Credit Sensitivity Group Forum on Implementation Framework for Commercial Loan Products
Minutes
January 14, 2021

Workshop Attendees

Hu Benton (American Bankers Association)
Tom Hunt (Association for Financial Professionals)
Alastair Borthwick (Bank of America)
John Carpenter (Bank of America)
Ashish Kumbhat (Bank of America)
Chris Marshall (BBVA)
John Orner (Blue Cross Blue Shield of Minnesota)
Jeff Nagle (Cadwalader)
Tom Feil (Capital One)
Jeff Kuzbel (Capital One)
Greg Yuhas (Capital One)
Raleigh Noland (Caterpillar)
Garrett Ringness (Caterpillar)
Jacob Harrell (Citizens Financial Group)
Michael Soccio (Citizens Financial Group)
Jillian Chuck (Comerica)
Stasie Kostova (Comerica)
Riley Saunders (Fifth Third Bank)
Hilary Gevondyan (First Republic Bank)
Jason Behnke (Ford Motor Company)
Melissa Rothert (Ford Motor Company)
Mark Brell (Frost Bank)
Matt Johnson (Genesco)
Mike Abarca (Huntington Bank)
Derek Meyer (Huntington Bank)
Tony Bulic (KeyBank)
Carlos Ramirez (Littelfuse)
Meredith Coffey (Loan Syndications and Trading Association)
Tess Virmani (Loan Syndications and Trading Association)
John Marynowski (M&T Bank)
Peter Olsen (M&T Bank)
Doug Sheline (M&T Bank)
Scott Warman (M&T Bank)
Matt Engstrom (MUFG)
Francis Scifo (MUFG)
John Trohan (MUFG)
Tom Deas (National Association of Corporate Treasurers)
Randall King (PNC Financial Services Group)
Alex Spiro (PNC Financial Services Group)
Tyler Zinder (Regions Financial Corporation)
Rick Brockhaus (Soave Enterprises)
Brian Yono (Soave Enterprises)
April Eaton (South State Bank)
John Finley (South State Bank)
Robert Stambaugh (South State Bank)
Rodgin Cohen (Sullivan & Cromwell)
Tara Herrera (The Related Companies)
Cori Krebs (US Bank)
Joe Tessmer (US Bank)
Brian Grabenstein (Wells Fargo)
Spencer Langston (Wells Fargo)
Akhil Salgia (Wells Fargo)

Ex-Officio Attendees

Darren Gersh (Board of Governors of the Federal Reserve System)
Sayee Srinivasan (Commodity Futures Trading Commission)
Irina Leonova (Federal Deposit Insurance Corporation)
Alex LePore (Federal Deposit Insurance Corporation)
Pablo Azar (Federal Reserve Bank of New York)
Betsy Bourassa (Federal Reserve Bank of New York)
Ray Check (Federal Reserve Bank of New York)
Cam Fuller (Federal Reserve Bank of New York)
Jamie Pfeifer (Federal Reserve Bank of New York)
Will Riordan (Federal Reserve Bank of New York)
Monica Scheid (Federal Reserve Bank of New York)
Nate Wuerffel (Federal Reserve Bank of New York)
Jay Gallagher (Office of the Comptroller of the Currency)
Christopher McBride (Office of the Comptroller of the Currency)
Chloe Cabot (U.S. Department of the Treasury)
John McGrail (U.S. Department of the Treasury)
Peter Phelan (U.S. Department of the Treasury)
Ben Bernstein (U.S. Securities and Exchange Commission)
David Metzman (U.S. Securities and Exchange Commission)

- Federal Reserve Bank of New York (FRBNY) staff, in their role providing secretariat services to the Credit Sensitivity Group (CSG) workshops, opened the forum by summarizing the series of CSG workshops held during 2020. The series brought together banks and borrowers to facilitate a robust discussion of issues related to transitioning certain commercial loan products off of LIBOR to robust reference rates, including potential uses for a credit sensitive rate/spread to SOFR.
    - Following four workshops over the summer of 2020, the official sector sent a letter highlighting some of the key takeaways, noting that: (1) "Market participants should seek to transition away from LIBOR in the manner that is most appropriate given their specific circumstances." (2) "The official sector supports the continued innovation in, and development of, suitable reference

rates, including those that have credit sensitive elements."(3) "Banks may seek different characteristics when selecting an alternative reference rate… based on their own profile and business needs." (4) "The terms of a commercial loan… are negotiated between the lending and borrowing parties to the transaction."

