



Yanked from Obscurity: Why Finance Experts Are Rethinking LIBOR

Published : June 11, 2008 in [Knowledge@Wharton](#)

Worldwide, as much as \$350 trillion worth of financial products are tied to the London Interbank Offered Rate, or LIBOR. So it was no small concern this spring when some experts questioned whether the rate's daily updates were rigged to be artificially low. Set LIBOR rates too low and borrowers might get an undeserved windfall -- at lenders' expense.

"I think this is potentially a major issue," said Wharton finance professor [Jeremy Siegel](#), adding: "We're talking about the biggest benchmark for short-term loans in the world." Wharton finance professor [Franklin Allen](#) said the process for setting LIBOR rates is "probably accurate most of the time. But some of the time it may deviate."

Questions this spring centered on whether some of the 16 banks that contribute data to the LIBOR calculation were reporting lower-than-actual figures to ease doubts about their own financial health. The first concerns were raised by some banking experts in April. Then, in May, *The Wall Street Journal* reported that its own study showed the LIBOR inexplicably diverging from what other interest-rate data suggested it ought to be.

Currently, the three-month LIBOR is around 2.7%, compared to 1.9% for three-month U.S. Treasury bills. The three-month LIBOR started the decade at more than 6%, fell to just over 1.1% early in 2003 and climbed to more than 5.6% last September before starting back down.

After doing its own investigation, the British Bankers' Association concluded at the end of May that there was nothing wrong with LIBOR reporting. But acknowledging the continuing concern, on June 10 it announced several procedural changes. Those include requiring member banks to justify rate discrepancies, increasing the number of banks it surveys and adding members to the committee that oversees the rate-calculation process.

Room for Improvement

"I don't think it's as accurate as it should be," said Mark Zandi, chief economist and co-founder of Moody's Economy.com, speaking before the June 10 announcement. "It's 16 financial institutions that are surveyed, 13 of which are in Europe. It's subject to the problems that small surveys have. It can be dominated by bad reporting by a few institutions."

On the other hand, he and others note that the 16 banks currently included in the survey include the world's biggest financial institutions. Barring deliberately inaccurate reporting, rates at which they borrow and lend should reflect the market. Siegel noted that banks would have little reason to low-ball rates for long, since that would reduce their earnings on loans tied to LIBOR. In effect, they'd be borrowing money at the higher "real" rate, and lending at a discount -- "shooting themselves in the foot," he said.

For non-experts there are some obvious questions: If there are doubts, why use LIBOR at all? Why not use an alternative that is beyond question, such as the going rate on U.S. Treasury bonds or some other index?

"It's not clear to me why U.S. homeowners should be paying a rate based on the cost of funds for European banks," Zandi said. Because some European banks have been hit hard by the credit crunch, loans tied to LIBOR now cost American borrowers more than they would if their loans were tied to some



This is a single/personal use copy of Knowledge@Wharton. For multiple copies, custom reprints, e-prints, posters or plaques, please contact PARS International: reprints@parsintl.com P. (212) 221-9595 x407.

U.S.-based index, he said.

The British Bankers' Association launched the LIBOR in January 1986 as a way to closely track the interest rates paid by the banks that dominate the financial markets. The need for an accurate, frequently updated, internationally accepted gauge had become more and more acute as the financial markets became more global.

The BBA publishes LIBOR rates shortly before noon London time every day. The rates are based on the 16 member banks' daily reports of rates they pay one another for deposits held from overnight to one year, in a range of currencies. The four highest and two lowest rates reported are thrown out, so the LIBOR is calculated with eight banks' reports. The BBA estimates that \$150 trillion in financial products are keyed to LIBOR, though no one knows for sure.

"It's a historical thing that goes back many years," Allen said, explaining LIBOR's dominance over alternatives. "LIBOR is the one people started to use. Once you start using it, people get locked in."

LIBOR's Long Shadow

LIBOR rates are used as a basis for setting values of all sorts of financial instruments, from the exotic, such as forward rate agreements, to the ordinary, such as mortgages. The six-month LIBOR, for instance, is used in many adjustable-rate home loans in the United States. Typically, the mortgage rate charged for the next 12 months is figured by adding a "margin" -- perhaps 2.75 percentage points -- to the LIBOR rate on the adjustment date. If LIBOR has gone up over the previous 12 months, the homeowner's monthly payment goes up as well, and vice versa. Many floating-rate corporate loans are based on LIBOR as well.

While some adjustable-rate loans use other benchmarks, such as the rate on U.S. Treasury bills with one year to maturity, LIBOR is popular with lenders because it reflects factors that Treasuries do not.

