

What's the deal with LIBOR?

The market is finally experiencing more than just conversations about replacing LIBOR. Phasing in a new benchmark will be a complicated and bumpy road as LIBOR has been embedded in the markets for decades. A major change like this is always easier said than done. Finding such a suitable replacement for LIBOR continues to proceed toward solution. But before we delve into the impending change, it is prudent to first explore why LIBOR exists and what its function has been up to this point.

LIBOR, or the "London Interbank Offering Rate" was created in 1986 by the British Bankers Association (BBA) to calculate the prices on a variety of financial products. It was established as a standardized benchmark for the pricing of floating-rate corporate loans, and acts as a uniform benchmark to set pricing on derivatives, interest rates, currencies, and other assets. It is generally considered to be one of the most important interest rates in the market and is the basis for trillions of dollars worth of transactions and mortgages around the world. But to put it in its simplest terms...LIBOR is the rate at which European banks "believe" they can borrow dollars from each other in the London Interbank market.

How is LIBOR determined?

LIBOR rates are calculated daily, formerly by the British Bankers Association, and currently by the ICE Benchmark Administration (IBA).

The bank panel is comprised of 16 banks. Each bank submits a borrowing rate for an unsecured loan for seven different tenors ranging from overnight out to 1 year. The rates are typically set daily around 11:45 a.m. London time.

USD LIBOR Panel Banks

Bank of America
Bank of Tokyo-Mitsubishi UFJ
Barclays Bank plc
BNP Paribas
Citibank NA
Credit Agricole CIB
Credit Suisse
Deutsche Bank AG
HSBC
JP Morgan Chase
Lloyds Banking Group
Rabobank
Royal Bank of Canada
Société Générale
Sumi Mitsui Banking Corp.
Norinchukin Bank
Royal Bank of Scotland Grp
UBS AG

The panel selection is conducted annually by IBA, and only banks that have significant exposure in the London market are eligible to become a member bank on the LIBOR panel. The potential member banks are assessed on market volume, reputation and assumed knowledge of the specific currency. The daily LIBOR setting process occurs around the world in each of the 7 maturities for 5 different currencies.

LIBOR Setting Tenors

1 Day
1 Week
1 Month
2 Months
3 Months
6 Months
12 Months

LIBOR Setting Currencies

American Dollar - USD
British Pound Sterling - GBP
European Euro - EUR
Japanese Yen - JPY
Swiss Franc - CHF

LIBOR Criticisms

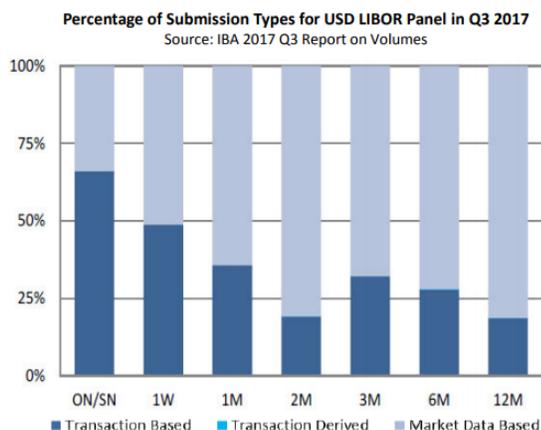
Market participants have long questioned the validity of LIBOR. From the beginning, LIBOR had two implicit assumptions linked to it:

- 1.) Banks were considered risk-free, or at most, contained limited risk with minimal variation over time.
- 2.) LIBOR rates could be calculated based off actual transactional data.

Neither of those two assumptions were accurate. Criticisms have centered around the beliefs that the method for which LIBOR rates are set is flawed, unreliable and generally at risk to inaccurate settings during any type of market stress which could (and has) cause banks to stop lending to each other.

For example, most banks typically loan each other money for a week or less. This means that the longer maturity LIBOR settings (3 months to 1 year) are essentially calculated off educated guesses by the member banks since they lack any real observable loan transactions as a basis for the rate. Adding to the complications and criticism, almost 95% of market transactions that reference LIBOR, whether it's a floating rate security, interest rate derivative, or home mortgage, are indexed to a

LIBOR for maturities three months or longer, with 3-month LIBOR as the most common tenor according to the U.K. Treasury. Therefore, the bulk of the LIBOR based securities in the market are calculated off theoretical LIBOR settings.



LIBOR was always intended to be a market-based reference rate. A reflection of what was “actually” happening in the market daily. However, as we have stated, LIBOR rates are not based off real observable transactions and therefore have always raised concerns about the ability for the rates to be manipulated by the member banks. The IBA conducts their daily survey of the 16-bank panel even if the bank may not actually have a need for the funds on any given day. This creates the disconnect, lack of validity, and the need for a more accurate and transaction based alternative to LIBOR.

Why is LIBOR Going Away?