- The first of two additional working sessions, the Innovation Forum, brought together a diverse set of banks and borrowers involved in prior CSG workshops, reference rate administrators, and other relevant parties to highlight areas of innovation in reference rates for commercial lending, particularly those with a credit sensitive element.
- FRBNY staff highlighted that the purpose of the second and final additional working session, the Implementation Forum, was to bring together a diverse set of banks and borrowers involved in prior CSG workshops and other relevant parties to review the implementation framework for commercial loan products amid the transition away from USD LIBOR, including how that framework could accommodate a diversity of potential rate inputs.
- FRBNY staff also highlighted recent supervisory guidance from the Federal Reserve, Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency which encouraged banks to stop entering into new contracts that use USD LIBOR as a reference rate as soon as practicable and in any event by December 31, 2021, citing "safety and soundness risks," in order to facilitate an orderly transition. The guidance noted that the proposed June 30, 2023 cessation date that ICE Benchmark Administration (IBA) is consulting on would allow most legacy LIBOR contracts to mature. Taken together, the announcements by regulators in the United States and United Kingdom and by the IBA lay out a path forward in which banks should stop writing new USD LIBOR contracts by the end of 2021, while allowing most legacy contracts to be able to mature before LIBOR stops.

— The forum proceeded to a presentation covering various considerations when implementing non-LIBOR loans. The presentation drew in part upon lessons learned from the Alternative Reference Rates Committee (ARRC) Business Loans Working Group's work to develop conventions, fallbacks, documentation, and systems changes to support the use of SOFR for business loans.

  - Lessons learned included that: (1) understanding how a new rate could map to its underlying market is an iterative process, (2) flexibility and open-mindedness are critical, (3) identifying variations of different rates and how those can be implemented may be more successful in the long run, (4) it is important to engage stakeholders early, and (5) not to let the "perfect be the enemy of the good."
  - The presentation also summarized the work on *market conventions* needed to make an alternative reference rate executable for business loans, loan operations *processes* that would need to change to operationalize all forms of an alternative reference rate, and *documentation* around actual contractual fallback language, amendments, advisories, and notices that would need to be developed to implement an alternative reference rate and LIBOR fallbacks.

— The forum then opened for a roundtable discussion with banks, borrowers, and other interested parties on the implementation framework for commercial loans using a credit sensitive rate/spread to SOFR.
  - One bank participant highlighted the extensive work required to vet and stand up a robust reference rate alternative to LIBOR, including work associated with the suitability of the rate, engaging internal partners on a variety of operational, compliance, market risk, model, data and vendor readiness, developing the treasury function's readiness, understanding pricing and funds transfer pricing (FTP) implications, and implementing change management.

- Some banks noted that they were preparing for a multi-rate environment in the future where different rates might suit different client needs, indicating, for example, that some banks could offer SOFR-based loans alongside loans based on a credit sensitive rate/spread to SOFR.
- Some borrower participants highlighted again that they carefully and competitively bid their borrowing activity out to banks, taking into consideration the specific credit profile of each bank. One participant expressed concern about how a potential credit sensitive spread would intersect with existing measures that banks may use to protect their interests and manage risk, including commitment fees, loan covenants, interest rate floors, shortening the length of the funding term, and charging a higher borrower-specific spread.
- LSTA staff highlighted a few key questions for a credit sensitive rate/spread, including whether it would be: 1) a rate or a spread over SOFR, 2) "known in advance" or daily in arrears, 3) if a spread, fixed at the beginning of the interest period or pulled daily, 4) used as fallback rate or only in new agreements and 5) how it would be hedged.
- Given recent supervisory guidance to stop entering into new contracts that use USD LIBOR as a reference rate as soon as practicable and in any event by December 31, 2021, many forum participants highlighted the importance of first operationalizing a plan that can be implemented with tools available now, recognizing that the market may continue to evolve over time.

