Alternative Reference Rates Committee (ARRC)

Minutes for the July 13, 2022 Meeting

The ARRC Chair welcomed participants to the virtual meeting and thanked everyone who attended and participated in the Last Call on LIBOR: Final Steps to Transition event held on July 11. The Chair briefly recapped 3 main highlights from the event: 1) the significant progress achieved in the shift away from LIBOR to SOFR in new activity across markets; 2) the importance for market participants to continue taking steps, where feasible, to remediate legacy LIBOR contracts ahead of June 30, 2023 to avoid potentially significant operational challenges (with the Chair noting that the ARRC published a Legacy LIBOR Playbook to help provide market participants with tools and resources to assist in the transition of legacy LIBOR cash products); and 3) the criticality of maintaining the major gains realized from the decade-long LIBOR transition effort by ensuring the market rests on robust rates like SOFR going forward. The Chair also noted separately the ARRC also welcomed a statement by Refinitiv that it intends to publish ARRC-recommended fallback rates for cash products based on CME Term SOFR plus the ARRC-recommended spread adjustments beginning in September.

Next, CME Group provided an update on its SOFR First for Options initiative that went into effect in June. The initiative encourages SOFR options trading through features including fee waivers for SOFR options, market making booster incentives, and sunsetting back-end Eurodollar options expiries. Since the launch of the initiative, SOFR options average daily volumes (ADV) have been on an upward trajectory and reached a record 46 percent of Eurodollar options ADV. It was noted that SOFR futures have also extended their strong growth, with SOFR futures ADV further surpassing Eurodollar futures ADV. (see Appendix A for details) CME Group subsequently announced that it is extending SOFR First for Options through August.

Federal Reserve staff then provided an overview of the USD LIBOR transition more broadly, using the charts provided in the July 13 Meeting Readout. Staff noted the data shows that the strong uptick in momentum in cash and derivative markets observed in the first quarter of the year has continued throughout the second quarter. In particular, SOFR swaps have accounted for about 80 percent of interest rate risk traded in the outright linear swaps market for the last 3 months while LIBOR swaps have declined to less than 10 percent. Additionally, almost all new debt, mortgage, and syndicated lending has been based on SOFR. Staff then provided an overview of the results of the most recent sentiment survey of ARRC members (see Appendix B for summary slides), where respondents mentioned the encouraging growth in SOFR futures and options activity and continued to characterize the LIBOR transition overall as progressing “smoothly” or “generally smoothly”. Areas of focus
highlighted by ARRC members included Federal Reserve rulemaking\(^1\) pursuant to the **LIBOR Act**.

Next, the Operations/Infrastructure Working Group provided an update on their ongoing work to facilitate effective and efficient communication to clients and counterparties regarding rate changes in LIBOR contracts. After consulting with a number of stakeholders, the Working Group proposed implementing a notification process for rate changes via a pre-determined term sheet format that would be disseminated through a new system that is being created by DTCC. (See Appendix C for details)

The Term Rate Task Force provided an update on its discussions of participants’ views on issues related to Term SOFR derivatives, including the overnight SOFR/Term SOFR basis, internal or external offsets to Term SOFR risk, clearing, capital, and accounting considerations. It was noted, however, that the ARRC’s best practice recommendations regarding **scope of use for Term SOFR** remain unchanged.

The ARRC Chair ended the meeting by directing members to review and finalize the **July 13 Meeting Readout**. The ARRC Chair then thanked everyone and reminded everyone of the next ARRC meeting to be held in person on September 8th.

