FAQs on the Secured Overnight Financing Rate

Background

As previously communicated and in keeping with regulatory guidance, beginning on January 1, 2022, we will no longer offer USD LIBOR pricing for new, extended, increased, repriced or renewed facilities. The Secured Overnight Financing Rate, or SOFR, is our preferred replacement rate methodology for USD facilities.

FAQs/Talking Points

1. **What is SOFR?**

   SOFR is a broad measure of the cost of borrowing cash overnight collateralized by Treasury securities in the overnight Treasury repurchase agreement market. SOFR was first published by the Federal Reserve in April 2018.

2. **What pricing options are available?**

   Several SOFR variants are available, however we believe that the one that looks and feels the most like LIBOR because it has a term structure is Term SOFR as published by the CME Group as forward looking 1, 3, 6 and 12-month rates. Depending on your usage of Term SOFR rates, you should check with CME Group to determine if you are required to obtain a license and ensure that appropriate action is taken. Available SOFR options are shown below:

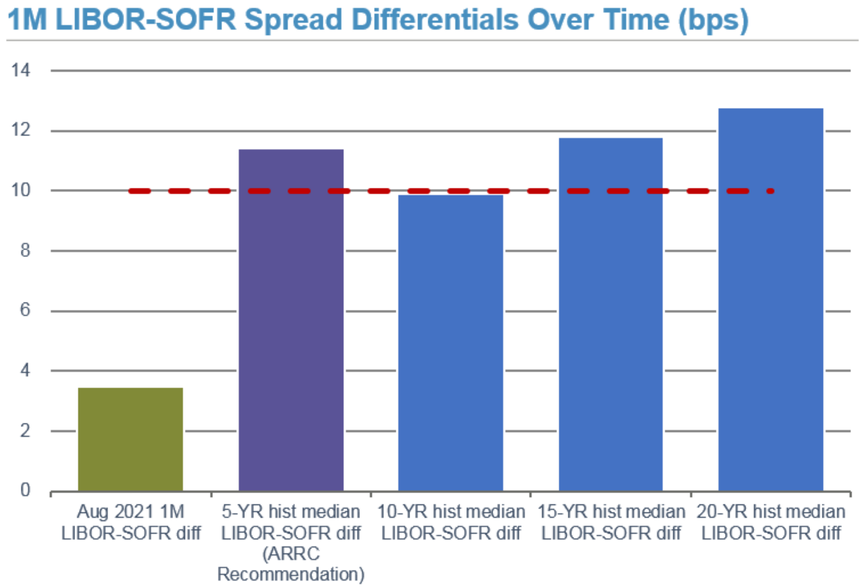
	Is interest expense known in advance like LIBOR?	Published by	Tenors
Forward looking CME Term SOFR	Yes	CME Group	1M, 3M, 6M 12M
Daily compounded SOFR in advance	Yes	Federal Reserve	1M, 3M, 6M
Daily Simple SOFR	No	Calculated based on overnight SOFR	1M to 12M
Daily compounded SOFR in arrears	No	Calculated based on overnight SOFR	1M to 12M

3. **What is a Credit Spread Adjustment (CSA) and why is it needed?**

LIBOR and Risk-Free Rates ("RFRs"), such as SOFR, are calculated using separate methodologies, and therefore there may be differences between the published rates of the two benchmarks. To accommodate the differences observed and minimize value transfer to the extent possible when transitioning from LIBOR to RFRs, industry working groups recommend using a credit spread adjustment.

The established market approach for the credit spread adjustment for fallbacks is based on the historical median with a five-year lookback period that calculates the difference between LIBOR and the alternative reference rate over five years' worth of daily data points. The ARRC has stated its recommended spread adjustments for fallback language in non-consumer cash products will be the same as the spread adjustments applicable to fallbacks in ISDA's documentation for USD LIBOR. The ISDA published CSAs are available at https://www.isda.org/2019/11/15/isda-publishes-results-of-consultation-on-final-parameters-for-benchmark-fallback-adjustments/.

For ease of use, communication and operational considerations, for many new or renewed loans booked on SOFR rates, Commercial Banking will apply a 10-basis-point credit spread adjustment to all SOFR tenors rather than the currently higher indicated ISDA credit spread adjustments (but note, for some loans, the market may dictate a higher credit spread adjustment). For existing LIBOR loans that transition from LIBOR to SOFR pursuant to fallback language, the credit spread adjustment will be determined as set forth in the existing loan documentation. Despite the current differential between SOFR and LIBOR, which are at historical lows (see green bars below), over longer-term periods of time (blue bars), we believe that our CSA for new or renewed loans of 10 bps is reasonable.



4. **I've heard about other credit-sensitive alternative rates. Can I use those for my facilities?**

While other replacement rates have emerged, regulators have cautioned market participants on the use of these rates. We prefer SOFR as the main alternative to USD LIBOR. National Working Groups have not endorsed any benchmark alternatives to LIBOR other than the alternative reference rates (i.e. SOFR, SONIA, SARON, €STR and TONA) and their respective term rates if available.

5. **I understand SOFR will be used for new, extended, increased, repriced or renewed facilities, but what about my existing facilities after December 31, 2021?**

With the exception of 1W and 2M tenors which are ceasing publication on December 31, 2021, existing facilities may continue on USD LIBOR pricing until the earlier of (1) such facility's maturity, increase, repricing or renewal date (a "Switch Date"), or (2) June 30, 2023. If a Switch Date is prior to June 30, 2023, the facility will be renewed with SOFR pricing. For facilities maturing after June 30, 2023 and where loan documents do not contain recent LIBOR replacement language, your banker will be reaching out to you in 2022 to amend the documentation to provide for a mechanism to transition to SOFR. Should you wish to move to a replacement rate before your maturity date or June 30, 2023, please contact your banker to discuss the options available.

6. **I prefer to hedge my SOFR loan exposure. Are SOFR hedges available?**

Hedges are available for loans booked in various SOFR methodologies. Please contact your banker for additional information.

7. **I have legacy LIBOR loan exposure under a credit/loan agreement closed before January 1, 2022. Can I still execute LIBOR hedges to fix my interest expense?**

Based on what we know today, yes. Execution of LIBOR based swaps in 2022 and beyond have been deemed risk-reducing and are allowed if being used to hedge legacy LIBOR based exposures. Please contact your banker for additional information.

8. **Where can I get more information around the transition?**

Please contact your coverage banker or visit our Leaving Libor webpage at https://www.jpmorgan.com/solutions/cib/markets/leaving-libor.