MF SOFR Loans Servicing & Investor Reporting Training

August 27, 2020
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The publication of LIBOR is expected to cease at the end of 2021.

The Secured Overnight Financing Rate (SOFR) has been chosen by the Alternative Reference Rates Committee (ARRC) as the best alternative index to USD LIBOR.

- SOFR is a broad measure of the cost of borrowing cash overnight collateralized by U.S. Treasury securities in the repurchase agreement (repo) market.
- SOFR is produced by the New York Federal Reserve in cooperation with the Office of Financial Research.
  - SOFR Average publication page: https://apps.newyorkfed.org/markets/autorates/sofr-avg-ind

“SOFR is a much more resilient rate than LIBOR because of how it is produced and the depth and liquidity of the markets that underlie it. As an overnight secured rate, SOFR better reflects the way financial institutions fund themselves today. The transaction volumes underlying SOFR regularly are around $1 trillion in daily volumes. The volumes underlying SOFR are far larger than the transactions in any other U.S. money market. This makes it a transparent rate that is representative of the market across a broad range of market participants and protects it from attempts at manipulation.”

- https://www.newyorkfed.org/arrc/sofr-transition
SOFR Background: SOFR vs. LIBOR Comparison

- Historically, 30-day Average SOFR has trailed 1-month LIBOR
  - This is in part driven by SOFR being secured by Treasury securities, compared with LIBOR which is unsecured.

<table>
<thead>
<tr>
<th>Date</th>
<th>30-day Average SOFR</th>
<th>1-Month LIBOR</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/12/2020</td>
<td>0.10%</td>
<td>0.16%</td>
<td>-0.06%</td>
</tr>
<tr>
<td>8/11/2020</td>
<td>0.10%</td>
<td>0.16%</td>
<td>-0.06%</td>
</tr>
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<td>8/10/2020</td>
<td>0.10%</td>
<td>0.17%</td>
<td>-0.07%</td>
</tr>
<tr>
<td>8/7/2020</td>
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<td>0.16%</td>
<td>-0.06%</td>
</tr>
<tr>
<td>8/6/2020</td>
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<td>0.16%</td>
<td>-0.05%</td>
</tr>
<tr>
<td>8/5/2020</td>
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<td>0.15%</td>
<td>-0.05%</td>
</tr>
<tr>
<td>8/4/2020</td>
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<td>0.15%</td>
<td>-0.04%</td>
</tr>
<tr>
<td>8/3/2020</td>
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<td>0.16%</td>
<td>-0.05%</td>
</tr>
<tr>
<td>7/31/2020</td>
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<td>0.15%</td>
<td>-0.05%</td>
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<tr>
<td>7/30/2020</td>
<td>0.11%</td>
<td>0.16%</td>
<td>-0.05%</td>
</tr>
</tbody>
</table>
Key LIBOR Transition Dates

SOFR Loan Quoting Begins
September 1, 2020
(Discontinue new LIBOR-indexed quotes)

LIBOR Full Underwriting Package Cut-off
November 9, 2020

LIBOR-indexed Loan Application Cut-off
September 30, 2020

LIBOR Final Delivery Package Submission Cut-off
December 11, 2020

LIBOR Purchase Cut-off
December 31, 2020
New Offering Index & Payment Structure

- **Index:** 30-day Average SOFR – “In Advance”
- **Publisher:** Federal Reserve Bank of New York
- **Determination Date/Lookback:** One day (unchanged)

  - “Determination Date” means, with respect to any determination of the Index Rate applicable to an Interest Adjustment Period:

    1. If the Index is Compounded SOFR, 3:00 p.m. (New York time) on the U.S. Government Securities Business Day most recently preceding such Interest Adjustment Period;

    2. If Compounded SOFR does not so appear on such day, 3:00 p.m. (New York time) on the first preceding U.S. Government Securities Business Day for which such rate was published by the Index Source; or

