

LIBOR Status Update

Background

The London Interbank Offered Rate (LIBOR) has historically represented the rate paid by large financial institutions when borrowing from other similar firms in the interbank market. Banks typically use the interbank market to manage liquidity, borrowing money for short periods of time (usually overnight) when funds are tight and lending money when excess funds are available. Borrowers in the interbank market are accessing liquidity whereas lenders are putting excess cash balances to work.

LIBOR was originally derived daily by the British Bankers Association (BBA) based on survey responses from approximately 20 large globally active financial institutions. These banks reported the rates associated with interbank transactions in five different currencies across seven maturity points ranging from overnight to one year. The four highest and lowest values from these surveys were eliminated and the remaining rates were averaged to determine LIBOR for that day. Over the years, LIBOR became the benchmark index for many floating rate transactions as well as derivative contracts such as interest rate swaps.

Given the relatively low cost and ease of accessing the interbank market, banks tended to keep as little liquidity on their balance sheet as possible prior to the financial crisis. LIBOR-based money market investments provided very low yields compared to the returns available if funds were instead loaned out or invested in securities. In addition, banks could also supplement their interbank borrowing capacity by drawing on contingent letters of credit (LOC) negotiated with other financial institutions if liquidity became excessively tight.

The financial crisis provided a real-time liquidity stress test scenario for many banks. As asset quality began to deteriorate, sources of liquidity began to disappear for even the most highly-rated institutions. For example, Lehman Brothers was very dependent on short-term unsecured borrowings in the commercial paper markets to fund their balance sheet. As their substantial investments in sub-prime mortgage-backed securities deteriorated throughout 2008, Lehman's creditors became increasingly hesitant to re-fund their maturing paper. Eventually Lehman ran out of cash and declared bankruptcy in September 2008.

Other financial institutions in similar circumstances attempted to draw on existing LOCs, only to find that these draw requests were often denied. Counterparties frequently preferred to face the legal risks of breaching these contracts rather than disbursing cash that could be used to address their own liquidity needs. Interbank transactions also largely disappeared as banks with excess cash were hoarding liquidity.

Post-Crisis Developments

Since 2008, regulatory reforms now require banks to maintain substantially more liquidity on their balance sheet to prevent a recurrence of the liquidity shortfalls experienced during the financial crisis. For instance, large banks must now satisfy a Liquidity Coverage Ratio by maintaining sufficient high-quality liquid assets (generally government securities) to cover expected cash outflows over a 30-day time horizon assuming a stressed scenario. Banks of all sizes now face additional regulatory requirements to retain more liquidity on their balance sheet and place less reliance on contingent sources such as LOCs.

These developments have resulted in dramatic declines in interbank transactions in the post-crisis period. Banks have frequently been forced to estimate their interbank rates in the absence of actual transactions when responding to the LIBOR survey. It also transpired that many financial institutions were significantly underreporting their interbank rates to the BBA as late as 2012 to signal that their overall risk was lower than their actual financial condition would have suggested. Substantial civil money penalties were ultimately assessed against UBS and Barclays (among others) as a result. The BBA eventually recused themselves from the calculation of LIBOR in 2014 and the surveys are now administered by the Intercontinental Exchange, which estimates that only about 30 percent of current three-month LIBOR survey submissions are transaction-based.



Alternative Benchmarks

The diminished number of interbank transactions in conjunction with the LIBOR calculation scandal triggered the search for a more viable benchmark rate. The International Swap and Derivatives Association (ISDA) estimates that there are interest rate derivatives in the amount of \$150 trillion tied to LIBOR. In addition, many financial instruments such as floating rate bonds and adjustable rate mortgages (ARMs) are also indexed to LIBOR. Clearly, any rate selected to replace LIBOR must be widely accepted by market participants to prevent serious disruptions in global financial markets.

On June 22, the Alternative Reference Rates Committee (ARRC), convened by the Federal Reserve Bank of New York (FRBNY) and comprising representatives from major market participants, recommended the adoption of a transaction-based repo financing rate that the FRBNY has proposed publishing in cooperation with the U.S. Treasury. The Broad Treasury Financing Rate (BTFR) would be derived from the observed cost of overnight loans that use U.S. government debt as collateral, currently representing about \$660 billion in daily transactions. Other central banks have proposed similar rates for non-dollar-based transactions (the Financial Conduct Authority's (FCA) SONIA for sterling, the Bank of Japan's TONAR for yen, the Swiss National Bank's SARON for Swiss francs, and the European Central Bank's EONIA for euros).

The transition to a new reference rate will likely be slow, but the need to adopt a replacement for LIBOR recently became more urgent after the FCA announced on July 27 that the LIBOR survey would be phased out in 2021. The ARRC met on August 1 at the FRBNY to discuss implementation issues regarding their proposed rate. One such issue is that the BTFR is only for overnight loans; the market for collateralized term loans with maturities between one month and one year is not yet well-developed. Another concern involves the determination of a new index rate for the \$1.33 trillion in LIBOR-based ARMs, many of which will still be outstanding in 2021 when LIBOR is no longer expected to be calculated.

The ARRC has previously suggested that central counterparty clearinghouses executing swap transactions should offer the flexibility of settling payments on existing swaps by calculating daily mark-to-market valuations using discount factors based on the proposed rate. This would create visibility for the new rate prior to the establishment of specific contracts indexed to the new rate. A basis contract between LIBOR-based swaps and contracts tied to the BTFR has also been proposed. Ultimately, support from other organizations such as ISDA, the CME Eurodollar futures exchange (which currently trades LIBOR-based contracts) and major banking institutions around the globe will be needed to ensure the successful transition to a new alternative benchmark.

Angel Oak's Perspective

The transition from LIBOR to a new broadly adopted benchmark rate will inevitably introduce some degree of volatility in financial markets and asset valuations. While it is far from clear exactly how this transition will be managed, market participants appear to have embraced the importance of converging quickly to a replacement and building products and trading mechanisms early in the process to enhance the liquidity and acceptance of the new rate. While uncertainty regarding the outcome will remain a factor for some years, we do not anticipate major disruptions in financial markets or asset valuations as a result of this transition.



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Rob founded Strategic Financial Solutions, Inc., a risk management consultancy, in 2001. He previously was a senior manager with Andersen Consulting's Financial Services practice. He also served in the Federal Reserve System for 12 years, first as a Research Division economic analyst and later as a capital markets examiner in Supervision and Regulation. His responsibilities included developing risk assessment models, conducting regulatory policy reviews and publishing topical articles for public distribution.

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