Alternative Reference Rates Committee (ARRC)

Minutes for the December 16, 2021 Meeting

The ARRC Chair welcomed participants to the virtual meeting and reminded everyone of the two agency statements related to the LIBOR transition which were published last week. The first was the CFPB final rule to facilitate the transition away from the LIBOR interest rate index for consumer financial products by identifying certain SOFR-based spread-adjusted indices recommended by the ARRC as examples of indices that meet the Regulation Z “historical fluctuations are substantially similar” standard regarding a particular LIBOR index. The second was an SEC statement on key considerations for market participants to remind investment professionals of their obligations when recommending LIBOR-linked securities and to remind companies and issuers of asset-backed securities of their disclosure obligations related to the LIBOR transition. The SEC statement noted the ARRC’s work, including its identification of the Secured Overnight Financing Rate (SOFR) as its recommended alternative rate to USD LIBOR, the ARRC’s recommended fallback language for new issuances of debt instruments, and the ARRC’s recommended forward-looking SOFR Term Rates.

The ARRC was provided with an overview of the User Guide for Exchange Traded Derivatives Transactions published by the Commodity Futures Trading Commission’s Market Risk Advisory Committee’s (MRAC). The User Guide is the fourth and final stage of the Subcommittee’s SOFR First Initiative, aimed at accelerating the transition away from LIBOR to SOFR for certain derivatives markets. The User Guide notes that the Eurodollar market, the largest exchange-traded LIBOR derivatives market, is also a highly diverse market composed of several different types of participants including banks, asset managers, hedge funds, proprietary trading firms and others (pension funds, insurance providers, mortgage providers and servicers, commercial entities and sovereigns). With such broad participation in this market, it is important to note that many firms that transact in Eurodollar futures and options are typically not directly subject to the same supervisory oversight as US regulated banks. Given this structure, the User Guide outlines best practices for market participants to consider in transitioning new exchange-traded derivatives activity to SOFR activity in the near term. The User Guide encourages all market participants to ensure operational capability to transact in SOFR exchange-traded derivatives as soon as possible, and states that it would be a best practice for all market participants to replace use of LIBOR with SOFR for new contracts, including exchange-traded derivatives, after end-2021.

The ARRC welcomed the release of the User Guide, the recommendations of which are consistent with the ARRC’s own recommendations that all market participants cease entering into new LIBOR contracts by the end of 2021, consistent with supervisory guidance. Following the SOFR First update, a market update was provided by CME.

Next, the Legal Working Group provided an update on the status of proposed federal legislation. It was noted that on December 8, the House of Representatives passed H.R. 4616, the Adjustable Interest Rate (LIBOR) Act by an overwhelming bipartisan vote and that members of the Senate are also actively considering similar legislation. ARRC members continued to emphasize the importance of federal legislation to provide a uniform solution for legacy contracts that cannot effectively be amended to fallback to an alternative reference rate upon LIBOR’s cessation. As noted in previous meetings, legislative efforts at the state level will
continue concurrent to the federal legislative effort in the event a state-by-state approach is needed, and it was noted that the State of Florida had recently introduced potential legislation that mirrored legislation already enacted in New York and Alabama.

The co-chair of the Operations / Infrastructure Working Group provided an update on the strategy of the revamped working group. ARRC members were asked to review their respective memberships for the working group to ensure differently-situated people from lenders, consumers, and other market participants making observations from a variety of backgrounds and perspectives are involved in the work going forward. The chairs discussed the working group’s initial focus for 2022 on the corporate action process for interest rate changes and operationalizing the transition of legacy floating rates notes (see Appendix A for the presentation materials).

On the transition outlook, members received an overview of the sentiment survey results (see Appendix B for a summary slide) which were highlighted in the ARRC’s Year-End Progress Report. Members were reminded that the purpose of the survey is to track progress and to identify areas where the ARRC can be helpful with developing recommendations to move the transition forward. It was noted that the plan is for the survey to be conducted again in early-2022.

