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Life After LIBOR: Understanding SOFR and Next Steps in the Transition

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Inside…

In March 2019, CoBank released a report "Life after LIBOR: What it is, what are its problems and what might be next?" With that foundation, the question now is where do we go from here?

Introduction

On November 17, 2014, the Federal Reserve convened the Alternative Reference Rate Committee (ARRC) in response to recommendations from the Financial Stability Oversight Council and the Financial Stability Board that an alternative benchmark rate to LIBOR, used to set interest rates for the majority of financial transactions, be identified.

The membership of the ARRC at that time was composed of major U.S. and international derivative dealers along with U.S. regulators. Other market participants such as buy-side firms were represented through an advisory group. The ARRC's goal was to identify an alternative benchmark rate that would be determined by transaction-level data and not the expert judgement from panel banks. The group's primary focus was on the transition of the derivative market, but members understood that the benchmark rate would also need to function in the cash markets.

For the next two years, the ARRC reviewed fixed income markets that could be utilized to determine a benchmark rate. Several possible benchmark rates were rejected, including policy rates (e.g. interest rate on excess reserves), treasury bills and bonds, overnight index swap rates and other term unsecured rates.

Understanding SOFR

On June 22, 2017, the ARRC announced the selection of the Secured Overnight Financing Rate (SOFR) as the alternative U.S. benchmark rate. This was a newly created index based on overnight U.S. Treasury repurchase agreement transactions, known as the "repo" market. The market was estimated to range from $600 billion to $1 trillion each day.

The Federal Reserve Bank of New York is the calculation agent. It first published the SOFR index rate on April 3, 2018. it continues to publish the new SOFR benchmark rate each U.S. business day based on the previous day's activity. SOFR is based fully on transaction-level data from three sources:

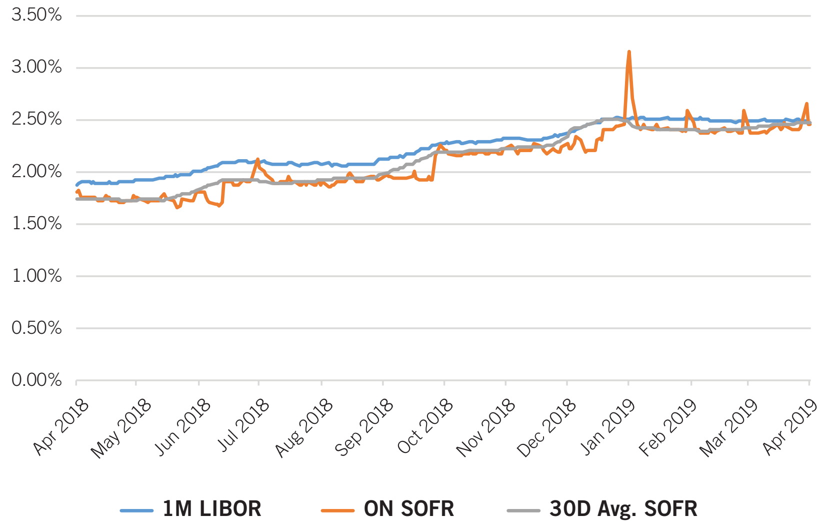
- Tri-party Treasury repo transactions, excluding transactions in which the Federal Reserve is a counterparty;
- Treasury repo transactions occurring within the Depository Trust & Clearing Corporation's General Collateral Financing service; and
- Bilateral Treasury repo transactions cleared through the Fixed Income Clearing Corporation's Delivery-versus-Payment service

Data about these transactions are compiled each day. The lowest 25% of transactions are filtered out to limit the impact of Treasury issuances that are deemed to be on "special," and then the volume-weighted median rate is calculated and published as the reported SOFR for that day.

While both LIBOR and SOFR are now utilized to index floating-rate transactions, the two benchmarks have some significant differences.

The first difference is that LIBOR represents an unsecured transaction between two financial institutions. Consequently, LIBOR includes an implied, theoretical credit spread that is roughly the equivalent to a generic AA- to A+ financial institution. In contrast, the transactions underlying SOFR are secured with U.S. Treasury collateral and contain virtually no credit spread. Therefore, during periods of financial stress, SOFR may not adjust to account for increases in borrowing costs; in periods of stability, the cost of borrowing may also not decrease or tighten.

EXHIBIT 1: SOFR vs. LIBOR, year one



Source: Federal Reserve Bank of New York

Another significant difference is that LIBOR has a forward-looking term structure from overnight to 1-year while SOFR is currently only an overnight rate. The Federal Reserve staff has been adamant that the industry should not expect any forward-looking term SOFR rates until late-2021. Consequently, the initial SOFR indexed floating-rate products will need to be referenced to overnight (ON) SOFR.

The reason for the lack of a forward-looking term SOFR rate is that there are no significant term repo transactions that can be utilized to determine forward-looking term SOFR rates. Any forward-looking term rates would need to be derived from the futures or swap market that are still under development and have only been around for the past year. Additionally, it will take the financial markets some time to develop a consensus methodology and assumptions related to building implied forward rates for SOFR.

In the first year that SOFR was published, the 30-day average SOFR rate was 0.11% lower than 1-month LIBOR and the 90-day average SOFR rate was 0.34% lower than 3-month LIBOR *(Exhibit 1)*.

It is important to remember that ON SOFR is based on actual transactions in the Treasury repo market, which can be quite volatile, but interest accrual on transactions will be based on average SOFR rates for the payment period, which are more stable. The most volatile periods in the Treasury repo market are usually at month-ends, quarter-ends and year-ends. Most attribute this volatility to market participants positioning their balance sheets for reporting periods. This is particularly significant for financial institutions as they try to manage regulatory capital and liquidity ratios. At year-end 2018, SOFR spiked 0.54% and then moved higher by 0.15% on the first day of 2019. It took an additional two days to return to the pre-year-end levels. This spike at year-end increased the 30-day average SOFR by 0.07%, which would determine the associated interest accrual.

The Federal Reserve has acknowledged the issue and is looking at alternatives such as the creation of an "overnight standing repo facility" or "ceiling tools" to mitigate the repo market volatility.

Next steps in the transition

In the next few months, the ARRC, the International Swaps and Derivatives Association (ISDA) Benchmark Working Group and the Commodity Futures Trading Commission (CFTC) Interest Benchmark Reform Subcommittee will be reviewing and releasing proposals for the functional aspects of the structure of the new recommended reference rate. Most of the proposal will be in the form of recommended voluntary fallback language, but these recommendations will also influence the structure of new SOFR indexed products. The items that will need to be developed include:

- Triggers: What events will trigger a conversion of LIBOR indexed transactions to the new alternative reference rate?
- Defining the new reference rate: What specific form of the recommended rate will be available and utilized?
- Adjustment to rates for legacy contracts: What adjustments to the new reference rate will be needed to avoid any transfer of value?
- Interest accrual calculation conventions: What form will become the market consensus for calculation of interest for transactions?
- Legal documents: What form will the required legal documents take?

CoBank will continue to monitor developments in the market and recommendations by regulators and advisory groups, and will provide periodic updates to our customers.