THIRD WAY

MEMO *Published August 16, 2012 • 8 minute read*

Understanding Libor

Lauren Oppenheimer
Deputy Director of the Economic Program

David Hollingsworth
Policy Advisor, Capital Markets Initiative

This month all eyes were on London, but unfortunately they were not all focused on the summer games. The spotlight is once again on the financial sector for the manipulation of Libor—a set of key interest rates that are used as benchmarks for loans and contracts throughout the world.

Barclays, a U.K.-based bank, recently admitted to rigging Libor—paying $453 million to settle with both U.S. and U.K. regulators. [1] Regulators are continuing to investigate this growing scandal. At this point, it is unclear how far it will spread or how many financial institutions will ultimately be involved.

This memo explains why everyone seems to be talking about Libor, and what it means for consumers, businesses, and our financial sector.

What is Libor?

LIBOR stands for the London Interbank Offered Rate. But rather than one rate, it's a series of interest rates that represents what it costs a bank to borrow from another bank on a short-term basis. It serves as a benchmark for financial transactions around the world—meaning that it is used to set the interest rates for products ranging from credit cards to adjustable rate mortgages.

Each day, the British Bankers' Association (BBA) in London—a trade association for the banking and financial services sector in the United Kingdom—oversees the Libor process. The BBA calculates Libor for 10 currencies over 15 different time frames, ranging from a day to a year. [2]

Libor is determined by a daily survey of 7 to18 large, mostly non-U.S. banks, depending on the rate in question. Banks are asked to approximate the rate they would be charged to borrow from another bank in different currencies and

maturities (loan length). After all of the rates are submitted, up to 25% of the top and bottom rates are removed to exclude outliers and prevent gaming of the system. The BBA averages the remaining submissions to arrive at the official Libor for various loan products. [3]

Why does Libor matter for businesses and consumers?

Across the globe, Libor rates are used as benchmark interest rates for financial transactions, with $10 trillion in loans and $550 trillion in derivatives tied to Libor worldwide. [4]

In the United States, many loans are tied to Libor, including adjustable-rate mortgages, auto loans, and credit cards. If you're a homeowner with an adjustable rate mortgage, your mortgage payment becomes lower if Libor falls. However, falling Libor rates could reduce returns on retirement savings in an investment portfolio.

The critical point is that fluctuations in Libor affect both borrowing costs for consumers and returns for investors. So while there are both winners and losers when Libor is inaccurate, manipulating Libor can adversely affect many Americans. Take the City of Baltimore. It made investments whose profits were determined in part by Libor. The city is among those suing for damages from Libor-connected banks, asserting that they were cheated because Libor rates were kept artificially low, resulting in a lower return on their investment than a true Libor rate would have delivered. [5]

Regardless of who wins or loses, any Libor manipulation is harmful because it distorts prices and misrepresents the true cost of borrowing. When prices are inaccurate, resources will be misallocated and economic growth is more difficult.

Why are benchmark interest rates important?

In the financial sector, benchmark interest rates set a standard through which all investors and market participants —large and small, sophisticated and novice—have the same

basic knowledge about the cost of money. And by the cost of money, we specifically mean the cost of acquiring it through borrowing.

Libor provides borrowers all over the world with the cost of capital for banks by listing the interest rate banks would charge each other for short-term loans. This helps borrowers determine if they are being overcharged by their lender and whether they would be better off looking for another lender that may charge lower rates. In addition, using a benchmark interest rate allows banks to charge interest rates that move in line with their funding costs. [6] Benchmark interest rates create greater transparency and efficiency that leads to better prices for everyone.

Do we have a Libor equivalent in the U.S.?

Not really. The U.S. federal funds rate is the rate that banks lend to each other on an overnight basis. However, since the Federal Reserve influences this rate as a tool in conducting monetary policy, it reflects more than just a pure market rate. The yield—or interest rate—on Treasuries is often used as a benchmark for loans. However, since the financial crisis, the interest rates on Treasuries and the costs of borrowing for banks don't always track each other.

So the closest thing to Libor in the U.S. may in fact be... Libor. All18 banks submit rates for loans of all types and durations using U.S. dollars as a currency. In other words, though Libor is calculated in London, it has a set of rates that reflects the costs of borrowing in U.S. dollars. The U.S. Dollar Libor rate is used as a benchmark for many U.S. loans. For example, of the adjustable rate mortgages issued in the U.S., 45% of prime mortgages and 80% of subprime mortgages are based on Libor. [7]

How can Libor be manipulated?

Because Libor rates are based on a survey rather than actual trades, their accuracy rests on the integrity of the banks' submissions. Banks can use discretion in reporting their

actual borrowing costs. It is therefore possible for a bank to manipulate the rate to increase profits or prevent losses on trades. Alternatively, a bank could manipulate Libor to make the bank look healthier than it is in reality. To put it simply, they can lie, because Libor is basically an honor system.

