate + 20 basis points if LIBOR ceases to be published. In the other examples, the Calculation Agent had discretion to take market-based acceptance as a factor in choosing the successor rate, but was not required to.

Trigger: Generally that LIBOR had been discontinued, but some contracts allowed the Calculation Agent to designate a successor rate if LIBOR is no longer recognized as an industry standard benchmark interest rate.

Spread: Example contract language typically allowed the Calculation Agent to make "any adjustment factor needed" to make the successor rate "comparable to LIBOR."

Note: One institution has included more robust contract language for some other reference rates in addition to LIBOR/EURIBOR.

## FRNs -- Issues Identified

- 1. Desire for a forward looking term rate.
- 2. Need to adjust for the credit component in LIBOR but not SOFR
- 3. Need for language and adjustments that can be explained clearly to a wide array of investors.
- 4. Legacy Contracts: Unanimous consent of note holders is required for amending legacy contracts, and in the absence of an ability to designate a successor rate FRNs would convert to fixed rate at the last published value of LIBOR. Because there are a tail of very long-dated FRNs, this is of particular concern. Buy-backs or renegotiation may be difficult depending on the rate environment (if note holders believe that converting to a fixed rate is in their interest at a point when LIBOR is discontinued, they will be reluctant to renegotiate for other terms).
- 5. Interpretation of Language: What is meant by terms like "comparable to LIBOR." There is a hope that as market practices coalesce then more concrete language could be put in place, so this type of language could be a stop gap.