— FRBNY staff concluded the forum by thanking all participants for their active participation in the CSG workshops and noted that with this session, the series of CSG working sessions is complete. The official sector will, as always, remain in close communication on transition-related issues, including for the commercial loan market.

January 14, 2021

Forum on Implementation Framework for Commercial Loan Products

The views here are of the presenter and do not necessarily represent those of the Federal Reserve Bank of New York or Federal Reserve System.

Introductions

Banks

- Bank of America
- BBVA
- Capital One
- Citizens Financial Group
- Comerica
- Fifth Third Bank
- First Republic Bank
- Frost Bank
- Huntington Bank
- Key Bank
- M&T Bank
- MUFG
- PNC Financial Services Group
- Regions Financial Corporation
- South State Bank
- US Bank
- Wells Fargo

Borrowers

- Association for Financial Professionals
- Caterpillar
- Ford Motor Company
- Genesco
- Littelfuse
- National Association of Corporate Treasurers
- Soave Enterprises
- The Related Companies

Other Participants

- American Bankers Association
- Cadwalader
- Loan Syndications and Trading Association
- Sullivan & Cromwell

Official Sector

- Federal Reserve Bank of New York
- Board of Governors of the Federal Reserve System
- U.S. Department of the Treasury
- Office of the Comptroller of the Currency
- Federal Deposit Insurance Corporation
- U.S. Securities and Exchange Commission
- Commodity Futures Trading Commission

Agenda

- 2:00 – 2:10 pm: Welcome and Introductions; Purpose of Forum and Ground Rules
- 2:10 – 3:00 pm: Implementation Considerations for Issuing Non-LIBOR Commercial Loans
- 3:00 – 3:50 pm: Round Table Discussion on Implementation Framework
- 3:50 – 4:00 pm: Wrap Up and Closing Remarks

Previous CSG Workshops

- The series of CSG workshops held during 2020 brought together banks of all sizes and borrowers to facilitate a robust discussion of issues related to transitioning certain commercial loan products off of LIBOR to robust reference rates, including potential uses for a credit sensitive rate/spread to SOFR.

- Following four workshops over the summer of 2020, the official sector sent a letter highlighting some of the key takeaways from those sessions, noting that
  - "market participants should seek to transition away from LIBOR in the manner that is most appropriate given their specific circumstances."
  - "the official sector supports the continued innovation in, and development of, suitable reference rates, including those that may have credit sensitive elements."
  - "banks may seek different characteristics when selecting an alternative reference rate… based on their own profile and business needs."
  - "the terms of a commercial loan… are negotiated between the lending and borrowing parties to the transaction."

- The first of two additional working sessions, the Innovation Forum, brought together a diverse set of banks and borrowers involved in prior Credit Sensitivity Group workshops, reference rate administrators, and other relevant parties to highlight areas of innovation underway in reference rates for commercial lending, particularly those with a credit-sensitive element.

Recent LIBOR Announcements

- Federal Reserve, FDIC, and OCC issued supervisory guidance which:
  - encouraged banks to stop entering into new contracts that use USD LIBOR as a reference rate as soon as practicable and in any event by December 31, 2021, citing "safety and soundness risks," in order to facilitate an orderly transition.
  - noted that the proposed June 30, 2023 cessation date that IBA is consulting on would allow most legacy LIBOR contracts to mature.
  - noted that any issuance in 2021 should "either utilize a reference rate other than LIBOR or have robust fallback language that includes a clearly defined alternative reference rate after LIBOR's discontinuation."
- The announcements by regulators in the United States and United Kingdom and by the benchmark administrator for LIBOR lay out a path forward in which banks should stop writing new USD LIBOR contracts by the end of 2021, while allowing most legacy contracts to be able to mature before LIBOR stops.

Purpose of the Implementation Forum

- The purpose of this second and final working session, the Implementation Forum, is to bring together a diverse set of banks and borrowers involved in prior Credit Sensitivity Group workshops and other relevant parties to review the implementation framework for commercial loan products amid the transition away from USD LIBOR, including how that framework could accommodate a diversity of potential rate inputs.

