

An Observation on the Question of a SOFR Term Rate

NOVEMBER 2018

Risk Transfer Benefits Borrowers in Exchange for Eliminating the Forward-looking Term Rate

In the conversation about the Secured Overnight Funding Rate (SOFR), it is important to identify the fundamental risk transfer already occurring in the move from the London Interbank Offer Rate (LIBOR) to SOFR, considered a risk-free term rate. Borrowers benefit since the cost-of-funds risk reverts to the lenders. Borrowers also benefit since lenders are likely to visibly price risks that were previously concealed in the aggregate LIBOR + spread pricing where LIBOR was tenor-independent. In exchange for these benefits, borrowers could eliminate the use of term rates set in advance and transition to a backward-looking rate.

Risk Transfer from Borrower to Lender

- **LIBOR is a cost-of-funds index.** In times of bank funding stress, borrowers pay more, i.e., the borrower pays for the bank's additional cost of raising funds in the market. This cost-of-funds method has always protected banks from the systemic risks of the funding market. Banks retain their own idiosyncratic funding risk.
- **SOFR does not reflect banks' cost of funds.** Instead, the SOFR benchmark represents the shortest time frame with the least possible risk and broadest possible participant set. It excludes systemic bank funding risk.
- **Borrowers win with SOFR,** because the base borrowing rate no longer moves against them in times of bank funding stress. This was core in the selection of SOFR as a replacement benchmark, as this was very attractive from a macro-prudential standpoint to government and regulators. It also is lower because it contains no credit, liquidity, or term premium.
- **Lenders lose with SOFR,** because the systemic risks and term premium become their costs. Banks will choose a funding formula relative to each bank's liquidity and best funding sources. Some may fund with a SOFR benchmark, but the spread will capture the systemic risk of unsecured borrowing since banks do not fund loans in secured markets.
- **Lenders will adjust.** Lending pricing will adjust to pass costs back to borrowers, since the overall lender's return on capital cannot be affected by the transition to SOFR. That adjustment will not just be an increase in aggregate spread, but to different spreads for each term—SOFR+x% for overnight resets, SOFR+y% for 90-day resets, SOFR+z% for 180-day resets.

The result will be a change in the pricing methodology for lenders, where the premiums for systemic funding risk and term rates will become explicit and observable, giving borrowers visibility into previously concealed components of the lending spread.

Elimination of Forward-looking Term Rates

The existing forward-looking term rate (LIBOR 3m) could be replaced with either a market-derived term rate or a backward-looking term rate (SOFR observed daily over the previous 90 days and compounded). This choice results

INDUSTRY ADVISORY (CONTINUED)

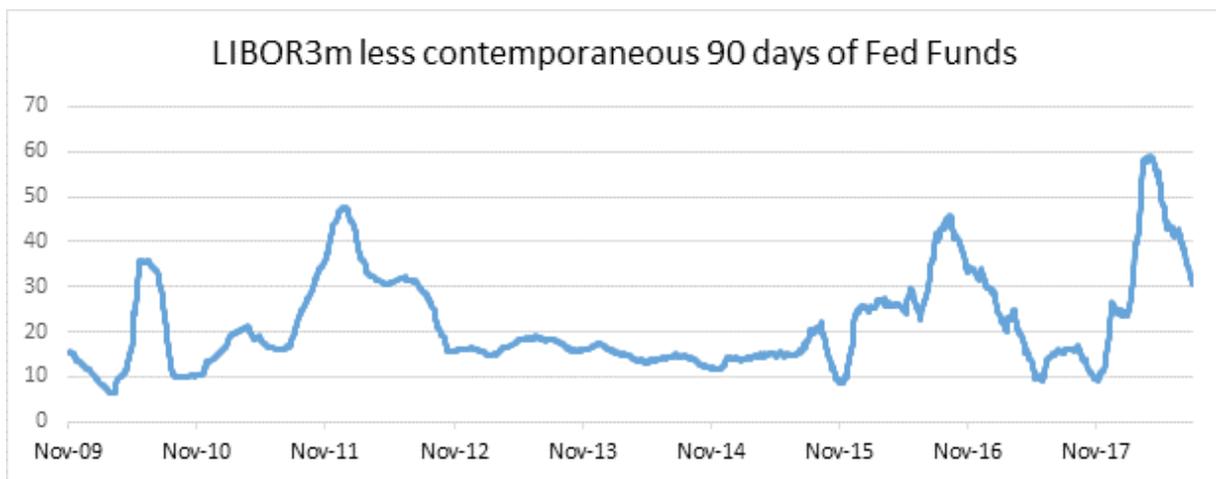
in significant tension among market participants because while borrowers prefer to know the borrowing rate at the beginning of the period, a term benchmark increases the complexity of the hedge market and fragments liquidity. Also, a benchmark derived from a futures market is not as robust as the overnight rate itself and is not fundamentally an essential element of functioning markets. The Alternative Reference Rates Committee's (ARRC's) paced transition plan suggests that a forward-looking rate will be available once the futures market is sufficiently robust that a calculation agent could publish one based on observable market prices.

