Credit Sensitivity Group Workshop 4
Meeting Minutes
August 27, 2020

Workshop Attendees
Tom Hunt (Association for Financial Professionals)  Tom Deas (National Association of Corporate Treasurers)
John Orner (Blue Cross Blue Shield of Minnesota)  Rick Brockhaus (Soave Enterprises)
Raleigh Noland (Caterpillar)  Brian Yono (Soave Enterprises)
Garrett Ringness (Caterpillar)  Bjork Hupfeld (The Hershey Company)
Jason Behnke (Ford Motor Company)  Tara Herrera (The Related Companies)
Nathan Herbert (Ford Motor Company)  Robert Anderson (Under Armour)
Matt Johnson (Genesco)  Tom Laughlin (Volkswagen)
Carlos Ramirez (Littelfuse)

Ex-Officio Attendees
Darren Gersh (Board of Governors of the Federal Reserve System)  Jamie Pfeifer (Federal Reserve Bank of New York)
Evan Winerman (Board of Governors of the Federal Reserve System)  Will Riordan (Federal Reserve Bank of New York)
Sayee Srinivasan (Commodity Futures Trading Commission)  Monica Scheid (Federal Reserve Bank of New York)
Irina Leonova (Federal Deposit Insurance Corporation)  Nate Wuerffel (Federal Reserve Bank of New York)
Alex LePore (Federal Deposit Insurance Corporation)  Christopher McBride (Office of the Comptroller of the Currency)
Pablo Azar (Federal Reserve Bank of New York)  Chloe Cabot (U.S. Department of the Treasury)
Ray Check (Federal Reserve Bank of New York)  Peter Phelan (U.S. Department of the Treasury)
Cam Fuller (Federal Reserve Bank of New York)  David Metzman (U.S. Securities and Exchange Commission)
Eric LeSueur (Federal Reserve Bank of New York)

Federal Reserve Bank of New York (FRBNY) staff, in their role providing secretariat services to the Credit Sensitivity Group (CSG) workshops, opened the meeting by reviewing the transition away from LIBOR to robust reference rates and the purpose and approach of the CSG workshops, similar to the review provided to participants in the first CSG workshop. FRBNY staff then summarized the outcomes of the first three CSG workshops, and noted the purpose of the fourth workshop was to understand the perspective of corporate borrowers on issues related to transitioning certain loan products (revolving lines of credit, commercial and industrial loans, and commercial real estate loans) to SOFR and the potential need for a credit sensitive supplement to SOFR for such products.

The workshop then proceeded to a facilitated discussion to solicit feedback from corporate borrowers on these topics. The discussion included workshop participant views on the potential for a credit sensitive supplement, on how corporate borrowers generally analyze loan pricing, the different mechanisms by which they believe credit sensitivity may be factored into such pricing, and how they managed their liquidity and borrowing activity during the recent COVID-19-related market disruption.

Some workshop participants highlighted that they carefully and competitively bid their borrowing activity out to banks, taking into consideration the specific credit profile of each bank. Additionally, participants noted that they consider their borrowing activity in the context of their broader relationships with banks, including overall costs and set of services received. Some participants expressed the view that a credit sensitive supplement to SOFR might be particularly important for banks that may have a smaller suite of relationship products and services to offer borrowers. One participant noted that if lending margins are too low for banks, the supply of credit could decrease, and that should be recognized when using risk-free rates for loans.

Workshop participants suggested that if a credit sensitive supplement to SOFR were developed and incorporated as part of the transition away from LIBOR for their loan pricing, it should be
transparently included and described as part of the discussion of their loan pricing with their banks. Further, inclusion of a credit sensitive supplement to SOFR would need to be addressed in the context of the overall banking relationship, as it would factor into the decision to enter into a banking relationship or not.

- Some workshop participants expressed concerns regarding 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. Several borrowers observed that these lending terms tightened during the recent period of market stress, for example some banks included interest rate floors in new LIBOR loans.

- Workshop participants noted that they pay a borrower-specific credit spread in their loan pricing. Some expressed the view that their loan pricing should reflect the funding profile of the banks they select to participate in their banking group and that a broader credit spread might capture bank credit risk inconsistent with that funding profile, creating additional upward pressure on their borrowing costs that could not be mitigated by the borrowers’ choice of lending banks. Some participants highlighted a concern that a potential credit sensitive spread to SOFR would increase their overall borrowing costs.

