

The TED Spread: Monitoring Banking Sector Health



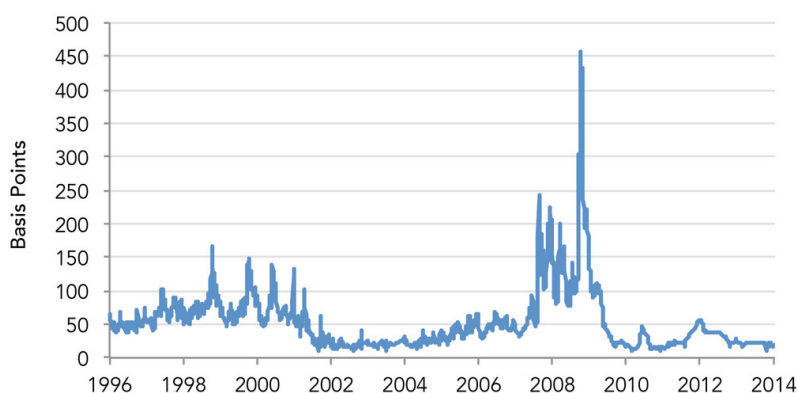
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How's the economy going to do this year? Credit spreads are a crucial indicator used by experts in finance to divine the future, and one such predictor is the TED Spread. This paper explains the TED spread and why the world of business studies this and other spreads daily.

TED Spread 1996-2013¹



What *Exactly* is a Credit Spread?

The TED spread is a type of credit spread, and a credit spread is nothing more than the difference in yields—or current market interest rates—between corporate bonds and government bonds of similar maturities. If a 10-year Treasury bond has a 2% yield and a 10-year bond issued by GE has a 5% yield, “the spread” is 3%. That was easy, but unless you are a bond investor, why should anyone in Washington care?

Spreads are predictors of future economic activity. When credit spreads are thin, it signals investor confidence in the economy. It means investors do not foresee businesses getting into trouble or failing to pay off their loans. A thin spread means investors are thinking, “hmm, that GE bond is almost as safe as a U.S. Treasury bond.” It also means they

think GE is doing awfully well and will continue to do so in the future. And if a lot of corporate bonds have thin spreads, it shows this confidence cuts across the entire economy.

In contrast, widening credit spreads show investor nervousness about the overall business environment and often indicate that investors are demanding a high premium to lend to corporations. The wider the spread the more serious investor concerns are about the economy.²

How Do Spreads Predict the Future?

When evaluating credit spreads, the key is not the specific number, but its relationship to historical data and trends over time. Say the spread between Treasury bonds and the bonds issued by AAA-rated companies is 3%. As a stand-alone figure, it doesn't mean much. But if you know this spread is usually less than 1%, and it was 2% only last month, then that 3% figure is a strong indicator that economic conditions are rapidly deteriorating—or at least the market perceives that to be the case.

There are many different credit spreads—spreads that compare individual bonds, bonds of particular industries, or bonds of particular countries to Treasury bonds. That brings us to the TED Spread.

The TED Spread

The TED spread also represents the difference in interest rates between government and the private sector—in this case, the difference between short-term borrowing costs for the U.S. government and short-term borrowing costs for highly rated banks. Specifically, the TED spread uses the difference between the 3-month Treasury bond rate and the 3-month London Interbank Offered Rate (LIBOR).

The TED Spread represents the difference in interest rates between Treasuries (T-bills) and Eurodollar futures contracts (ED)—it got its name from combining the symbols for the two inputs.

Why is the TED Spread significant?

Credit is the lifeblood of the economy—when it is hard or expensive to borrow in the private sector, it is more difficult for the economy to grow. The TED Spread, while it is not a specific borrowing rate, reflects credit conditions in the wider economy.

Banks lend to each other in what is called the interbank lending market. While the length of the loans vary (they can be any maturity), most loans are short-term—typically ranging from a day to a week with overnight loans being the most popular. These loans are not secured by collateral but are extended based on the creditworthiness of the borrower.

Large, highly-rated banks are involved in lots of activities. Money is flowing in and out of these banks every day—some depositors are withdrawing money from the bank while others are putting money in, loans are being extended and loans are being paid off, etc. In addition, banks face reserve requirements and other regulations which are designed to ensure that banks have enough assets on hand—cash and assets that can quickly be turned to cash—to meet large and unanticipated withdraws by depositors.

At the end of each business day, some banks will be short of the funds they are required to hold, and will look to borrow to meet their obligations. Other banks will have funds in excess of their requirements. The interbank lending market is where banks needing funds go to borrow from banks with excess funds to lend.

The Libor is an important rate, but an odd duck. Libor is not calculated using actual transactions (a subject of some recent concern). Instead, banks are asked what rate they would charge for loans in the interbank market at different maturities—1 day, 1 week, 1 month, 3 months, 6 months, 1 year, etc. The TED Spread uses the 3-month rate.

The U.S. government is considered the safest borrower in the world. When the TED Spread is narrow—i.e. the short-term borrowing costs for banks are similar to the cost of U.S. government borrowing—it reflects strong conditions in

credit markets for businesses and consumers. Banks are confident about the health of business and consumer balance sheets. They don't foresee borrowers getting into trouble and failing to pay back loans.

When bank borrowing costs rise compared to the borrowing costs of the U.S government, it suggests more concern about the overall state of the economy. There is more doubt about the ability of business and consumers to repay loans, and less confidence in the creditworthiness of banks that have lots of lending exposure. A rising TED spread can indicate distress, with banks perceiving that lending to each other has become riskier.

TED Spread and the Financial Crisis

The rise of TED spreads foretold the trouble in the banking sector in the run-up and during the most recent financial crisis. Through 2006 and the first half of 2007, the TED spread hovered around 50 basis points or less (100 basis points = 1%). However, the TED spread began to widen in August 2007, reaching 240 basis points on August 20 more than a year before the Lehman collapse. The TED Spread remained elevated through the financial crisis, averaging 148 basis points from August 2007 through 2008.³

The TED spread is currently at very low levels—just over 20 basis points—reflecting the fact that interest rates are low and banks are confident about lending to each other.⁴

Conclusion

Every morning, policymakers fire up their computers and quickly scan the horizon for news and data that situates them for the day. What's on the floor? What are the polls saying? What has the White House announced? This information is second nature to policymakers, but Esperanto to nearly everyone else. The same is true in the world of finance. Leaders in finance pore over data to orient themselves for a day in the market—seeking to uncover short term opportunities and long term trends.

The TED Spread can be a useful tool for policymakers going forward. The Federal Reserve continues to taper its quantitative easing program (QE III)—the Fed’s \$85 billion a month bond-buying program to help stimulate the economy—reducing its bond purchases by \$10 billion a month. As the Federal Reserve continues to pull back on its bond purchases, many market participants are unsure how it will play out in financial markets and the overall economy. By following the TED Spread, policymakers can see how credit markets are operating under changing conditions. A wide TED Spread can signal trouble ahead.

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END NOTES

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- 3.** James R. Barth, Tong Li, and Triphon Phumiwasana, "The U.S. Financial Crisis: Credit Crunch and Yield Spreads," Asia Pacific Economic Association. Accessed April 28, 2014. Available at: <http://apeaweb.org/confer/beio8/papers/blr.pdf>.
- 4.** United States, Federal Reserve Bank of St. Louis, "TED Spread." Accessed April 30, 2014. Available at: <http://research.stlouisfed.org/fred2/series/TEDRATE>.