- **This Forum is not intended to facilitate or result in a recommendation of any particular products, services, or approaches. Participation by the official sector participants does not constitute an endorsement or recommendation of any rate discussed.**

- **The materials presented today are solely the responsibility of the presenting organizations and the statements in those materials, including any data, have not been verified by the official sector participants in the Forum.**

- Opinions expressed or statements made by official sector staff during today's Forum are solely those of the individual and do not necessarily reflect the views of their agency.

Ground Rules for the Day

- The public minutes for the session will include a list of attendees and firms represented and all presentation materials used in the session.
- Participants should not disclose any confidential or commercially sensitive information during today's Forum.
- The Forum is not intended, and should not be used, to facilitate any collective agreement or the adoption of any specific rate(s) or term(s) by participants.
- Participants should not make statements purporting to describe any conclusions of the Forum participants as a whole, or implying that the Forum constitutes an endorsement of any potential rate that may be discussed.

Antitrust Guidelines

- This Forum is intended to serve a public purpose and to be pro-competitive. However, participants must be mindful of their obligation to observe applicable antitrust laws.
- By participating, all participants are agreeing to observe the antitrust guidelines that have been provided in advance of the Forum.
- Those guidelines are intended to assist participants to ensure their conduct is consistent with law, but each participant is individually responsible for his or her own conduct.
- Participants should police themselves, and should raise questions about and report suspected violations of the Antitrust Guidelines to an FRBNY attorney or an attorney for their respective firms. Anonymous reporting is also available using the FRBNY's Integrity Hotline: (877) 52-FRBNY.

ARRC Business Loans Working Group

Lessons from Developing "SOFR for Syndicated Loans"

The views expressed in this presentation are solely those of the authors and do not necessarily represent those of the sponsors or any other participants in the Forum for which it was prepared.

Topics

- Lessons – Upfront and at the end
- What needed to be “solved” to implement SOFR for business loans
- BLWG timeline for “solving SOFR” for syndicated loans
- SOFR rate types and implications
- The role of conventions, operations and documentation

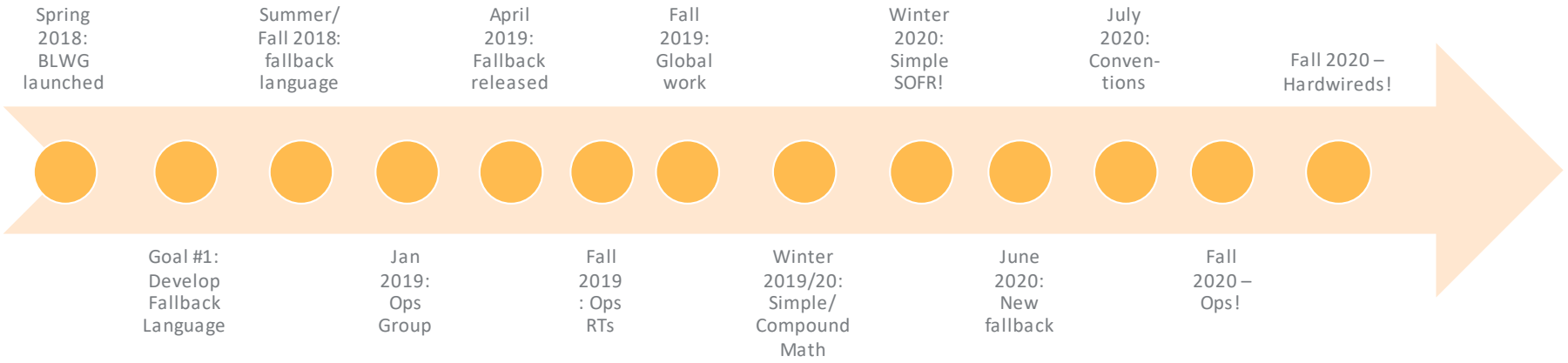
Lessons from BLWG Loan Process

- “Learning” a new rate was an iterative process
- Flexibility and open-mindedness were critical
- Identifying “architectures” of different rates and determining how to implement the architectures (as opposed to implementing specific rate variants) may be more successful in the long run
- Bring in stakeholders early
- Don’t let the perfect be the enemy of the good