- Some participants questioned the feasibility of developing a robust credit sensitive spread to SOFR, with some expressing concerns that a credit sensitive spread might lead to a replication of LIBOR and the associated challenges that precipitated the current transition. Some observed that LIBOR may not currently reflect banks’ marginal bank funding costs, calling into question whether LIBOR’s replacement needs to reflect banks’ marginal bank funding costs.

- Workshop participants discussed decision-making around whether to draw down revolving lines of credit during the COVID-19 market disruption. Many participants expressed that, as a general matter, the rate on such a facility is not the primary factor when determining whether or not to draw down, especially during times of market stress. Rather, the decision to draw is linked to the underlying business and liquidity needs.

- Some participants viewed the ability to hedge their loans as an important consideration. They noted that, if there were a potential credit sensitive spread, they would want the ability to hedge that spread in the derivatives market. Receiving hedge effectiveness accounting treatment was viewed as essential by these participants. They suggested this could be impaired if a credit spread were introduced. The fact that ISDA’s IBOR fallback protocol has not been published yet was cited as a material concern for some participants.

- Many workshop participants noted concern regarding the timeline for the transition away from LIBOR, particularly given its complexity and the need for system updates. They noted that a substantial body of work was already under way to transition loan products to SOFR, and suggested that a potential credit sensitive spread would add a significant layer of complexity that could compromise the transition timeline. Workshop participants also described limited bank engagement with borrowers around the shift away from USD LIBOR in the business loans market.

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FRBNY staff summarized responses to a pre-workshop questionnaire on how borrowers utilize floating rate loans; the extent to which they have had discussions with their banks about alternative rates; and how they would expect credit sensitivity to be reflected in a borrowing rate. The summary is included as an appendix to the minutes.

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FRBNY staff concluded the meeting by noting that following the session with the borrowers, observations from the workshops with banks and borrowers would be summarized for the official sector.
Appendix: Credit Sensitivity Group (CSG) Workshop 4 Questionnaire Summary of Responses

Participants in the fourth CSG workshop were asked to complete a voluntary pre-workshop questionnaire aimed at understanding how they utilize floating rate loans; the extent to which they have had discussions with their banks about alternative rates for revolving lines of credit, commercial and industrial loans, and commercial real estate loans that currently reference LIBOR; and how they would expect credit sensitivity to be reflected in a borrowing rate were such a supplemental spread to SOFR to be included. Seven institutions responded to the questionnaire.

— Many institutions noted that, when analyzing loan pricing received from banks, they typically analyze the borrower-specific credit spread that is added on top of a base rate.

— The institutions that responded utilize floating rate loans in different ways – some use revolving lines of credit while others use floating rate term loans. Several indicated that they hedge their loans with interest rate swaps. One indicated the use of cross currency swaps to hedge currency risk.

— Many respondents indicated that banks either have not had detailed discussions regarding alternative rates for revolving lines of credit, commercial and industrial loans, and commercial real estate loans that currently reference LIBOR, or have only had preliminary discussions. Of those respondents that have had discussions with their banks, many indicated the information they have been provided was fairly general in nature. One respondent indicated that they have included fallback language on a revolving line of credit. Another respondent noted that, as they negotiate new LIBOR-linked loans or extend existing contracts, they discuss with the banks how to incorporate robust fallback language that addresses a potential cessation of LIBOR.

— Respondents managed their liquidity during the COVID-19 pandemic in different ways, with some institutions drawing down their lines of credit and others not drawing down their lines. A few indicated that their lines of credit were drawn down for precautionary purposes. Several institutions stated that they did not draw down lines of credit because they did not need it due to sustained cash flow during the pandemic. None of the respondents cited the prevailing level of LIBOR as a deciding factor in whether or not to draw down.

