Commodity Futures Trading Commission
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"SOFR First" User Guide for Exchange-Traded Derivatives Transactions

Executive Summary

Pursuant to the Market Risk Advisory Committee's (MRAC) approval of the SOFR First Initiative[1] at the MRAC meeting on July 13, 2021, the MRAC Subcommittee on Interest Rate Benchmark Reform (Subcommittee) outlines best practices for market participants to consider vis-à-vis transitioning new LIBOR-based exchange-traded derivatives activity to SOFR activity in the near term.

All market participants are encouraged to ensure operational capability to transact in SOFR exchange-traded derivatives as soon as possible, and 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. Eurodollar futures and options contracts are LIBOR-based contracts, and while they include strong fallback language, market participants should consider the risks of a potential decline in liquidity for LIBOR instruments following the year-end supervisory deadline. Accordingly, market participants are encouraged to consider voluntary conversions of LIBOR risk to SOFR risk at this time and in advance of USD LIBOR's cessation on June 30, 2023. Because there is no identifiable "interdealer" market for exchange-traded LIBOR instruments, the Subcommittee could not determine a specific date prior to end-2021 on which dealers should transition exchange-traded interdealer derivatives activity from LIBOR to SOFR, and instead encourages all market participants to adopt the best practice of replacing use of LIBOR with SOFR in new contracts after end-2021.

Background

The Commodity Futures Trading Commission (CFTC) established the Interest Rate Benchmark Reform Subcommittee under the Market Risk Advisory Committee (MRAC) in 2018. The Subcommittee's mandate is to provide reports and recommendations to the MRAC regarding ongoing efforts to transition U.S. dollar derivatives and related contracts to a risk-free reference rate—the Secured Overnight Financing Rate (SOFR)—and the impact of this transition on the derivatives markets. The Subcommittee reports directly to the MRAC and does not provide reports and/or recommendations directly to the CFTC.

[1] The "SOFR First" Transition Initiative was approved on July 13, 2021 by the Market Risk Advisory Committee (MRAC). The views, analyses, and conclusions expressed herein do not necessarily reflect the views of the Commodity Futures Trading Commission or its staff. Reference to any products, services, websites, organizations, or enterprises, or the use of any, organization, trade, firm, or corporation name is for informational purposes only and does not constitute endorsement, recommendation, or favoring by the U.S. Government.

In July 2021, the MRAC approved a Subcommittee proposal for a series of best practice recommendations entitled "SOFR First". These recommendations represent a prioritization of trading in SOFR rather than USD LIBOR for particular market segments and products, which is designed to help market participants decrease reliance on USD LIBOR in light of US banking supervisory guidance that such activity should cease as soon as practicable and in any event by December 31, 2021[2,3,4]. The SOFR First recommendations include four distinct phases targeted at changing trading behavior of certain market participants. As designed, the four phases were to occur in sequential order targeting the following USD interest rate derivative products: linear swaps, cross-currency swaps, non-linear derivatives and exchange-traded derivatives. The first three phases of SOFR First have already occurred, with a focus on the interdealer market. The dates selected by the Subcommittee for SOFR First implementation were July 26 for linear swaps, September 21 for cross-currency swaps (and additional cross-currency swaps on December 13), and November 8 for non-linear derivatives.

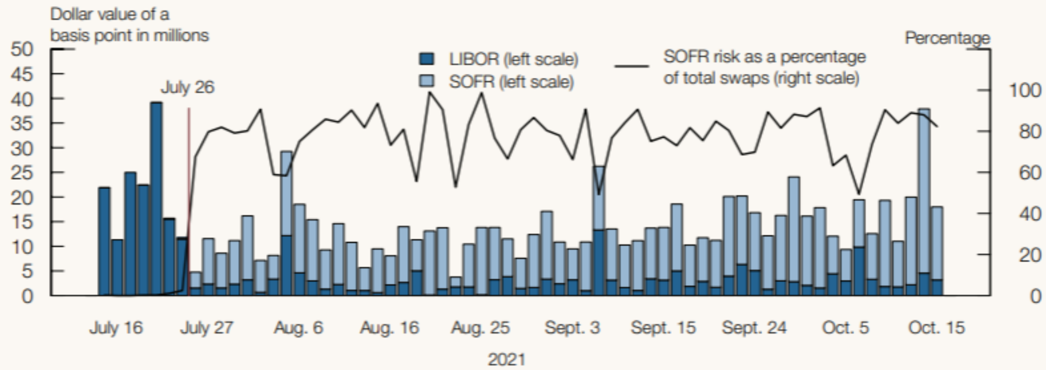
Following implementation of the first three phases of SOFR First, market participants have noted improved liquidity and trading conditions for impacted SOFR-based interest rate derivatives. The Federal Reserve's November 2021 Financial Stability Report noted that in the interdealer market for linear swaps, SOFR risk traded as a percentage of total swap activity was de minimis prior to the linear swaps SOFR First date on July 26; in the days following the implementation date of the recommendation, such SOFR activity was 60%-100% of total interdealer swap transactions and has remained in that range since. As a result, the share of SOFR trades in the overall swap market has increased as well.

