Alternative Reference Rates Committee (ARRC)

Minutes for the September 8, 2022 Meeting

The ARRC Chair welcomed participants to the hybrid meeting. Federal Reserve staff then provided an overview of the USD LIBOR transition, using the charts provided in the September 8 Meeting Readout. Staff noted that the transition away from LIBOR to SOFR continues to progress strongly in 2022, with SOFR now the predominant rate across both cash and derivatives markets. In particular, SOFR swaps have accounted for around 90 percent of daily volumes on average of interest rate risk traded in the outright linear swaps market in recent months while LIBOR swaps have declined to less than 10 percent. In exchange-traded markets, average daily SOFR futures volumes have also surpassed average daily Eurodollar futures volumes. Within cash products, almost all new debt, mortgage, and syndicated lending have also been based on SOFR.

Staff then provided an overview of the results of the most recent sentiment survey of ARRC members (see Appendix A for summary slides), where respondents continued to characterize the LIBOR transition overall as progressing “smoothly” or “generally smoothly”.

Next, CME Group provided an update on its proposal for conversion of most Eurodollar futures and options contracts to their SOFR fallbacks on April 14, 2023, noting that CME believes this will align with industry plans for the switch over of centrally cleared LIBOR interest rate swaps to SOFR ahead of June 2023. CME Group highlighted the importance of broad market awareness of the proposal beyond the Eurodollars trading community, such as for market participants who utilize Eurodollars for analysis and curve construction. ARRC members were encouraged to engage with the proposal through the end of September.

The ARRC Chair then highlighted the public release of the ARRC Loan Remediation Survey, which seeks to gather information on plans to remediate USD LIBOR loans. Over 60 responses had been submitted, with about two thirds coming from bank lenders. ARRC members involved in the business loan market were encouraged to respond to the survey if they had not already done so, with input from borrowers especially welcome. Results of the survey, which will be aggregated and anonymized to preserve confidentiality, will be made publicly available once finalized.

The Operations/Infrastructure working group provided an update on its work with DTCC on a solution to facilitate effective and efficient communication of rate changes in the conversion of LIBOR contracts. Stakeholders have been working to capture the detailed requirements needed to fully communicate the rate changes and programming for the final DTCC solution will commence soon. (See Appendix B for details)
The Term Rate Task Force provided an update on its discussions around Term SOFR derivatives. In particular, the Task Force has been discussing participants’ views on the level of awareness of the existing ARRC best practice recommendations on the scope of use of Term SOFR and making limited refinements to sustain the availability of Term SOFR for use by borrowers in business loans. In particular, however, it was noted that the Task Force is not considering any material relaxations of the substance of the ARRC’s best practice recommendations on the scope of use of Term SOFR including the provision that no interdealer trading of any Term SOFR-linked derivatives is recommended.

The ARRC Chair ended the meeting by directing members to review and finalize the September 8 Meeting Readout. The ARRC Chair then thanked the members and reminded everyone of the next ARRC meeting to be held in person on November 9th.
**Attendance at the September 8, 2022 Meeting**

**ARRC Members**
- American Bankers Association
- Association for Financial Professionals
- Bank of America
- Bank of America
- Bank of New York Mellon
- Bank of New York Mellon
- Citigroup
- Citigroup
- Citigroup
- CME Group
- Comerica
- CRE Finance Council
- CRE Finance Council
- Deutsche Bank
- Equitable Life
- Fannie Mae
- Fannie Mae
- Federal Home Loan Bank of New York
- Federal Home Loan Bank of New York
- Freddie Mac
- Freddie Mac
- Freddie Mac
- GE
- GE
- Goldman Sachs
- Goldman Sachs
- Government Finance Officers Association
- HSBC
- HSBC
- Huntington National Bank
- Intercontinental Exchange
- International Swaps and Derivatives Association
- KKR
- London Clearing House
- Loan Syndications and Trading Association