\(^1\) On July 19, 2022, the Federal Reserve Board published a notice of proposed rulemaking that would implement the Adjustable Interest Rate (LIBOR) Act.
Attendance at the July 13, 2022 Meeting*

ARRC Members
American Bankers Association
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
Citigroup
Citigroup
CME Group
CRE Finance Council
CRE Finance Council
CRE Finance Council
Deutsche Bank
Equitable Life
Fannie Mae
Fannie Mae
Federal Home Loan Bank Office of Finance
Federal Home Loan Bank of New York
Federal Home Loan Bank of New York
Ford
Freddie Mac
Freddie Mac
Freddie Mac
Freddie Mac
Freddie Mac
GE
GE
Goldman Sachs
Goldman Sachs
Government Finance Officers Association
HSBC
Huntington National Bank
Intercontinental Exchange
International Swaps and Derivatives Association
Hu Benton
Sayee Srinivasan
Tom Hunt
Janet Choi
Gregory Todd
Sonali Theisen
Oliver Bader
Jason Granet
Jeanne Naughton-Carr
Peter Phelan
Rodrigo Fernandez
Agha Mirza
Lisa Pendergast
Sairah Burki
Raj Aidasani
Kayam Rajaram
Julien Zusslin
Robert Ives
Wells Engledow
Kyle Lynch
Rei Shinozuka
Philip Scott
Jason Behnke
Ameez Nanjee
Guim Barbour
Allan Krinsman
Karen Pilewski
Samuel Chapin
Mike Taets
Fred Robustelli
Richard Chambers
Guillaume Helie
Patrick McCoy
Shirley Hapangama
Larry Heath
Harvey Flax
Ann Battle
JP Morgan Chase & Co. Alice Wang
JP Morgan Chase & Co. Emilio Jimenez
KKR Tal Reback
London Clearing House Phil Whitehurst
Loan Syndications and Trading Association Meredith Coffey
Loan Syndications and Trading Association Tess Virmani
MetLife Joseph Demetrick
MetLife William Ding
MetLife Alex Strickler
Morgan Stanley Paige Mandy
Morgan Stanley Tom Wipf
Morgan Stanley Maria Douvas
Morgan Stanley Matt Ochs
Morgan Stanley Tom Deas
National Association of Corporate Treasurers Jerry Woytash
PIMCO Alex Spiro
PNC Andrew Wilson
PNC Gary Horbacz
Prudential Financial Chris McAlister
Prudential Financial Chris Killian
Securities Industry and Financial Markets Association Priya Misra
TD Bank Greg Moore
TD Bank Kristen Malinconico
U.S. Chamber of Commerce Alexis Pederson
Wells Fargo Jessica Murphy
Wells Fargo Don Sinclair

**Ex-Officio ARRC Members**

Consumer Financial Protection Bureau Abhishek Agarwal
Federal Deposit Insurance Corporation Irina Leonova
Federal Housing Finance Agency Daniel Coates
Federal Housing Finance Agency Muna Sisay
Federal Reserve Bank of New York Pooja Gupta
Federal Reserve Bank of New York Sophie Legrand-Green
Federal Reserve Bank of New York Jamie Pfeifer
Federal Reserve Bank of New York Nathaniel Wuerffel
Federal Reserve Bank of New York Jennifer Wolgemuth
Federal Reserve Bank of New York Mari Baca
Federal Reserve Bank of New York Scott Sherman
Federal Reserve Board of Governors Jeffrey Huther
Federal Reserve Board of Governors David Bowman
Federal Reserve Board of Governors Erik Heitfield
Observers
Bank of Canada
BNP Paribas
Brunswick Group
Cadwalader
CitiGroup
Morgan Lewis
State Street

*This meeting was held via WebEx; asterisk indicates participation by dial-in.
## Appendix A

### SOFR Futures & Options reached 2.4M ADV in June, Current OI at 14.4M

<table>
<thead>
<tr>
<th></th>
<th>SOFR Futures</th>
<th>SOFR Options</th>
<th>OTC SOFR</th>
<th>CME Term SOFR (Cumulative)</th>
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<tbody>
<tr>
<td></td>
<td>ADV</td>
<td>OI*</td>
<td>ADV</td>
<td>OI*</td>
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<tr>
<td>Q4 2021</td>
<td>277,000</td>
<td>1,800,000</td>
<td>4</td>
<td>2,600</td>
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<tr>
<td>Q1 2022</td>
<td>1,200,000</td>
<td>4,500,000</td>
<td>39,000</td>
<td>1,400,000</td>
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<tr>
<td>June 2022</td>
<td>2,000,000</td>
<td>6,400,000</td>
<td>412,000</td>
<td>7,200,000</td>
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<tr>
<td>% Growth vs. Q4</td>
<td>616%</td>
<td>245%</td>
<td>&gt;100x</td>
<td>&gt;100x</td>
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</table>