What Needed to be “Solved” in the BLWG

- **Conventions** – market conventions that were needed to make all forms of SOFR executable for business loans
- **Operations** – loan operations processes would need to change to operationalize all forms of SOFR (and this informed conventions)
- **Documentation** – actual contractual fallback language, amendments, advisories and notices would need to be developed to implement SOFR and the fallbacks

Business Loans Working Group Syndicated Loan Timeline



- While the ARRC BLWG started out with a seemingly manageable mandate of "creating LIBOR fallback language", as we went through the process, we realized it was complex and intersected with legal, operations and business workstreams
- Operations work (and examination of SOFR behavior) led to a rethink of Daily Simple SOFR, a change in the hardwired fallbacks and the scope of the conventions
- By incorporating new knowledge and working to solve for all variants of SOFR – as opposed to being locked into one variant – we were able to develop solutions should work for different markets' needs

BLWG Determined That We Needed to "Solve" for Three Types of Rates

- ***SOFR*** *– A combination of three daily Treasury repo rates. It is large and robust, but is a daily, risk free rate, so it works differently than LIBOR.*

- **Potential Cash Product SOFR Rates**
  - "Known in Advance" Rates
    - Forward Looking Term SOFR
    - SOFR Compounded in Advance

    Fixed upfront like LIBOR | *Like LIBOR, rates are known "in advance"* | *Limited operational, conventions or document changes*

  - Daily Simple SOFR

    Not fixed upfront like LIBOR | *Rates not known in advance; Interest rates pulled daily* | *However, similarities to Prime; Economically similar to Compounded*

  - Daily Compounded SOFR

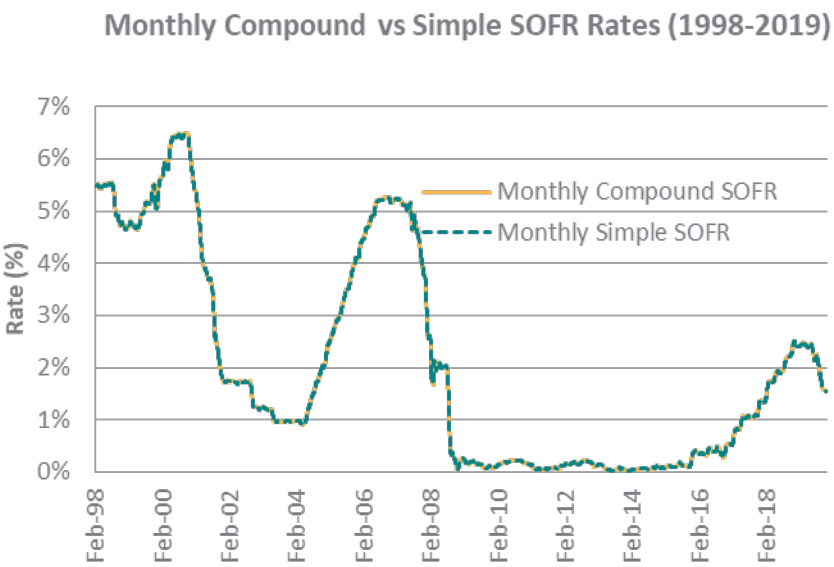
    Not fixed upfront like LIBOR | *Rates not known in advance; Interest rates pulled daily* | *Computationally different; more complex than Simple SOFR*