*Hu Benton*
*Tom Hunt*
*Janet Choi*
*Sonali Theisen*
*Oliver Bader*
*Jason Granet*
*Jeanne Naughton-Carr*
*Peter Phelan*
*Luis Asturizaga*
*Rodrigo Fernandez*
*Jeannine Hyman*
*Agha Mirza*
*Stasie Kostova*
*Lisa Pendergast*
*Raj Aidasani*
*Kayam Rajaram*
*Julien Zusslin*
*Robert Ives*
*Wells Engledow*
*Rei Shinozuka*
*Philip Scott*
*Ameez Nanjee*
*Guim Barbour*
*Allan Krinsman*
*Mike Taets*
*Fred Robustelli*
*Richard Chambers*
*Guillaume Helie*
*Patrick McCoy*
*Shirley Hapangama*
*Oresta Mehta*
*Larry Heath*
*Harvey Flax*
*Ann Battle*
*Alice Wang*
*Emilio Jimenez*
*Tal Reback*
*Phil Whitehurst*
*Meredith Coffey*
Loan Syndications and Trading Association
Tess Virmani*
MetLife
Joseph Demetrick
MetLife
William Ding*
MetLife
Alex Strickler*
Morgan Stanley
Tom Wipf
Morgan Stanley
Maria Douvas-Orme
Morgan Stanley
Matt Ochs
National Association of Corporate Treasurers
Tom Deas*
PIMCO
Jerry Woytash*
PNC
Alex Spiro*
Prudential Financial
Chris McAlister
Securities Industry and Financial Markets Association
Chris Killian*
Structured Finance Association
Kristi Leo*
TD Bank
Priya Misra
TD Bank
Greg Moore*
U.S. Chamber of Commerce
Kristen Malinconico*
Wells Fargo
Alexis Pederson
Wells Fargo
Jessica Murphy*
World Bank
Don Sinclair*
Ex-Officio ARRC Members
Commodity Futures Trading Commission
Alicia Lewis*
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
Sophie Legrand-Green
Jamie Pfeifer
Federal Reserve Bank of New York
Nathaniel Wuerffel
Federal Reserve Bank of New York
Jason Friedman*
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
Ginnie Mae
Carol Vilsack*
Ginnie Mae
Diego Leguizamon*
New York State Department of Financial Services
Steven Kluger*
Office of the Comptroller of the Currency
Kevin Walsh
Office of the Comptroller of the Currency
Ang Middleton*
U.S. Department of Housing and Urban Development
Maria Chelo De Venecia*
U.S. Securities and Exchange Commission
Michelle Danis*
U.S. Securities and Exchange Commission
U.S. Treasury
U.S. Treasury

Observers
Bank of Canada
BlackRock
BNP Paribas
Brunswick Group
Cadwalader
Deloitte
Morgan Lewis
State Street
Venerable

Jason Leung*
Sally Au Yeung*
Daniel Harty*

Sheryl King
Alexander Krol*
Simon Winn
Nathan Kline*
Lary Stromfeld
Alexey Surkov
Jon Roellke*
Scott Longo*
Charles Schwartz*

*Indicates virtual participation.
## ARRC Sentiment Survey - Responses Overview

**Overall:**
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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<td>a:</td>
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<td></td>
<td>b:</td>
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**Derivatives:**
The LIBOR Transition is progressing:
- a) Smooth
- b) Generally smooth, working through some obstacles
- c) Significant obstacles

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

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

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

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<td>(10 responses)</td>
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<td>a:</td>
<td>10.0%</td>
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<td>b:</td>
<td>90.0%</td>
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<td>57.1%</td>
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<td>b:</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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<tr>
<td></td>
<td>(10 responses)</td>
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<tr>
<td>a:</td>
<td>70.0%</td>
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<tr>
<td>b:</td>
<td>30.0%</td>
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<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>(9 responses)</td>
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<td>a:</td>
<td>22.2%</td>
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<td>77.8%</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 similar to areas highlighted in the July 2022 survey results. Areas of focus include:
  - Federal Reserve rule-making process and determination of replacement benchmark rate per the federal LIBOR legislation
  - The interplay between the Federal Reserve rules and any synthetic USD LIBOR rate.
  - Very encouraging progress in SOFR futures and options; particularly following CME’s SOFR First for Options initiative
  - Remediation of legacy contracts: relatively slow but activity has picked-up in the second quarter
  - 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 Operations & Infrastructure

Update on activities competed over the past month

- DTCC established two working groups to work with user community to capture detailed requirements
  - Corporate Trust / Agent Working Group
    - 4 meetings held
  - Broader Industry Working Group
    - 2 meeting held
- Held several session with corporate trustee and their legal advisors to finalize term sheets
  - Term SOFR is finalized
  - O/N Rates in progress
- Have narrowed focus of Lens solution is on contracts governed by US Law

Topics for Discussion

- With Lens solution now in design, we are starting to think about:
  - How best to communicate these changes to market participants
    - Please let us know if there is an upcoming event that would help “spread the word”
  - Is there a way to develop a “score card” that can be used in 2023 to track the percentage of notifications received? Would that be of value?
  - Are there other topics that this group should be working on?
LIBOR TRANSITION