[2] US banking supervisory guidance is directed at banks supervised by the Federal Reserve, the Federal Deposit Insurance Corporation or the Office of the Comptroller of the Currency. See the "Statement on LIBOR Transition" from November 30, 2020 (link) for more information.

[3] US supervisory guidance notes that there may be limited circumstances when it would be appropriate for a bank to enter into new USD LIBOR contracts after December 31, 2021, such as: (i) transactions executed for purposes of required participation in a central counterparty auction procedure in the case of a member default, including transactions to hedge the resulting USD LIBOR exposure; (ii) market making in support of client activity related to USD LIBOR transactions executed before January 1, 2022; (iii) transactions that reduce or hedge the bank's or any client of the bank's USD LIBOR exposure on contracts entered into before January 1, 2022; and (iv) novations of USD LIBOR transactions executed before January 1, 2022.

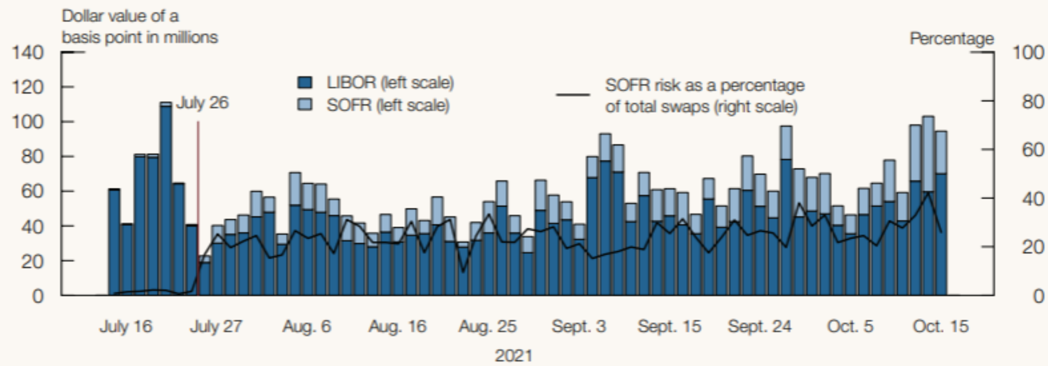
[4] The SOFR First best practices recommend replacing the use of LIBOR with SOFR in new contracts, and are not intended to recommend the replacement of indices other than LIBOR.

Figure A. Interdealer SOFR Swaps Risk Traded versus LIBOR Risk Traded



Source: Clarus Financial Technology Ltd., Swap Execution Facility data.

Figure B. SOFR Swaps Risk Traded as a Proportion of Total Swaps Risk Traded



Source: Clarus Financial Technology Ltd., Swap Execution Facility data.

Source: Financial Stability Report (November 2021); Board of Governors of the Federal Reserve System

Exchange-Traded Products

The initial phases of SOFR First applied to the interdealer market only. The rationale for this approach was twofold: 1.) to develop momentum in interdealer markets for SOFR derivatives liquidity such that end-users who prefer the most efficient trade execution may be economically incentivized to transact in SOFR, and 2.) to assist dealers (who are often associated with supervised banks) to prepare for US banking supervisory guidance to cease entering into new contracts that use USD LIBOR as a reference rate as soon as practicable and in any event by December 31, 2021. While this approach worked well for linear swaps, cross-currency swaps and non-linear derivatives, it is challenged when considering exchange-traded derivatives. Exchange infrastructure facilitates participant's direct trading with one another, and as a result, there is no identifiable "interdealer" market and dealers have a relatively smaller share of exchange-based market activity. This differs from over-the-counter (OTC) products, where dealers are typically the main providers of liquidity and there are clearer separations between interdealer and dealer-to-customer trading venues. 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.

For this reason, the Subcommittee, with the MRAC's approval, has published this User Guide for exchange-traded derivatives to promote understanding of the following four statements:

1. Eurodollar futures and options are LIBOR contracts;
2. SOFR futures trading volumes are growing rapidly, and SOFR futures exposures are larger than market participants realize, given the construction of LIBOR fallback language embedded in all Eurodollar futures contracts;
3. Liquidity for LIBOR contracts could decline after end-2021;
4. CME has created products to allow market participants to transfer risk from Eurodollar futures to SOFR futures in an efficient manner in advance of USD LIBOR's cessation on June 30, 2023.