**SOFR Futures**: Record 2M ADV in June was higher than June ED Fut. ADV of 1.7M. Over 1,800 global participants now account for more than 98% of Eurodollar Futures ADV. In July, SOFR Futures ADV has advanced further ahead of Eurodollar Futures running at 126% of ED Fut. ADV.

**SOFR Options**: CME SOFR First for Options initiative has contributed to substantial growth in SOFR Options, reaching record 412k ADV in June (46% of Eurodollar options ADV) and 7.2M in OI by the end of June. The initiative has included fee waivers, market making booster incentives, and sunsetting back-end ED Options expiries.

**CME OTC SOFR Swaps**: SOFR-indexed trades now represent about 77% of all USD trades ($14B notional in June), up from about 65% in May.

**CME Term SOFR**: Licensing and usage has grown, with over 5,200 licenses extended to 1,250+ firms.
### ARRC Sentiment Survey - Responses Overview

#### Overall:
The LIBOR Transition is progressing:
- a) Smooth  
- b) Generally smooth, working through some obstacles  
- c) Significant obstacles

<table>
<thead>
<tr>
<th>Responses</th>
<th>July 2022 (12 responses)</th>
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<tbody>
<tr>
<td>a:</td>
<td>33.0%</td>
</tr>
<tr>
<td>b:</td>
<td>66.0%</td>
</tr>
<tr>
<td>c:</td>
<td>0.0%</td>
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</tbody>
</table>

#### Derivatives:
The LIBOR Transition is progressing:
- a) Smooth  
- b) Generally smooth, working through some obstacles  
- c) Significant obstacles

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<tr>
<td>a:</td>
<td>50.0%</td>
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<tr>
<td>b:</td>
<td>41.7%</td>
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<tr>
<td>c:</td>
<td>8.3%</td>
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</table>
**ARRC Sentiment Survey - Responses Overview**

**Business Loans:**
The LIBOR Transition is progressing:
- a) Smooth
- b) Generally smooth, working through some obstacles
- c) Significant obstacles

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<tr>
<th>Responses</th>
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<tbody>
<tr>
<td></td>
<td>(12 responses)</td>
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<tr>
<td>a:</td>
<td>20.0%</td>
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<tr>
<td>b:</td>
<td>80.0%</td>
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<tr>
<td>c:</td>
<td>0.0%</td>
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</table>

**Consumer Loans:**
The LIBOR Transition is progressing:
- a) Smooth
- b) Generally smooth, working through some obstacles
- c) Significant obstacles

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<tr>
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<tbody>
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<td>(12 responses)</td>
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<tr>
<td>a:</td>
<td>62.5%</td>
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<tr>
<td>b:</td>
<td>37.5%</td>
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<tr>
<td>c:</td>
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### ARRC Sentiment Survey - Responses Overview

**Floating Rates Notes:**
The LIBOR Transition is progressing:
- a) Smooth
- b) Generally smooth, working through some obstacles
- c) Significant obstacles

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<td>(12 responses)</td>
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<td>a:</td>
<td>77.8%</td>
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<td>b:</td>
<td>22.2%</td>
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<tr>
<td>c:</td>
<td>0.0%</td>
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### Securitizations:
The LIBOR Transition is progressing:
- a) Smooth
- b) Generally smooth, working through some obstacles
- c) Significant obstacles

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<td>(12 responses)</td>
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<tr>
<td>a:</td>
<td>12.5%</td>
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<tr>
<td>b:</td>
<td>87.5%</td>
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<tr>
<td>c:</td>
<td>0.0%</td>
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ARRC Sentiment Survey - Responses Overview

Key Messages:

• Overall, continued positive momentum - 100% of respondents indicated the transition overall is progressing smoothly or generally smoothly into 2022.
  • No meaningful change in sentiment regarding most asset classes\(^1\). Respondents largely kept their assessments little changed from prior survey responses.