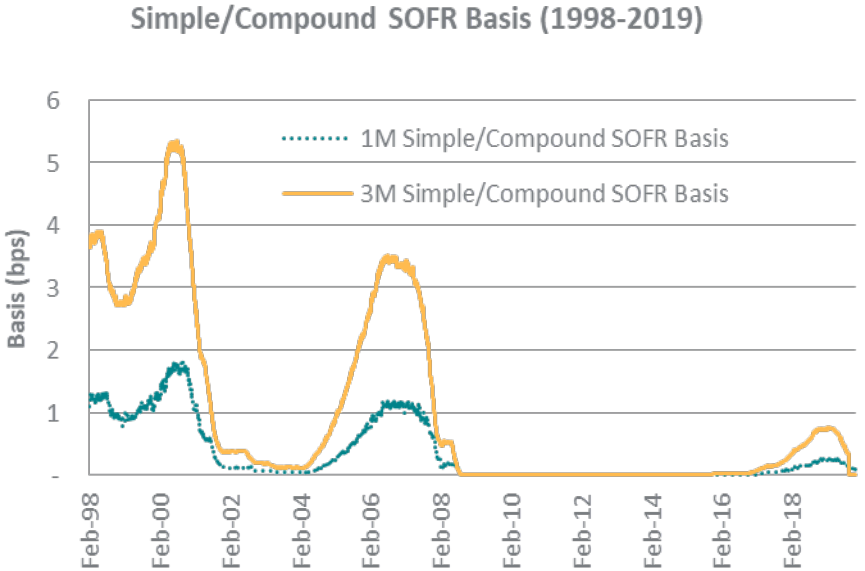
SOFR Operations

- **SOFR "Known in Advance"** – Operationalizes much like LIBOR because the rates are known in advance. Calculations and notices do not change.
- **Daily Simple SOFR** – Operations are very different than LIBOR and more like Daily Prime (but rate must be pulled for tens of thousands of loans daily). Calculations are straightforward, but daily rates require changes to notices and notice periods.
- **Daily Compounded SOFR** – Operations are very different than LIBOR and calculations are more complex for loans. Daily rates require changes to notices and notice periods, which are more complex to reconcile for a compounded rate.

Ultimately, the work done in the Ops group (along with the recognition of modest economic differences between Simple and Compounded SOFR) drove a rethink of LIBOR fallbacks and SOFR loan documentation.

Economically, Simple & Compounded SOFR are Very Similar





- Simple & Compounded SOFR rates are nearly identical
- Avg 20-year Simple/Compound SOFR basis is 0 bps for 1M (2 bps maximum) and 1 bp for 3M (5 bps maximum)
- *Note the Y axis scales – more basis when rates are higher, but basis is low even in 5-6% risk-free rate environment*

Source: FRBNY, St Louis Fed

SOFR Documentation: ARRC Fallbacks

- LIBOR Fallbacks 1.0 – April 2019
  - Amendment approach
  - Hardwired approach – Term SOFR, then Compounded SOFR, then Amendment Approach
  - Bilateral "Hedged" Fallback
- LIBOR Fallbacks 2.0 – June 2020
  - No longer recommended Amendment approach
  - Hardwired approach waterfall revised: Term SOFR, then Daily Simple SOFR, then Amendment Approach
  - Bilateral "Hedged" Fallback remained

SOFR Conventions for Business Loans

- **Scope** – focused on Daily Simple and Daily Compounded SOFR because the "Known in Advance" rates would have conventions broadly similar to LIBOR
- **Calculations** – Simple is simple, Compounded has number of complexities
- **Hedging** – determined that even Compounded SOFR would be difficult to hedge perfectly with ISDA fallbacks because loan needs and derivatives needs are different when using a daily rate. Issues like daily accruals, floors and observation shift were difficult to align.
- **Process** – There was a feedback loop between economics, operations, business, conventions and documentation. As we learned about economic similarities between Simple and Compounded and operational complexities of Compounded, our focus shifted to Simple.

SOFR Documentation: LSTA-facilitated Amendments

- Business loans are not standardized so the market does not lend itself to an ISDA protocol-type approach. That means thousands of agreements will need to be amended on a deal by deal basis to transition to SOFR.
- To facilitate this process, the LSTA will offer a generic, “golden” amendment that can be used by administrative agents to transition loans across their lending platform to Daily Simple SOFR.
- Designed for amending credit agreements that:
  - Do not include LIBOR replacement language, or
  - Include ARRC (or other) amendment approach fallback language

SOFR Documentation: LSTA Notices

- All sets of ARRC fallback language contain notice requirements. In most cases, the notice will be sent by the administrative agent to all transaction parties.
- Industry-accepted forms of notice to address these requirements will simplify this process
- Examples:
  - Notice of the occurrence of a trigger event and the related effectiveness date
  - Notice of those technical/operational/administrative conforming changes implemented by the administrative agent to administer Daily Simple SOFR