Borrowers Benefit from a Backward-looking Rate

Interest rate markets have always priced the term premium and credit spread between the Fed Funds rate (EFFR) and LIBOR 3m over various maturities, in the basis swap market. The chart below shows the spread between LIBOR 3m and the average of daily Fed Funds (for the same reset period) for a swap of 5-year tenor. That spread has been between 20 and 35 basis points (bps) and currently sits at about 32 (LIBOR 3m—32bps vs. EFFR).



The chart below captures that same spread at an actual realized historical average of 22 bps.



INDUSTRY ADVISORY (CONTINUED)

Borrowers could benefit from eliminating the forward-looking benchmark in exchange for a backward-looking rate by 10 to 12 bps or more, which is the difference between the observable market for the basis risk and the actual observed differences over the past 8 years. A cashflow manager is always free to execute a 90-day forward vs. daily SOFR so that the end-of-period interest payment is known well in advance. However, that manager would avoid paying for the series of term premiums that is embedded in a longer-term basis swap and, presumably, in the 1-month, 3-month, and 6-month term spreads that a lender will charge as we described above.

The accrual and payment mechanics represented above are: on Day0 LIBOR 3m is observed, and on Day90 the average of SOFR is observed. The period of comparison is the same for the forward-looking and the backward-looking rates. A market suggestion is that the payment date could be lagged 5 days to accommodate systems and operational requirements. The graphic above is also a measurement of the predictive power of the term premium embedded in LIBOR 3m.

Conclusion

The transition from LIBOR to SOFR is an opportunity for the entire market to evaluate some of its long-held assumptions and embedded structures. If the result is a true overnight index swap market where borrowers/lenders and hedgers/speculators are all working with the identical risk tools, improved efficiency and effectiveness will benefit all participants and reinforce the long-term robustness of the replacement benchmark. ✪

THIS ADVISORY WAS PROVIDED BY GRAHAM A.D. BROYD AND DAVID WAGNER.

Graham Broyd, who leads Treliant's Global Markets practice, has been actively engaged in the global banking and markets business for almost 35 years. He worked at the Royal Bank of Scotland Group (RBS) from 1995 through 2015 in senior management roles in the U.S. and U.K. Graham was a member of the Federal Reserve's Alternative Reference Rates Committee (ARRC) from 2014 to 2016 and a member of the Federal Reserve's Foreign Exchange Committee from 2006 to 2009. gbroyd@treliant.com

David Wagner heads Treliant's LIBOR practice and assists companies affected by the LIBOR transition. He has been a fixed income market practitioner for 29 years, in roles ranging from underwriting and investment banking to structuring, marketing, and trading complex derivatives. Most recently he spent 12 years with RBS including serving on the U.S. management team, the board of directors of RBS Securities Inc., and the board of Tradeweb, and he was the RBS representative to the ARRC from its establishment in 2014 until 2018. dwagner@treliant.com

Treliant releases *Industry Advisories* as pertinent issues affecting the financial services industry arise. To subscribe to Treliant's *Industry Advisories*, *Insights*, and quarterly newsletter, *New Coordinates*, please Contact Us at www.treliant.com/ContactUs.

Treliant is well-placed to ease clients' transition to a new global lending benchmark, across the full range of institutional, commercial, and consumer banking and trading. In the coming months, we will continue to report on the implications of LIBOR transition plans as they unfold.