The ARRC Chair closed the meeting by thanking everyone and reminding everyone of the next ARRC meeting to be held January 10th via Webex.
Attendance at the December 16, 2021 Meeting*

ARRC Members
American Bankers Association
Association for Financial Professionals
Bank of America
Bank of America
Bank of America
Bank of New York Mellon
Bank of New York Mellon
BlackRock
CME Group
CRE Finance Council
CRE Finance Council
Citigroup
Citigroup
Deutsche Bank
Deutsche Bank
Equitable
Fannie Mae
Federal Home Loan Bank Office of Finance
Federal Home Loan Bank of New York
Federal Home Loan Bank of New York
Ford Motor Company
Freddie Mac
Freddie Mac
Freddie Mac
GE Capital
Government Finance Officers Association
HSBC
HSBC
Huntington
Intercontinental Exchange
International Swaps and Derivatives Association
JP Morgan Chase & Co.
JP Morgan Chase & Co.
KKR
LCH
Loan Syndications and Trading Association
Loan Syndications and Trading Association
MetLife
MetLife
MetLife

Hu Benton
Tom Hunt
Greg Todd
Janet Choi
Sonali Theisen
Jason Granet
Jeanne Naughton-Carr
Oliver Bader
Jack Hattem
Agha Mirza
Raj Aidasani
Sairah Burki
Jeannine Hyman
Josie Evans
Adam Eames
Greg Coutu
Julien Zusslin
Wells Engledow
Kyle Lynch
Phil Scott
Rei Shinozuka
Jason Behnke
Ameez Nanjee
Guim Barbour
Michelle Thomas
Fred Robustelli
Pat McCoy
Blair Selber
Shirley Hapangama
Beth Russell
Harvey Flax
Ann Battle
Alice Wang
Emilio Jimenez
Tal Reback
Phil Whitehurst
Meredith Coffey*
Tess Virmani
Alex Strickler
Joe Demetrick
William Ding
Morgan Stanley
Morgan Stanley
Morgan Stanley
National Association of Corporate Treasurers
PNC
PNC
Pacific Investment Management Company
Prudential Financial
Prudential Financial
Prudential Financial
Securities Industry and Financial Markets Association
Securities Industry and Financial Markets Association
Structured Finance Association
TD Bank
Wells Fargo
Wells Fargo
World Bank

Ex-Officio ARRC Members

Commodity Futures Trading Commission
Consumer Financial Protection Bureau
Federal Deposit Insurance Corporation
Federal Housing Finance Agency
Federal Reserve Bank of New York
Federal Reserve Bank of New York
Federal Reserve Bank of New York
Federal Reserve Bank of New York
Federal Reserve Bank of New York
Federal Reserve Bank of New York
Federal Reserve Bank of New York
Federal Reserve Board of Governors
Federal Reserve Board of Governors
Federal Reserve Board of Governors
Federal Reserve Board of Governors
Federal Reserve Board of Governors
Federal Reserve Board of Governors
Office of the Comptroller of the Currency
Office of the Comptroller of the Currency
U.S. Department of Housing and Urban Development
U.S. Department of Housing and Urban Development
U.S. Securities and Exchange Commission
U.S. Securities and Exchange Commission
U.S. Treasury
U.S. Treasury
U.S. Treasury

Maria Douvas-Orme
Matt Ochs
Tom Wipf
Tom Deas
Alexander Spiro
Andrew Wilson
Jerry Woytash
Chris Mcalister
Gary Horbacz
Jason Pan
Mark Schuermann
Chris Killian
Jennifer Earyes
Priya Misra
Brian Grabenstein
Alexis Pederson
Donald Sinclair
Alicia Lewis
Abhishek Agarwal
Irina Leonova
Daniel Coates
Betsy Bourassa
Fatima Madhany
Jamie Pfeifer
Nathaniel Wuerffel
Ray Check
Will Riordan
Darren Gersh
David Bowman
Erik Heitfield
Evan Winerman
Jeffrey Huther
Ang Middleton
Kevin Walsh
Diego Leguizamón
Mike Nardacci
Jason Leung
Gerard Citera
Daniel Harty
Dini Ajmani
Joshua Frost
### Observers

<table>
<thead>
<tr>
<th>Institution</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BNP Paribas</td>
<td>Simon Winn</td>
</tr>
<tr>
<td>Bank of Canada</td>
<td>Sheryl King</td>
</tr>
<tr>
<td>Brunswick</td>
<td>Jeanmarie McFadden</td>
</tr>
<tr>
<td>Cadwalader</td>
<td>Lary Stromfeld</td>
</tr>
<tr>
<td>Deloitte</td>
<td>Alexey Surkov</td>
</tr>
<tr>
<td>Morgan Lewis</td>
<td>Jon Roellke</td>
</tr>
</tbody>
</table>

*This meeting was held via WebEx; asterisk indicates participation by dial-in.*
REMINDER: Membership Review & Working Group Topics