SOFR Documentation: LSTA SOFR Concept Credit Agreements

- There is no market practice to currently look to in originating SOFR business loans
- LSTA offers concept credit agreements which illustrate how SOFR loans could be structured:
  - Daily Simple SOFR
  - Daily Compounded SOFR
  - Simple RFR Multicurrency Facility (in development)
- Provides educational baseline for market participants to use as a launch pad for their own internal and external discussions and development of SOFR loan products

Lessons from BLWG Loan Process

- “Learning” a new rate was an iterative process
- Flexibility and open-mindedness were critical
- Identifying “architectures” of different rates and determining how to implement the architectures (as opposed to implementing specific rate variants) may be more successful in the long run
- Bring in stakeholders early
- Don’t let the perfect be the enemy of the good

Round Table Discussion

PNC Perspective: Credit Sensitive Rate Implementation Considerations

Credit Sensitivity Workshop – January 14, 2021

PNC

Credit Sensitive Rate/ Supplement

"The natural consequence of these forces will either be a reduction in the willingness of lenders to provide credit in a SOFR-only environment, particularly during periods of economic stress, and/or an increase in credit pricing through the cycle. In a SOFR-only environment, lenders may reduce lending even in a stable economic environment, because of the inherent uncertainty regarding how to appropriately price lines of credit committed in stable times that might be drawn during times of economic stress. Moreover, in economically stressed times, these forces could increase pro-cyclicality, put pressure on lenders' liquidity and generally exacerbate stress in the economy."

Regional Bank Letter September 2019

Implementation Considerations

- Issues associated with implementation of a credit-sensitive rate are very similar to those associated with SOFR implementation, and include:
  - Contract provisions
  - Models
  - Systems (internal and vendor-provided)
  - Operations
  - Client communication
  - In fallback context: Tax, Accounting and Regulatory
- Banks / industry well positioned to address these issues given experience / expertise with the transition of derivatives to SOFR

Benefits

- Implementation of a credit-sensitive rate should be easier than implementation of SOFR as a replacement rate because a credit-sensitive rate behaves like LIBOR. Accordingly:
  - More straight-forward implementation from a system, model and vendor perspective
  - Easier to implement with clients
    - Forward-looking, familiar term settings
    - Should behave like LIBOR through economic cycles
  - In fallback context, would reduce potential for value transfer (e.g., economics of loan should be highly correlated between LIBOR and a credit-sensitive rate without need for "spread adjustment")
  - Better economic fit for undrawn commitments, revolvers, etc.

Challenges

- Vendors developing rate, readiness timeline unknown
- Timing issues in light of recent industry adoption of ARRC-like hardwire (e.g., most loans currently issued with hardwire fallback to SOFR)
- Multi-reference rate environment, using rates best suited to lenders, borrowers, and market needs, increases operational complexity
- Continued regulatory support for market experimentation and innovation
- In light of need to cease LIBOR issuance in 2021, additional work should be directed towards developing a “modified hardwire” that includes a TBD credit sensitive rate as first step in waterfall for commercial loans and lines
  - Terms could require that rate be IOSCO compliant and on a pro forma, historical basis behaved similarly to LIBOR
  - Appears to involve a reasonable trade-off between (i) potential uncertainty associated with new step in waterfall, and (ii) benefits associated with minimized value transfer, similarity to LIBOR, ease of client communication and reduced potential impacts on credit availability and pricing

"SOFR for Loans" Experience May Help Inform Questions for Credit Sensitive Rate/Spread Architecture

- Would it be a rate or a credit sensitive spread adjustment over SOFR?
  - Rate and spread require different approaches to systems, conventions and documents
- Is it a "Known in Advance" rate/spread or a spread over Daily In Arrears SOFR?
  - Operations, conventions and documents for "Known in Advance" more similar to LIBOR
  - Operations, conventions and documents may be more similar to Daily In Arrears SOFR for a daily adjustment
- If it is a credit sensitive adjustment over Daily SOFR, is it fixed at the beginning of the interest period or is it pulled every day?
  - This could lead to different systems development
- Would it be used as a fallback rate or only a new rate for new credit agreements?
  - If fallback, how does this fit into Hardwired infrastructure?
- How would it be hedged?

Closing Remarks