In Barclays' settlement with U.S. and U.K. regulators, the bank admitted to falsifying borrowing rates numerous times between 2005 and 2009. Between 2007 and the beginning of 2009, Barclays falsified Libor submissions to look stronger during turbulent market times. Because Libor represents a bank's borrowing costs, submitting a high rate may invite questions about a bank's health. In addition, starting in 2005 traders at Barclays submitted false rates to manipulate Libor to increase profits on their own trades. [8] Because the highest and lowest submissions are removed from the Libor calculation, it would almost certainly require at least a few banks working together to manipulate the rate. U.S. and U.K. regulators are continuing to investigate other banks for complicity in Barclays' manipulation, and additional enforcement actions are likely.

Why would a trader manipulate Libor?

Barclays and other financial institutions use interest rate swaps for a variety of reasons, including hedging risk and managing an investment portfolio. An interest rate swap is a tool that allows two parties—i.e. trading partners—to "swap" interest payments on existing loans. A typical swap involves a financial institution on one side of the transaction and a company, a financial institution, or investor on the other side. [9]

A basic interest rate swap would involve one party with a fixed interest rate loan and the other party with a floating interest rate loan—which is a loan where the interest rate fluctuates with the movement of an agreed upon benchmark interest rate. Libor is a commonly used benchmark in these types of transactions. [10]

Since one party will be paying an interest rate that is partially determined by Libor, which will in turn determine which party profits and which party loses on the swap, both parties have an incentive to manipulate the rate. If one of those parties is a financial institution on the panel that determines Libor, it has the ability to manipulate the Libor rate as well. While interest rate swaps can get much more complex, it was these types of products that Barclays manipulated—with the help of other banks—to increase their profits from 2005 to 2007.

Conclusion

The Libor scandal is a reminder of the importance of transparency in financial markets. As investment advisor John Mauldin puts it, "The larger question that really needs to be asked [about Libor] is how…did we get to a place where we base hundreds of trillions of dollars of transactions worldwide on a number whose provenance is not clearly transparent." [11]

A Libor rate based on transparency would imply submissions based on actual transactions, rather than estimates, whenever possible. That is to say, Libor should be determined by the market, not a straw poll. Additionally, for thin markets where actual transactions are few, there needs to be a transparent set of procedures to provide confidence that Libor submissions are accurate.

Financial markets function best when businesses and investors, both large and small, trust that financial markets aren't a rigged game. Benchmark interest rates are an important reference point for both lenders and borrowers, and we should ensure that these rates are being set transparently. It is important to get this right because episodes like the Libor scandal undermine the credibility of financial markets, and less capital will be available for businesses and consumers if people do not trust that capital markets are fair.

END NOTES

1. James O'Toole, "Explaining the Libor interest rate mess," CNNMoney, July 10, 2012. Accessed August 10, 2012. Available at: http://money.cnn.com/2012/07/03/investing/libor-interest-rate-faq/index.htm.

2. "The Basics," British Bankers' Association. Accessed August 10, 2012. Available at: http://www.bbalibor.com/bbalibor-explained/the-basics.

3. Halah Touryalai, "Libor Explained: How Manipulated Rates Could Be Hurting (Or Helping) You," *Forbes*, July 9, 2012. Accessed August 10, 2012. Available at: http://www.forbes.com/sites/halahtouryalai/2012/07/09/libor-explained-how-manipulated-rates-could-be-hurting-or-helping-you/.

4. Aruna Viswanatha, "U.S. states look to enter Libor manipulation case," Reuters, July 11, 2012. Accessed August 10, 2012. Available at: http://www.reuters.com/article/2012/07/12/us-banking-libor-states-idUSBRE86A1H420120712.

5. James O'Toole, "Winners and losers in Libor mess," CNNMoney, July 12, 2012. Accessed August 10, 2012. Available at: http://money.cnn.com/2012/07/12/investing/libor-consumers/index.htm.

6. The Editors, "Saying Goodbye to Libor Won't Be Easy, but It's Necessary," Bloomberg, July 23, 2012. Accessed August 15, 2012. Available at: http://www.bloomberg.com/news/2012-07-23/saying-goodbye-to-libor-won-t-be-easy-but-it-s-necessary.html.

7. "Behind the Libor Scandal," Infographic, *The New York Times*, July 10, 2012. Accessed August 10, 2012. Available at: http://www.nytimes.com/interactive/2012/07/10/business/dealbook/behind-the-libor-scandal.html.

8. O'Toole, "Explaining the Libor interest rate mess."

9. "What Are Interest Rate Swaps and How Do They Work?" PIMCO, January 2008. Accessed August 10, 2012. Available at: http://www.pimco.com/EN/Education/Pages/InterestRateswapsBasics1-08.aspx.

10. "What Are Interest Rate Swaps and How Do They Work?" PIMCO, January 2008. Accessed August 10, 2012. Available at: http://www.pimco.com/EN/Education/Pages/InterestRateswapsBasics1-08.aspx.

11. John Mauldin, "A Different Take on LIBOR," Minyanville, July 30, 2012, Accessed August 10, 2012. Available at: http://www.minyanville.com/business-news/markets/articles/libor-liborgate-cds-credit-default-swaps/7/30/2012/id/42821.