What is the OIS LIBOR Spread And What Is It For?

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A decade ago, most traders didn't pay much attention to the difference between two important interest rates, the London Interbank Offered Rate (LIBOR) and the Overnight Indexed Swap (OIS) rate. That's because, until 2008, the gap, or "spread," between the two was minimal.

But when LIBOR briefly skyrocketed in relation to OIS during the financial crisis beginning in 2007, the financial sector took note. Today, the LIBOR-OIS spread is considered a key measure of credit risk within the banking sector. (For a glimpse into the possible evolution of these two rates, read "Will OIS Replace LIBOR?")

To appreciate why the variation in these two rates matters, it's important to understand how they differ.

Defining the Two Rates

LIBOR (officially known as ICE LIBOR since February 2014) is the average interest rate that banks charge each other for short-term, unsecured loans. The rate for different lending durations – from overnight to one-year – are published daily. The interest charges on many mortgages, student loans, credit cards and other financial products are tied to one of these LIBOR rates. LIBOR is designed to provide banks around the world with an accurate picture of how much it costs to borrow short term. Each day, several of the world's leading banks report what it would cost them to borrow from other lenders on the London interbank market. LIBOR is the average of these responses. (For more, see *What Is ICE LIBOR And What Is It Used For?*)

The OIS, meanwhile, represents a given country's central bank rate over the course of certain period; in the U.S., that's the Fed Funds rate – the key interest rate controlled by the Federal Reserve If a commercial bank or a corporation wants to convert from variable interest to fixed interest payments – or vice versa – it could "swap" interest obligations with a counterparty. For example, a U.S. entity may decide to exchange a floating rate, the Fed Funds Effective Rate, for a fixed one, the OIS rate. In the last 10 years, there's been a marked shift toward OIS for certain derivative transactions.

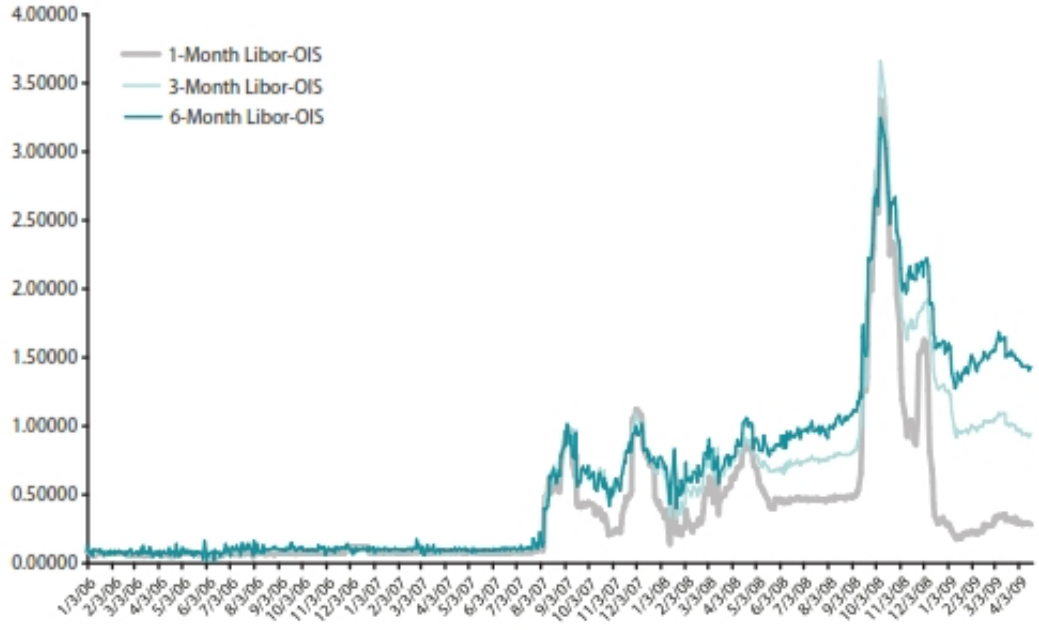
Because the parties in a basic interest rate swap don't exchange principal, but rather the difference of the two interest streams, credit risk isn't a major factor in determining the OIS rate. During normal economic times, it's not a major influence on LIBOR, either. But we now know that this dynamic changes during times of turmoil, when different lenders begin to worry about each other's solvency.

The Spread

Prior to the subprime mortgage crisis in 2007 and 2008, the spread between the two rates was as little as 0.01 percentage points. At the height of the crisis, the gap jumped as high as 3.65%.

Figure 1

The following chart shows the LIBOR-OIS spread before and during the financial collapse. The gap widened for all LIBOR rates during the crisis, but even more so for longer-term rates.



(Source: Federal Reserve Bank of St. Louis)

The Bottom Line

The LIBOR-OIS spread represents the difference between an interest rate with some credit risk built in and one that is virtually free of such hazards. Therefore, when the gap widens, it's a good sign that the financial sector is on edge.