Areas Highlighted by Respondents:

• Remain very similar to areas highlighted in the [May 2022 survey results](#). Areas of focus include:
  • Federal Reserve rule-making process and determination of replacement benchmark rate per the LIBOR Act
  • Very encouraging progress in SOFR futures
  • Following the introduction of CME’s SOFR First for Options initiative, streaming and RFQ liquidity for SOFR options have notably improved
  • Remediation of legacy contracts
  • Usage of Term SOFR in derivatives market

\(^1\) Any apparent changes mainly due to differences in respondent composition between surveys rather than a shift in sentiment.
ARRC Meeting Update
July 13, 2022

ARRC Operations & Infrastructure Working Group

Oliver Bader, Scott Longo
How are Bondholders informed in different jurisdictions today about rate replacement decisions?

| Rate Change Event          | • Is treated as a Corporate Action | • Is currently **not treated as a Corporate Action**  
|                           |                                   | • Rates Changes are a **non-serviceable event** |
| Announcement of the Change | • International Central Securities Depositories (ICSDs) will send corporate action notification via SWIFT when received from issuer or agents | • Change notifications received from Issuers or Agents are published on DTCC LENS message board (subscription service)  
|                           |                                   | • Notifications are comingled with redemption and default notices and are therefore difficult to identify |
| Details of the Change      | • ICSDs distribute detailed term sheet via other channels to their network | • Are included on the LENS messaging board |
| Informed Parties           | • Broad range of investors, infrastructure providers and data providers | • Limited reach due to subscription model and difficult data extraction process |

**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**
ARRC Operations & Infrastructure Working Group Efforts so far

Activities to date
• We developed a process to improve how interest rate changes about how changes at transition will be communicated in the market
• We have engaged with numerous market participants (buy & sell side, agents, custodians) to understand their perspectives also to include their feedback into our proposals
• Developed a template “Term Sheets” of all data elements needed to transition off LIBOR – one for Term SOFR and one for O/N Rates
• We have had regular meeting with DTCC to discuss our proposal and to develop a recommended approach

Progress since last meeting
• We have spent the last 30 days seeking a commitment from “determining parties” and “their agents” that they would communicate decisions leveraging the “terms sheets” and proposed DTCC solution.
• Based on the feedback received from Issuers, Agents and ARRC Committee firms and the engagement of the ABA, DTCC is comfortable supporting the roadmap on slide 5 for development and testing of the solution
Proposed Solution – Detailed Design to take place in July/August

1. Agent, Issuer or any other party responsible for disseminating the information will leverage existing LENs service to submit new Lens Event type through a UI to populate information on the UI or upload through a standardized template.

2. Document available through traditional Lens interface and subscription model.

3. Fielded data available through API enabled subscription service which includes detailed content of the data mapping template from step 1.
   - Market Data providers would use data to populate their own static data masterfiles.
LIBOR Transition Timeline

**JULY 2022**
- DTCC Industry Proposal
  - Public domain web input / upload
  - API
  - LENS

**JULY-SEPT 2022**
- Industry Working Groups

**AUGUST 2022**
- DTCC Specs Available

**NOVEMBER 2022**
- DTCC Testing
  - PSE-U test environment
  - Web input / upload
  - API

**JUNE 2023**
- LIBOR Retirement

**JUNE-SEPT 2022**
- Term Sheet Field Agreement

**JULY-NOV 2022**
- DTCC Build / Outreach

**SEPTEMBER 2022**
- DTCC Demo

**LATE JAN - MARCH 2023**

*Production Go-Live dependent on PSE testing results*