— Several respondents noted that it would be important for the calculation of a potential credit sensitive spread to be transparent and to know whether the spread was based on observed transactions. One respondent highlighted a concern that a credit sensitive spread could lead to higher overall borrowing costs and a need to understand what is driving the credit sensitive spread calculation. Another respondent questioned whether a credit sensitive spread would be applied to other products, beyond just revolving lines of credit, commercial and industrial loans, and commercial real estate loans.
Credit Sensitivity Workshop 4

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

Participants
- Association for Financial Professionals
- Blue Cross Blue Shield of Minnesota
- Caterpillar
- Ford Motor Company
- Genesco
- Littelfuse
- National Association of Corporate Treasurers
- Soave Enterprises
- The Hershey Company
- The Related Companies
- Under Armour
- Volkswagen

Official Sector Representatives
- 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
Overview of the Day

- 9:00 – 9:15 am: Welcome and Introductions
- 9:15 – 10:00 am: Background on the Credit Sensitivity Group Workshops
- 10:00 – 11:00 am: Facilitated Discussion
- 11:00 – 11:30 am: Wrap Up and Next Steps
Ground Rules for the Day

- Participants are free to use and discuss the information received during the workshop sessions, but statements made by participants during workshop sessions may not be attributed to the participant or his or her firm.

- While a participant may share his or her own view on these topics, participants should not make statements purporting to describe the views of the CSG as a whole.

- Participants should not disclose any confidential or commercially sensitive information in workshop sessions.

- The public minutes for each workshop session will include a list of attendees and firms represented and all presentation materials used in the session.

- Opinions expressed or statements made by official sector staff during workshop sessions are solely those of the individual and do not necessarily reflect the views of their agency.
Antitrust Guidelines

- These workshops are being hosted by the official sector and are 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 this workshop.

- 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.
Background on the LIBOR Scandal

- The Financial Stability Oversight Council (FSOC) noted that reliance on LIBOR creates vulnerabilities that could pose a threat to market integrity, the safety and soundness of individual financial institutions, and to financial stability.

- These vulnerabilities reflect three key issues:
  - LIBOR’s widespread use, which creates incentives for manipulation
    - From LIBOR’s origins supporting the syndicated loan market it grew into a reference rate for a wide range of products, from commercial and consumer loans to over-the-counter and exchange-traded derivatives.
  - The limited activity in the term unsecured wholesale funding markets.
  - The cases of attempted market manipulation and false reporting.
Overview of Reference Rate Reform’s Beginning

- The official sector’s LIBOR reform efforts started in 2012 with the Wheatley Review, which focused on the governance and oversight of LIBOR.
- In 2013, the Financial Stability Board (FSB) initiated work to develop reform proposals for major interest rate benchmarks, including LIBOR.
- In 2013, the International Organization of Securities Commissions (IOSCO) released its Principles for Financial Benchmarks.
  - The FSB endorsed the adoption of the IOSCO Principles.
  - The FSOC recommended that US agencies consider the Principles when assessing financial benchmarks in the US.
- In 2014, the FSB released its reform proposal; recommended a “multiple-rate approach”
  - Strengthen LIBOR (and other LIBOR-like rates) by underpinning them to the greatest extent possible with transactions data.
  - Developing alternative, nearly risk-free reference rates.
- In its 2013 Annual Report the FSOC recommended prompt identification of alternative interest rate benchmarks that are anchored in observable transactions and are supported by appropriate governance structures, and development of a plan to accomplish a transition to new benchmarks.
Efforts to Strengthen LIBOR

- In line with the recommendations of the Wheatley Review, steps were taken to strengthen governance and oversight of LIBOR. Notably:
  - In April 2013, the production of LIBOR became formally regulated by the UK Financial Conduct Authority (FCA).
  - In February 2014, ICE Benchmark Administration (IBA) took over as the administrator of LIBOR and has strengthened the governance and oversight of LIBOR.

- Lack of term unsecured wholesale borrowing by banks remains a fundamental challenge for LIBOR.
  - Activity in the markets LIBOR is intended to reflect remains limited, and LIBOR remains reliant on the expert judgment of panel banks.
  - In July 2017, Andrew Bailey, then head of the FCA noted that the lack of an active underlying market raised a “serious question about the sustainability of [LIBOR],” and the FCA could not guarantee that LIBOR will continue past the end of 2021.
Establishment of the ARRC

- In 2014, the Federal Reserve convened the Alternative Reference Rates Committee (ARRC) to identify robust alternatives to USD LIBOR and identify an adoption plan to facilitate the voluntary acceptance and use of these alternative reference rates.
  - Tasked with identifying a set of alternative USD reference rates that are firmly based on transactions from robust underlying markets and that comply with standards such as IOSCO’s Principles for Financial Benchmarks.