1) Please review your Membership
   a. We welcome new members and welcome back current members to the ARRC Operations and Infrastructure Working Group
   b. Given the focus on transition related issues we would like members to review their participant list. Ideally, we would like delegates to join who have detailed knowledge of operational & infrastructure aspects
   c. As we would like to contact members for sub-working groups we would appreciate if each firm could name a point person
   d. SMEs in the Operations and Technology who could act as a multiplier for their respective organization.
   e. Project managers who oversee key system topics / issues and are able to identify the SMEs needed

2) Suggestions for Items to be discussed
   a. We would invite members to submit questions related to the mission statement of the group to arrc@ny.frb.gov
   b. Topics the group will initially focus on
      i. Corporate Action Process for Interest Rate Changes / Operationalize the transition of legacy Floating Rates Notes (FRNs) - see further details within
The replacement of the LIBOR benchmark in legacy FRN transactions will lead to 1:N static data replacement options

1) Replacement via Consent Solicitation
   • Parties can decide on replacement benchmark, spread adjustment, conforming changes as well as rounding conventions

2) Replacement via Legislation
   • Recent example of ARRC's recommendation for benchmark replacement, spread adjustment and conforming changes for FRNs (see picture) indicates that deciding parties have more than 1 option to choose

- Every transition will be unique
- Details of all static data elements of transition cannot be predicted
- Automation solutions – Ctrl F / Replace will not be possible
How are Bondholders informed in different jurisdictions today about rate replacement decisions

<table>
<thead>
<tr>
<th>Rate Change Event</th>
<th>Announcement of the Change</th>
<th>Details of the Change</th>
<th>Informed Parties</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Is treated as a Corporate Action</td>
<td>• International Central Securities Depositories (ICSDs) will send corporate action notification via SWIFT when received from issuer or agents</td>
<td>• ICSDs distribute detailed term sheet via other channels to their network</td>
<td>• Broad range of investors, infrastructure providers and data providers</td>
</tr>
<tr>
<td>• Is currently not treated as a Corporate Action</td>
<td>• Change notifications received from Issuers or Agents are published on DTCC LENS message board (subscription service)</td>
<td>• Are included on the LENS messaging board</td>
<td>• Limited reach due to subscription model and difficult data extraction process</td>
</tr>
</tbody>
</table>

ARRC O&I Working Group does not believe that the current US process will be fit for purpose to deal with transition event in June 2023
Clearstream’s Approach to Communication of Rate Changes

- **Corporate Action Notification:**
  - Communication of rate change from LIBOR to RFR: is communicated as a corporate action notification

- **Method of Communication:**
  - Clearstream will send a corporate action notification once an official announcement is received from the depositories/custody agents, who need to receive such announcement from the issuer or its agents

- **Information Included:**
  - Some information about the rate is included in the communication, however for further details, such as the benchmark rate, the applicable convention to determine the observation period (for example, lookback, lockout, etc.) and the method to calculate the interest rate (for example, compounded rate), Clearstream Banking recommends customers to refer to the Terms and Conditions of the security
Proposal for High Level Approach and Timeline

<table>
<thead>
<tr>
<th>Activity</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
</tr>
<tr>
<td>I. Engage with DTCC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Initial Engagement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Potential Testing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II. Downstream</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III. Up Stream</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Dependencies:
- Timing of Federal Legislation. The earlier clarity will be achieved the earlier a process might be required.
- Testing Window of DTCC is normally limited to October
- Changes to SWIFT messaging will not be possible as outside of normal development cycle (i.e. message changes are communicated in June for introduction in Q4 of the following year)

- **Our ask to you:** Please provide comments on the approach and timeline to help with successful scoping, planning, and delivery to the following email address arrc@ny.frb.gov
Players of ECO System

Players involved in communicating security update data and involved in how data gets pushed to the industry
Appendix B: ARRC Sentiment Survey - Responses Overview

• Key Messages:
  • Overall, positive momentum and - 100% of respondents indicated the transition is going smoothly or generally smoothly across derivatives, consumer loans, and floating rate notes.
  • The majority of respondents indicated the transition is going smoothly or generally smoothly in business loans (79%) and securitizations (90%).
  • Items Highlighted by Respondents:
  • Areas to Watch for 2022:
    • Non-banks and Eurodollar Futures Activity
    • SOFR loan conventions and lender engagement with borrowers
    • Securitization conventions

<table>
<thead>
<tr>
<th>Question: Overall, the LIBOR Transition is progressing:</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Smooth</td>
<td>33.3%</td>
</tr>
<tr>
<td>b. Generally smooth, working through some obstacles</td>
<td>62.5%</td>
</tr>
<tr>
<td>c. Significant obstacles</td>
<td>4.1%</td>
</tr>
</tbody>
</table>

For discussion purposes only