Statement #1: Eurodollar futures and options are LIBOR contracts

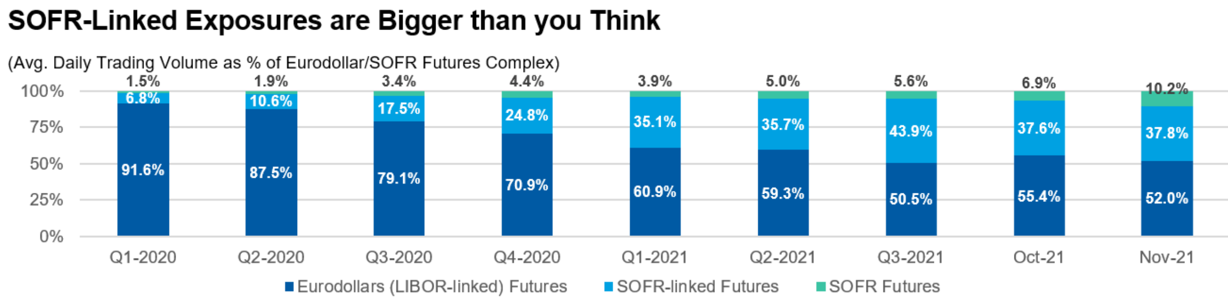
According to the CME Rulebook Chapter 452, the final settlement price of an expiring contract shall be 100.0000 minus the three-month U.S. dollar ICE LIBOR wholesale funding rate ("rate") for the second London bank business day immediately preceding the third Wednesday of the contract's named month of delivery. Such rate shall be as determined, and as first published, by ICE Benchmark Administration Limited.

Since Eurodollar futures rely on continued publication of USD ICE LIBOR for valuation and settlement, they are clearly LIBOR-based contracts. Other exchange-traded products, like Eurodollar options, include the same dependencies on USD ICE LIBOR, and thus are also LIBOR-based contracts. As market participants, including banks and non-bank entities, consider the types of transactions that would create safety and soundness risks after end-2021, they should be cognizant of the potential risks posed by such exchange-traded LIBOR contracts.

Statement #2: SOFR futures volumes are growing, and exposures are bigger than market participants realize

Since the launch of SOFR futures in May 2018, the volumes traded and number of counterparties trading these products have grown materially. In fact, average daily trading volume in November 2021 reached 300k, up 251% year over year. Open interest peaked on November 30, reaching a record 1.6 million contracts, up 136% year over year, and making SOFR futures among the fastest growing products in CME Group's 170+ year history. Additionally, there are over 700 firms (including global banks, hedge funds, asset managers, proprietary trading firms and others) that transact in SOFR futures. The firms that transact in SOFR futures account for over 93% of Eurodollar futures volumes today (*Source: CME*).

Effective March 29th, 2021, CME adopted SOFR-based fallbacks which are designed to convert (in June 2023) CME Eurodollar contracts and Cleared Swaps into the corresponding SOFR contracts using the spread for 3-month LIBOR fallbacks in ISDA documentation now fixed at 26.161 bps. Thus, for any Eurodollar contract maturing after June 2023, there is a clear and transparent mechanism by which these contracts will be valued and settled as CME 3-Month SOFR-based futures contracts. Price action in the market closely reflects this future conversion to SOFR, with longer dated Eurodollar futures contracts consistently priced very close to the fallback spread of 26.161 bps to related 3-Month SOFR futures contracts. Therefore, in thinking about the state of SOFR futures contract exposures, Eurodollar futures and options with expiries beyond June 2023, which account for about 38% of the entire Eurodollar and SOFR futures complex, already have embedded SOFR exposures (referred to as 'SOFR-linked' futures contracts) (*Source: CME*). That said, Eurodollar futures and options remain LIBOR contracts and as such could see a decline in liquidity in advance of cessation, posing risk to market participants who rely on the liquidity of the market to adjust their positions. Market participants with such exposures are encouraged to consider the most effective means of managing any such existing exposures over time given that liquidity in LIBOR markets, like Eurodollar futures and options, could decline. To avoid these risks, the MRAC recommends that all market participants adopt the best practice of replacing use of LIBOR with SOFR for new contracts, including exchange-traded derivatives, after end-2021.