Over time, LIBOR has earned the reputation of being a “convenient fiction”. The market believes there is a significant disconnect between the LIBOR rates used as benchmarks and the current actual observable borrowing costs in the market.

This perception became reality during the 2007-2009 financial crisis. During this period, LIBOR panel banks did not want to create panic or show signs of funding weakness by submitting LIBOR rates higher than other banks. They wanted to portray an image

of health, stability, and liquidity to the markets. To hide their liquidity problems, banks that were in fact facing funding stresses, now had incentive to submit lower borrowing rates than it was actually being offered.

Following the financial crisis and LIBOR scandal (<https://www.moneytalksnews.com/libor-scandal-of-the-century/>), market participants and regulatory authorities intensified the push and pressure to finally eliminate LIBOR. However, since LIBOR is linked to trillions of dollars worth of global securities, simply eliminating LIBOR is easier said than done. It will take time (years) to phase out and replace LIBOR with an alternative reference rate.

USD LIBOR Market Footprint by Asset Class

Asset Class	Volume (\$, Bn)	% Libor Related	% Roll-off After 5 Yrs
Syndicated Loans	3,400	97%	90%
Corporate Business loans	1,650	30-50%	-
Non-Corp. Business loans	1,252	30-50%	-
CRE/Commercial Mtgs.	3,583	30-50%	-
Retails Mortgages	9,608	15%	-
Credit Cards	846	Low	-
Auto Loans	810	Low	-
Consumer Loans	139	Low	-
Student Loans	1,131	7%	-
Floating/Variable Rate Notes	1,470	84%	73%
RMBS	7,500	24%	3%
CMBS	636	4%	12%
ABS	1,400	37%	15%
CLO's	300	71%	-
Interest Rate Swaps	106,681	65%	65%
Forward Rate Agreements	29,044	65%	100%
Interest Rate Options	12,950	65%	74%
Cross-Currency swaps	22,471	65%	76%
Interest Rate Options	20,600	95%	100%
Interest Rate Figures	12,297	82%	99%

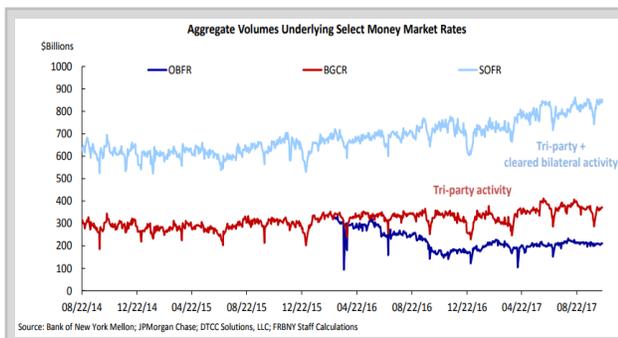
Source: Market Participants Group (2014). Data as of year-end 2012.

What is the Solution?

As we mentioned, replacing LIBOR will be a very timely and arduous process. Many of the current

LIBOR panel banks have reportedly already requested to withdraw from the panel and submission process. Allowing that to happen would certainly weaken the strength and stability of the current process. Thus, most of the panel banks have agreed to voluntarily remain on the panel through 2021 which allows a suitable time period for the market to transition to a replacement.

Globally, the search for a replacement is advancing. In the United States (U.S.) an industry group known as the Alternative Reference Rates Committee (ARRC) made an announcement in June 2017 that it is recommending a broad Treasuries repo rate as the LIBOR replacement for the U.S. market. They have termed the replacement rate as the “Secured Overnight Financing Rate” (SOFR). The rate is directly tied to the cost of overnight borrowing collateralized by U.S. Treasury securities and has a targeted daily publication time of 8:30am EST based on the previous day’s trading activity. The SOFR has garnered steady support so far as a viable replacement. It will be a fully transaction-based benchmark based off a very active market with daily real transaction data, and representing data from all relevant market participants as opposed to a selected sample of only 16 banks.



It is estimated that approximately \$700 B per day in transactions will contribute to the daily calculation. That far exceeds the daily amount in unsecured LIBOR markets as well as daily Treasury bill trading volume. The SOFR is expected to begin being released in Q2 2018.

What about existing LIBOR based securities?

The ARRC plans to transition away from LIBOR to the new replacement (SOFR or other) rate over time. Many of the details are still being finalized, however, the ARRC’s current proposal is to phase out LIBOR referenced securities in a coordinated and structured fashion that would allow market participants to continue using LIBOR for existing securities and contracts until they mature or expire. Ultimately, the ARRC’s goal is to replace all USD LIBOR fixings to create a more transparent reference rate based off actual transactions and building demand and liquidity for the new SOFR.

Conclusion

If market consensus can begin shifting to sourcing different rates to construct a new base curve, then LIBOR usage can be phased out over time with minimal market disruption. We are a long way from the final solution as the process will continue to evolve as the market prepares itself for the impending change.



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