- ARRC’s five criteria for potential alternative reference rates:
  - Benchmark quality
  - Methodological quality
  - Accountability
  - Governance
  - Ease of implementation
The ARRC considered a number of rates:
- Overnight general collateral (GC repo) rates
- Overnight unsecured lending rates
- Policy rates
- Treasury bill or bond rates
- Term overnight index swap (OIS) rates
- Term GC repo rates
- Term unsecured lending rates

The ARRC assessed term unsecured wholesale markets did not offer a basis for a robust reference rate anchored in a deep, active market given the lack of borrowing by banks in term unsecured wholesale markets.
The ARRC narrowed its selection of potential alternatives to two rates:

- An overnight Treasury repo rate—the Secured Overnight Financing Rate (SOFR)
- A rate reflecting bank borrowing in overnight wholesale unsecured markets—the Overnight Bank Funding Rate (OBFR)

In July 2017, the ARRC selected the SOFR as its preferred alternative to USD LIBOR.

The ARRC considered a variety of factors in selecting SOFR, including:

- The depth of the underlying market and its likely robustness over time;
- The rate’s usefulness to market participants; and
- Whether the rate’s construction, governance, and accountability would be consistent with IOSCO’s *Principles for Financial Benchmarks*.

In making its selection, the ARRC also considered the input of a wide range of market participants, including feedback from an advisory group of end-users.
Reconstitution of ARRC

- The ARRC was reconstituted in 2018 with an expanded membership to help ensure the successful implementation of the Paced Transition Plan, address the increased risk that LIBOR may no longer be usable beyond 2021, and serve as a forum to coordinate and track planning across cash and derivatives products and market participants currently using USD LIBOR.

- The ARRC has produced a variety of material to facilitate the transition off of LIBOR, including fallback contract language and recommended best practices for a range of products, including business loans.
In a letter to the official sector, some banks expressed a desire to explore ways to include a credit sensitive rate/spread that could be added to SOFR for loan products. Some views expressed by the banks included:

- “During times of economic stress, SOFR (unlike LIBOR) will likely decrease disproportionately relative to other market rates as investors seek the safe haven of U.S. Treasury securities.”

- “The return on banks’ SOFR-linked loans would decline, while banks’ unhedged cost of funds would increase, thus creating a significant mismatch between bank assets (loans) and liabilities (borrowings).”

- “We believe a sensible and practical way to address these risks is to create a SOFR-based lending framework that includes a credit risk premium. That framework could consist of a dynamic spread that reflects changes in banks’ cost of funds over forward-looking term periods and is added on a periodic basis to SOFR-based rates.”
Purpose and Approach to CSG Workshops

- Following in person discussions, the official sector laid out a plan.

- Official sector would initially convene a series of working sessions among banks of all sizes and borrowers of different types, with the goal of understanding the lending needs of these banks and their borrowers and how a robust credit sensitive rate/spread could be developed to address them.

- Workshops hosted by FRBNY. Secretariat will prepare minutes and summary outcomes of the discussions. This information will be made publically available on the FRBNY website.

- Workshops will cover:
  - Laying the Groundwork: What is the nature of the problem?
  - Reviewing the Data: What data could be used?
  - Constructing Robust Reference Rates: What are the design considerations?
  - Borrower Perspectives

- Next Steps
  - At this stage, the goal is not to recommend a credit sensitive spread.
  - Next steps will include summarizing the observations from workshops with banks and borrowers for the official sector.
The CSG workshops aim to facilitate efforts to overcome transition challenges and move off of LIBOR to robust reference rates.

The workshops are focused on a credit sensitive supplement to SOFR for lending products.

The workshops are administratively separate but supportive of the work of the ARRC.

The main priority is moving the financial system off of LIBOR to robust reference rates in line with the timeline recently reinforced by the UK FCA.

We don’t want to do this again, so any solution needs to be robust.
Summary of Workshop 1 Outcomes

- Presenters described that there could be a mismatch between banks’ unhedged cost of funds and SOFR-based commercial loans during an economic downturn that could erode bank capital, and that a credit sensitive rate/spread would provide a natural hedge.

- Presenters noted that while SOFR was an appropriate benchmark for a range of types of transactions that currently reference LIBOR, there is a use case for a credit sensitive rate/spread to SOFR which would be focused on a subset of loans, including revolving lines of credit, commercial real estate loans, and commercial and industrial loans.