Source: CME Group; Numbers may not add to 100% due to rounding

Statement #3: Liquidity for LIBOR contracts may decline after end-2021

In many markets where supervised banks are liquidity providers, it is reasonable to expect that the ease with which market participants trade LIBOR products may decline after 2021. As a result, the US banking supervisory guidance may affect most markets directly and indirectly. This could potentially result in greater transaction costs and lower market activity after 2021 and through LIBOR's cessation date in June 2023. The subcommittee notes that this potential liquidity deterioration may affect the broader rates trading environment, to the extent market participants further bifurcate trading between LIBOR and SOFR futures products. Market participants are encouraged to consider risk mitigation strategies, including voluntary conversion of LIBOR-based positions to SOFR-based positions where possible. By adhering to the best practices herein concerning operational capability to transact SOFR products and replacing use of LIBOR with SOFR for new contracts, including exchange-traded derivatives, after end-2021, market participants will be well-equipped to manage decreasing liquidity for LIBOR products as they transition their business to viable alternatives like SOFR in the near term.

Statement #4: CME has created products to allow market participants to efficiently transfer risk from Eurodollar futures to SOFR futures

US banking supervisory guidance calls on banks to cease entering into new contracts that use USD LIBOR as a reference rate as soon as practicable and in any event by December 31, 2021. Even so, some legacy Eurodollar futures and options exposures will exist and may need to be risk-managed in a manner consistent with that supervisory guidance. While Eurodollar futures and options already include SOFR-based fallback language, it is a market best practice to engage in voluntary transfer of LIBOR-based risk to SOFR-based risk where practicable. CME offers inter-commodity spread (ICS) products between Eurodollar futures and SOFR futures as an efficient tool for relative value trading and basis hedging, and to allow seamless risk transfer between the benchmark rates. Trading of such ICS products saw record volumes in October 2021. In order to further facilitate voluntary conversion activity, beginning January 10, 2022[5], CME Group will permit new reduced-tick SOFR futures-Eurodollar futures ICS trading. Such reduced-tick ICS products will reduce friction for participants moving positions from Eurodollar futures into 3-month SOFR futures by offering the functionality to trade at or very close to the fallback spread for 3-month USD Libor in ISDA documentation. Market

[5] Date subject to regulatory review

participants will be able to trade in 0.1 bps increments around the fallback spread (e.g., -0.2, -0.1, 0, 0.1, 0.2 bps, etc.). Such ICS contracts will be available for contract months beginning with September 2023, which is the first Eurodollar future maturity occurring after USD LIBOR cessation. Each spread trade will simultaneously execute a buy (sell) in 3-month SOFR futures vs. a sell (buy) in Eurodollar futures at a spread equal to 26.16 bps plus the traded price. Additionally, because the relationship between Eurodollar futures and SOFR futures is known and stable for contract months beyond the end of June 30, 2023, CME provides substantial margin offsets for positions in opposing directions between the same contract months. CME Clearing is planning to enhance margin efficiencies this month in applicable parts of the forward curve to further remove potential barriers to voluntary conversions of LIBOR risk to SOFR risk (*Source: CME*).

Recommended Best Practices

In light of the landscape for the exchange-traded derivatives markets and the four statements above, the Subcommittee, with the MRAC's approval, has produced the below best practices to market participants transacting in Eurodollar futures and options:

1. **All market participants that currently trade Eurodollar futures and options should ensure that they are operationally capable of transacting in SOFR futures and options as well as ICS products between Eurodollar futures and SOFR futures as soon as possible**. While there is currently significant crossover between the firms that trade Eurodollar futures and SOFR futures, it is likely that there are some firms who have yet to transact in SOFR futures altogether. Ensuring operational capability to execute SOFR-based transactions is a critical milestone that all market participants should meet prior to end-2021.
2. **All market participants should replace use of LIBOR with SOFR for new contracts, including exchange-traded derivatives, after end-2021**. US banking supervisory guidance to cease entering into new contracts that use USD LIBOR as a reference rate as soon as practicable and in any event by December 31, 2021 directly applies to institutions supervised by the Federal Reserve System, the Federal Deposit Insurance Corporation and the Office of the Comptroller of the Currency. This guidance is expected to prompt supervised banks to replace use of LIBOR with SOFR for new contracts, except in certain limited exemptions provided in the guidance related to hedging or market making for legacy LIBOR contracts[6]. While this guidance directly applies only to supervised banks, the Subcommittee believes using SOFR in place of LIBOR for new contracts, including exchange-traded derivatives, also represents sound risk management strategy for non-bank market participants.

[6] US supervisory guidance notes that there may be limited circumstances when it would be appropriate for a bank to enter into new USD LIBOR contracts after December 31, 2021, such as: (i) transactions executed for purposes of required participation in a central counterparty auction procedure in the case of a member default, including transactions to hedge the resulting USD LIBOR exposure; (ii) market making in support of client activity related to USD LIBOR transactions executed before January 1, 2022; (iii) transactions that reduce or hedge the bank's or any client of the bank's USD LIBOR exposure on contracts entered into before January 1, 2022; and (iv) novations of USD LIBOR transactions executed before January 1, 2022.