DTCC Update to the ARRC

August 24, 2022
Centralized Communication Portal

- **Web attributes:**
  - No formal sign-up process
  - Safe and secure
  - Valid email required (no personal email domains allowed)
  - Several input methods – templates included
  - Easy to use – user materials available
  - Form validation provided

- **Party responsible for inputting rates**

- **Secure Public Domain / Web Input Portal**

- **Manual input for individual securities and PDF upload**

- **Upload .csv file for multiple securities**

- **Automated data either via API or a file transmission**

- **Pull information from LENS as a PDF attachment**
Basic Web Input Flow – High Level Demo

1. Authentication
2. Input
3. Upload
4. Final Validation
5. Transmission

• User navigates to new UI
• User inputs a valid business domain and receives an email confirmation with a verification code

The user inputs the code from their email and is able to proceed

The user completes a ‘Captcha’ to certify they are not a bot.

• The user chooses a template and completes a form
• The user uploads an attachment after completing the form. The user then submits the transaction

• The data is then transmitted over DTCC’s network through LENS and the output to the investor community

*Wireframe / screen design in progress
Examples of what output may look like (subject to change)

- JSON file layout (high-level)

```
"MessageDateTime": "2022-08-03T10:28:34",
"NumberOfRates": "2",
"Type": "SOFR",
"Rate": [  
  {  
    "Security": {  
      "CUSIP": "54028AAA0",
      "DeterminingPartyType": "Paying Agent",
      "SubmitterInformation": "Transfer Agent",
      "SubmitterCompany": "Bank of New York",
      "SubmitterEntityName": "Paying Agent",
      "SubmitterContactEmail": "jsmith@bnym.com",
      "DeterminingPartyCompany": "Deutsche Bank",
      "DeterminingPartyEntityName": "Paying Agent",
      "DeterminingPartyContactEmail": "jdoe@db.com"
    },
    "Benchmark Replacement": {  
      "FallbackRate": "SOFR",
      "FallbackRateTenor": "1M",
      "FallbackRateIndexTicker": "TERM"
    },
    "SpreadAdjustment": {  
      "SpreadAdjustmentAmount": "0.2555",
      "ClientSpreadAmount": "0.005"
    },
    "EffectiveChanges": {  
      "FixingDate": "202304-24"
    }
  },
  {  
    "Security": {  
      "CUSIP": "54028AAA0",
      "DeterminingPartyType": "Paying Agent",
      "SubmitterInformation": "Transfer Agent",
      "SubmitterCompany": "Bank of New York",
      "SubmitterEntityName": "Paying Agent",
      "SubmitterContactEmail": "jsmith@bnym.com",
      "DeterminingPartyCompany": "Deutsche Bank",
      "DeterminingPartyEntityName": "Paying Agent",
      "DeterminingPartyContactEmail": "jdoe@db.com"
    },
    "Benchmark Replacement": {  
      "FallbackRate": "SOFR",
      "FallbackRateTenor": "1M",
      "FallbackRateIndexTicker": "TERM"
    },
    "SpreadAdjustment": {  
      "SpreadAdjustmentAmount": "0.2555",
      "ClientSpreadAmount": "0.005"
    },
    "EffectiveChanges": {  
      "FixingDate": "202304-24"
    }
  }
]
```

- Possible PDF layout in LENS

```
LIBOR Centralized Communication Solution
Descriptive Replacement Rate Detail
LG20220803-018

Term Type: Term SOFR
CUSIP: 54028AAA0
Replacement Choice Made?: Yes
Updated Submission?: No
Term SOFR Index Used: CME Term SOFR
Fallback Tenor: 1M
Fallback Rate Index Ticker: CMESO
Spread Adjustment Amount (bps): 0.11448
Client Spread Amount (bps): 0.005
Accrued Start Date: 202307-01

For more information, please contact:
Submitter:
John Smith ABC Transfer
Transfer Agent jsmith@abctransfer.com

Information Source/Provider:
Jane Doe USA Calculation Corp
Calculation Agent Jane.doe@usacalccorp.com
```
Next Steps

• Finalize review of the Term SOFR worksheet
• Continue review of the Overnight ARR benchmark details
• Advance technology build activities for web/UI input portal
• Begin outreach plan for subscriptions to output (i.e., file/API)
• Questions: mschill@dtcc.com
**LIBOR Transition Timeline**

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

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

- **AUG-SEPT 2022**
  - DTCC Specs Available

- **NOVEMBER 2022**
  - Industry Testing
    - DTCC 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

- **SEPT-OCT 2022**
  - DTCC Demo

- **JAN-MAR 2023***
  - Production Go-live

*Deployment contingent upon successful testing period*