- **Interest Calculation Basis:** Actual/360 (unchanged)
- **Interest Rate/Payment Reset Frequency**
  - Conventional/Seniors/Targeted Affordable: Monthly (unchanged)
  - SBL Hybrid: Every 6 months during the floating-rate period (unchanged)
<table>
<thead>
<tr>
<th>Metric</th>
<th>LIBOR</th>
<th>SOFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>London Inter-Bank Offered Rate (LIBOR)</td>
<td>Secured Overnight Financing Rate (SOFR)</td>
</tr>
<tr>
<td>Index Rate Term</td>
<td>TAH &amp; Conventional: 1-month Term Rate</td>
<td>FRBNY-published 30-day Average</td>
</tr>
<tr>
<td></td>
<td>SBL Hybrid: 6-month Term Rate</td>
<td>SOFR is known &quot;In Advance&quot; of Accrual Period</td>
</tr>
<tr>
<td>Publisher</td>
<td>Intercontinental Exchange (ICE)</td>
<td>Federal Reserve Bank of New York</td>
</tr>
<tr>
<td>Access Provider</td>
<td>Various sources that publish LIBOR as described in the Note.</td>
<td>FRBNY website</td>
</tr>
<tr>
<td>Interest Accrual Period</td>
<td>Calendar Month</td>
<td></td>
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<tr>
<td>Interest Rate Reset Frequency</td>
<td>Conventional &amp; Targeted Affordable: Monthly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SBL Hybrid: Every 6 months during floating-rate period</td>
<td></td>
</tr>
<tr>
<td>Rate Determination Date</td>
<td>1st day preceding the beginning of such Interest Accrual Period for</td>
<td>1st day preceding the beginning of such Interest Accrual Period for</td>
</tr>
<tr>
<td></td>
<td>which LIBOR has been released by the IBA</td>
<td>which 30-day Average SOFR has been released by the FRBNY</td>
</tr>
<tr>
<td>Loan Installment Due Date/Frequency</td>
<td>Monthly, first day of calendar month</td>
<td></td>
</tr>
</tbody>
</table>
LIBOR is a term rate, meaning it is “forward-looking” and represents a rate that is fixed over a specified term, with a maturity date in the future.

In contrast, 30-day Average SOFR represents a “backward-looking” calculated rate; calculated by taking the compounded average of daily SOFR over the preceding 30 days.

SOFR “in advance” is defined as referencing an average of SOFR observed before the current interest accrual period begins.

An “in arrears” structure would reference an average of SOFR over the current interest accrual period; however, it provides very little notice before payment is due.
SOFR Interest Calculation Example

Publisher: SOFR Average publication page: https://apps.newyorkfed.org/markets/autorates/sofr-avg-ind
Lender Servicing & Investor Reporting Impacts

Optigo® lenders will follow a very similar process for SOFR new offering to LIBOR:

- **New Index and Source:** Lenders should have system changes and processes to accommodate the new indices and anticipate a SOFR term index in the future.

- **Maintaining ARM Terms:** Similar to existing LIBOR, servicers must maintain appropriate mechanisms to accommodate interest rate caps, truncation, and reset frequencies in accordance with the new note.

- **Investor Reporting:** There is no impact to reporting timelines or loan activity date reported. Freddie Mac will compare expected interest amounts with lender reported interest amounts as usual.
Loan Document Modifications

- Updated Loan Documents for SOFR Loans have been posted on our website.
  - New floating-rate note form for SOFR loans
  - Updated rate cap rider to the loan agreement
  - New guaranty rider for SOFR loans with LIBOR caps
  - Updated seller representations and warranties (solely to reflect floating rate can be based on SOFR or LIBOR)

**Conventional Cash SOFR Loan Documents**
- Note – Floating Rate (30-Day Average SOFR) [link] (08-03-2020)
- Note – Floating Rate – Value Add Transaction (30-Day Average SOFR) [link] (08-03-2020)
- Rider to Guaranty – SOFR Mortgage with Initial LIBOR Cap [link] (08-03-2020)
- Rate Cap Agreement Reserve Rider to Loan Agreement [link] (08-03-2020)

**SBL SOFR Note**
- Note Hybrid ARM – SBL (30-Day Average SOFR) [link] (08-03-2020)

**TEL SOFR Loan Documents**
- Project Note – Variable Rate – Forward – TEL (30-Day Average SOFR) [link] (08-03-2020)
- Project Note – Variable Rate – Immediate Funding – TEL (30-Day Average SOFR) [link] (08-03-2020)
- Rate Cap Agreement Reserve Fund Rider to CCA – TEL [link] (08-03-2020)
- Rider to Guaranty – SOFR Mortgage with Initial LIBOR Cap – TEL [link] (08-03-2020)

Term SOFR “Jump”

- Although Term SOFR is not currently available, it is expected to become available at a later date, potentially in 2021.
  - SOFR note form provides that the index will automatically transition (“jump”) from 30-day Average SOFR to 1-month term SOFR when available. “Availability” will occur only when ARRC endorses Term SOFR and when Freddie Mac determines that transition to Term SOFR is technically, administratively, and operationally feasible.