Wharton finance professor [Richard Marston](#) says LIBOR reflects lenders' real cost of money better than Treasury rates can, since LIBOR measures what the banks actually charge one another. Interbank loans present lenders with certain risks, such as the risk the borrower will default or that the supply of money for lending will shrink. Those risks are not reflected in rates paid by super-safe, highly liquid Treasuries, Marston said. Also, Treasury rates are slightly reduced because for U.S. investors' interest earnings on Treasuries are exempt from state and local taxes.

"A bank certainly wants to reflect its own cost of credit," Marston said.

Typically, LIBOR rates average about 50 basis points above yields for Treasuries of comparable maturities, Marston said. (100 basis points equal 1 percentage point)

He noted that the recent worry about LIBOR's accuracy began when that spread grew unusually large. The spread on three-month securities was just under 50 basis points early in 2007 and spiked to more than 250 basis points last August as the credit crunch gathered steam. That meant banks were charging one another more because they worried the borrowing banks might run short of cash to pay back their loans. Recently, the spread has been around 80 to 100 basis points -- still high by historical standards.

"It's just scary that that would happen," he said.

In April, news accounts quoted financial analysts who suspected LIBOR's dramatic decline since September meant some of the 16 banks were reporting lower rates than they were actually paying. Low-balling would set the LIBOR lower than it ought to be, thus reducing the banks' apparent borrowing costs and helping to conceal the fact that lenders were demanding higher rates because they worried the borrowing banks were shaky. "If they are paying more ... than they have in the past, it might be a public signal that they aren't trusted as much," Marston said. It's critical for banks to maintain a solid image -- losing that image contributed to the collapse of Bear Stearns in March. But Marston he noted there has been no proof banks have shaved their numbers.

At the end of May, *The Wall Street Journal* published a story on its own study which compared the dollar-denominated LIBOR with the information derived from credit-default swaps, a kind of insurance that reflects the market's assessment of a borrower's creditworthiness.

"*The Journal* analysis indicates that Citigroup, WestLB, HBOs, J.P. Morgan Chase and UBS are among the banks that have been reporting significantly lower borrowing costs for the London interbank offered rate, or LIBOR, than what another market measure suggests they should be," the newspaper concluded. It cited several economists to support its methodology.

The cost of those swaps had tended to move in tandem with LIBOR until late January, the *Journal* said. Starting then, the LIBOR drifted lower even as the costs of swaps rose to reflect growing worry about possible bank failures, the *Journal* reported.

A Better Way?

The Journal conceded, however, that its analysis "doesn't prove that banks are lying or manipulating LIBOR." Amidst the financial crisis, banks had cut back loans to one another for periods of three months or more, making estimates of borrowing costs subject to "a lot of guesswork," the *Journal* said. Moreover, U.S. banks could borrow more cheaply from the Federal Reserve, reducing demand for loans from other LIBOR banks, thus holding LIBOR rates down.

"Payments on nearly \$90 trillion in dollar-denominated mortgage loans, corporate debt and financial contracts rise and fall according to LIBOR's movements," the *Journal* story said. If the dollar-based LIBOR were as understated as the *Journal's* analysis suggested, homeowners, companies and investors got a \$45 billion break in interest charges during the first four months of 2008.

As a result of the questions, the BBA rushed its annual assessment of the LIBOR-calculating methodology, which led to the June 10 report.

Even if LIBOR gets a clean bill of health, that does not resolve the broader question of whether LIBOR rates are the best index for U.S. institutions. On the other hand, it would be terribly difficult to switch from LIBOR to something else. While Treasury rates are used for some floating-rate loans, they cannot substitute for LIBOR in all cases because they do not fully reflect bank's money costs, Marston said.

The U.S. has plenty of big banks, and some experts have suggested adopting a new index, tentatively labeled NYBOR, for New York banks, to reflect their borrowing costs. Siegel likes that idea, noting the LIBOR has a cloud over it because the BBA has yet to provide details on how it will better monitor the 16 banks' reports.

Even if LIBOR rates are accurate, the fact that those rates are now unusually high relative to Treasuries means Americans with LIBOR-based loans are paying billions more in interest than they could with an alternative index such as the proposed NYBOR, he said.

Zandi favors an idea recently suggested by some market participants to use an existing overnight index swap rate, which tracks short-term dealings between financial institutions. Because it tracks actual transactions, while LIBOR merely reflects banks' views of what they *would* pay on short-term loans, the overnight index swap rate is more objective, he says. "It encapsulates the market's thinking about where monetary policy is heading in the near term," Zandi said of the newer index. "So I just think it makes a lot more sense."

Some note that problems with the LIBOR -- if there were any -- have probably dissipated, as the heightened scrutiny should discourage phony reporting. "I think that clearly put some pressure on them," Marston said, adding that he does not see any good alternative to the LIBOR.

As much as some experts would like to see LIBOR replaced, there's no easy way to scrap it when trillions upon trillions of dollars of debt are already linked to it. "I think it's probably the best thing out there," Allen said, "just because we've used it for so long and we know more about it."