- Participants also discussed the ability to create a credit sensitive supplement to SOFR. Some participants were optimistic that it could be done with relative ease, noting a variety of sources that might be useful in constructing a spread. Others were skeptical that it could be done before the end of 2021 and noted the limited number of underlying bank transactions in term unsecured money markets, particularly during periods of stress.

- There was also discussion on ways to mitigate the potential funding mismatch risk between banks’ SOFR-based loans and unhedged cost of funds if the banks issued SOFR-based loans, with some noting the potential use of interest rate floors and other hedging activities to help reduce the risk.
The second report of the ARRC estimated that, around the end of 2016, total exposure to USD LIBOR was around $200 trillion.

Exposure to USD LIBOR in business loans, excluding undrawn lines, was estimated to be around $3.4 trillion.

Within business loans, CSG workshop participants have focused on revolving lines of credit, C&I loans, and CRE loans.

### Estimated USD LIBOR Market Footprint by Asset Class

<table>
<thead>
<tr>
<th>Volume (Trillions USD)</th>
<th></th>
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<tbody>
<tr>
<td>Derivatives</td>
<td>190</td>
</tr>
<tr>
<td>Business Loans</td>
<td>3.4</td>
</tr>
<tr>
<td>Consumer Loans</td>
<td>1.3</td>
</tr>
<tr>
<td>Bonds</td>
<td>1.8</td>
</tr>
<tr>
<td>Securitizations</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>Total USD LIBOR Exposure</strong></td>
<td><strong>199</strong></td>
</tr>
</tbody>
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*Source: ARRC Second Report (March 2018)*
Summary of Workshop 2 Outcomes

- Treasury staff noted that in order for any potential credit sensitive supplement to SOFR to meet the IOSCO principles, it would need to be representative, proportional, robust, and fit for purpose.

- Panelists and participants discussed a variety of data sources that could be relevant to constructing a credit sensitive supplement, though different opinions were expressed concerning the type of transactions or the type of borrowers that a credit sensitive spread should reflect. Some participants indicated that it should reflect the funding costs of a broad set of banks and that it should include banks’ short- and long-term wholesale borrowing.

- Several participants also noted the importance that a potential spread reflect the economic conditions it seeks to measure.

- There was a discussion about the risk of a credit sensitive supplement being used for broader purposes for which it was not designed or sufficiently robust, including in derivatives markets.
Summary of Workshop 3 Outcomes

- In considering the design of its reference rates, FRBNY staff highlighted the importance of clearly defining the underlying interest—the types of transactions and activity the benchmark is intended to represent—and, consequently, the types of transactions and activity that should be included. They also noted the potential for financial markets to evolve, and the importance of assessing whether the underlying interest and transaction base will remain robust to future changes in market structure.

- Many participants re-iterated views that a supplement to SOFR should be credit sensitive, dynamic, based on unsecured funding, and reflect marginal funding costs. Participants also discussed a variety of considerations on the precise scope of the types of transactions to include, the range of issuers to include, and an appropriate frequency and observation period for calculations.

- A few participants expressed interest in further studying some proposed design approaches and existing benchmarks. There was some discussion that funding costs may vary by the size of the bank and the regulatory oversight they are subject to, as banks have access to different funding sources.

- There was discussion that tension exists between the objectives of representativeness and robustness—in particular, that increasing the amount of eligible transactions might improve the robustness of the spread, but also might lead it to be less representative of the funding costs for a specific market segment.
Workshop 4 Purpose

The goal of Workshop 4 is to:

- Understand the borrower perspective on the potential need for a credit sensitive supplement to SOFR for certain loan products
Questionnaire Summary
Facilitated Discussion
Key Questions

- How do you analyze the loan pricing you receive from banks? Do you decompose the price into certain components and if so, are there certain pricing components that you are particularly attuned to?

- How would you expect credit sensitivity to be reflected in a borrowing rate?
  - What would you want to know about a potential credit sensitive spread?
  - What types of cost would you expect it to reflect?

- How did you manage your liquidity and borrowing activity during the recent COVID market disruption? Specifically, did you draw down or consider drawing down on your revolvers, why or why not?
Wrap Up & Next Steps

- Themes from today’s session
- Next steps