SOFR Note – new definitions related to the Term SOFR “jump”

- “Term SOFR Transition” means the transition of the SOFR rate from compounded SOFR to Term SOFR.
- “Term SOFR Transition Date” means the date on which the Term SOFR Transition occurs, which will be the date the lender determines in its sole discretion that the Term SOFR Transition will be operationally, administratively and technically feasible, provided that the Term SOFR Transition may occur only if such transition will not cause an adverse tax event.

- SOFR Floating Rate Note, Section 3(q)(ii):

  (ii) If a Term SOFR Transition occurs:

  (A) Lender will provide Notice to Borrower of the Term SOFR Transition Date before the first Installment Due Date following the Term SOFR Transition Date.

  (B) Beginning on the Term SOFR Transition Date, interest will accrue at the Floating Interest Rate calculated using Term SOFR as specified in such Notice, without the necessity of any amendment or other modification of this Note.
Interest Rate Caps – Index Optionality

- **Interest Rate Cap Optionality:** Borrowers will be permitted to purchase either a LIBOR- or SOFR-indexed third-party cap for SOFR-indexed loans. **This optionality will not impact timing of rate cap determination; the borrower may make their final choice after rate-lock.**

- If an initial LIBOR cap is purchased, the following requirements apply:
  - Replacement Cap Reserve: Equal to 125% of the cost of a replacement SOFR cap.
  - Accelerated Reserve Collection: Borrower will be required to make monthly replacement cap reserve deposits with the servicer sufficient to purchase a replacement SOFR-indexed third-party cap within 12 months of the loan closing.
  - Lender Replacement Cap Purchase: Lender will have the right to apply amounts in the reserve toward the purchase of a replacement SOFR-indexed third-party cap if 30-day Average SOFR is above 1.25% and higher than 1-month LIBOR by more than 0.25% on the SOFR Determination Date for any interest adjustment period.
  - Reserve Shortfall Guarantor: A guarantor will guaranty payment of the difference between the reserve amount and the cost of the replacement cap, even if the guarantor requirement is otherwise waived.
  - ISDA LIBOR Fallback Protocol: Borrower and the cap provider must agree to use Freddie Mac’s updated form LIBOR cap documentation, including provisions governing the transition to SOFR.

- If an initial SOFR cap is chosen, no change to existing cap policy will apply.

- Freddie Mac expects that the option to purchase a LIBOR cap will be phased out over a period of months as the SOFR derivatives market matures and the availability of SOFR caps increases.
FAQ #1: What happens to LIBOR caps when LIBOR cessation occurs?
Borrowers will not need to purchase a new cap until the existing cap expires, because the existing cap will remain in effect after LIBOR ceases to be published

- On older LIBOR caps, the cap provider will pick a new index in consultation with Freddie Mac, and that index will govern the cap going forward.
- On newer LIBOR caps that reference the ISDA LIBOR fallback protocol, the parties will be required to adhere to the protocol.

FAQ #2: Where can I find information on SOFR cap pricing and availability?
Freddie Mac does not provide interest rate caps for floating-rate loans, so we are unable to provide cap pricing indications. For information related to SOFR cap pricing and availability, we recommend that Optigo lenders reach out to their internal hedging group or preferred hedge advisory/consulting firm.

FAQ #3: If a borrower elects to purchase a LIBOR cap for a SOFR loan, how do the replacement cap reserve requirements differ compared with a SOFR cap?
Larger monthly replacement cap reserve deposits will be required, since the reserve must be fully funded within 12 months instead of immediately prior to termination of the existing cap (typically 3 years). The total reserve amount remains unchanged, and will be equal to 125% of the cost of a replacement SOFR cap with a 2-year term.
- Detailed information can be found on our website at: [https://mf.freddiemac.com/libor/index.html](https://mf.freddiemac.com/libor/index.html)
- Feel free to contact the [MFLIBOR@freddiemac.com](mailto:MFLIBOR@freddiemac.com) mailbox and/or loan accounting representative with your questions.
Thank you for attending today’s SOFR training