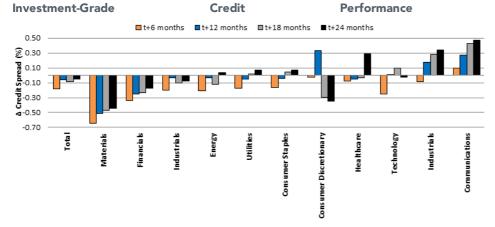
THE IMPACT OF FED TIGHTENING ON U.S. INVESTMENT GRADE CREDIT

Bradley Krom — U.S. Head of Research 12/17/2015

After nearly two and a half years of debate, the Federal Reserve (Fed) finally lifted the Federal Funds Rate target by 25 basis points (bps) on December 16, 2015. While investors continue to grapple with what impact this might have for markets and the economy, we thought it could be instructive to understand what impact a tightening cycle has historically had on the cost of credit for investment-grade corporations. While each tightening cycle is different, we chose to examine the most recent cycle from 2004. A primary reason for our focus on this period is that it represents liftoff from the second lowest period of rates in U.S. history (1.00%) and also shares some of the benign inflation characteristics seen today. Overall, credit tends to perform well in the first six months of a tightening cycle. As more hikes occur, the economy eventually slows, injecting additional costs and risks into markets. Below, we outline our key thoughts on how tightening from the Fed ultimately impacts the various sectors of investment-grade credit. Macro Impact on Credit As we show below, the immediate impact from Fed tightening is a general decline in credit spreads across nearly all sectors. In our view, this makes sense for several key reasons. First, it is extremely unlikely that any change in Fed policy would come as a dramatic surprise to borrowers and / or investors. Additionally, investors can generally view any Fed rate hikes as a vote of confidence from policy makers that the overall health of the economy is strong enough to necessitate higher rates. This boost in confidence appears to persist across sectors for at least the first six months, as evidenced by 2004 data. Finally, during periods of rising rates, many investors seek out corporate credit as one way to help dampen the impact of rising nominal interest rates. Historically, bonds with credit risk have tended to outperform U.S. Treasuries in rising rate environments given their higher incremental income (credit spread), as lending to risky borrowers can help dampen losses from higher nominal rates. Overall, credit spreads tended to tighten by approximately 18 bps over the first six months following the 2004 rate hike. Among major sectors, bonds from communications companies were the only ones that saw credit spreads widen. Impact on Credit Post-Fed Rate Hikes



Source: Barclays. Period t represents 6/30/04, the date of the first Fed rate hike. Subsequent periods represent the end-of-month values for the Barclays U.S. Corporate Investment Grade Index and its underlying sectors. Past performance is not indicative of future results.

Sector Impact over Time

With the exception of the Technology and Consumer Discretionary sectors, the trend in credit from 2004 shows that spreads initially tighten, then gradually widen back to around unchanged at the peak of the interest rate cycle. Additionally, Materials, Financials and Industrials were previously the strongest performers. For Financials, rising rates often translate into wider net interest margins, ultimately helping banks drive earnings. For the Materials sector, commodity prices generally rose over this period on the back of strong growth from emerging markets. Overall, credit



Sector

across sectors tended to correlate over time, albeit with varying degrees of magnitude. Finally, while the trend in credit spreads is important from a positioning perspective, investors should also be aware of the all-in level of spreads. A primary reason the Communications sector appears to underperform over this period is that it had initially been trading at some of the lowest spread levels (78 bps over Treasuries) of any sector at that time. Today, credit spreads are materially wider than 2004 levels across all sectors (+55 bps). In fact, spreads currently average 155 bps over Treasuries across all sectors, ranging from a low of 121 bps for capital goods to a high of 268 bps for basic materials. Pace of Hikes Now that the Fed has announced its first hike of this cycle, the debate among market participants will ultimately begin to shift to the pace of rate hikes and the terminal level of interest rates for this cycle. During the 2004 tightening cycle, the Fed hiked rates at one of the most consistent paces in history. Over the first six months, the Fed hiked rates five times. Over the next 18 months, it increased rates by 100 basis points every six months. Ultimately, the target of the Federal Funds Rate rose to a high of 5.25%. Today, the Fed is forecasting four hikes for 2016 and a peak in the Fed Funds Rate of 3.5% in the long run. With a slower pace of tightening and a lower terminal rate, we believe that the net impact on credit has the potential be more subdued than in previous periods. While the impact of changes in Fed policy will continue to be hotly debated in the coming months, we don't currently view this initial shift as particularly troubling for U.S. investment-grade credit. For borrowers, this incremental shift in policy is hardly a surprise. For lenders, credit spreads have already widened materially in advance of this move. In our view, investment-grade credit could continue to offer value over at least the next six months as investors and markets digest the shift in policy.

Important Risks Related to this Article

Fixed income investments are subject to interest rate risk; their value will normally decline as interest rates rise. In addition, when interest rates fall, income may decline. Fixed income investments are also subject to credit risk, the risk that the issuer of a bond will fail to pay interest and principal in a timely manner or that negative perceptions of the issuer's ability to make such payments will cause the price of that bond to decline.

For standardized performance and the most recent month-end performance click <u>here</u> NOTE, this material is intended for electronic use only. Individuals who intend to print and physically deliver to an investor must print the monthly performance report to accompany this blog.

For more investing insights, check out our Economic & Market Outlook

View the online version of this article here.



IMPORTANT INFORMATION

U.S. investors only: Click <u>here</u> to obtain a WisdomTree ETF prospectus which contains investment objectives, risks, charges, expenses, and other information; read and consider carefully before investing.

There are risks involved with investing, including possible loss of principal. Foreign investing involves currency, political and economic risk. Funds focusing on a single country, sector and/or funds that emphasize investments in smaller companies may experience greater price volatility. Investments in emerging markets, currency, fixed income and alternative investments include additional risks. Please see prospectus for discussion of risks.

Past performance is not indicative of future results. This material contains the opinions of the author, which are subject to change, and should not to be considered or interpreted as a recommendation to participate in any particular trading strategy, or deemed to be an offer or sale of any investment product and it should not be relied on as such. There is no guarantee that any strategies discussed will work under all market conditions. This material represents an assessment of the market environment at a specific time and is not intended to be a forecast of future events or a guarantee of future results. This material should not be relied upon as research or investment advice regarding any security in particular. The user of this information assumes the entire risk of any use made of the information provided herein. Neither WisdomTree nor its affiliates, nor Foreside Fund Services, LLC, or its affiliates provide tax or legal advice. Investors seeking tax or legal advice should consult their tax or legal advisor. Unless expressly stated otherwise the opinions, interpretations or findings expressed herein do not necessarily represent the views of WisdomTree or any of its affiliates.

The MSCI information may only be used for your internal use, may not be reproduced or re-disseminated in any form and may not be used as a basis for or component of any financial instruments or products or indexes. None of the MSCI information is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Historical data and analysis should not be taken as an indication or guarantee of any future performance analysis, forecast or prediction. The MSCI information is provided on an "as is" basis and the user of this information assumes the entire risk of any use made of this information. MSCI, each of its affiliates and each entity involved in compiling, computing or creating any MSCI information (collectively, the "MSCI Parties") expressly disclaims all warranties. With respect to this information, in no event shall any MSCI Party have any liability for any direct, indirect, special, incidental, punitive, consequential (including loss profits) or any other damages (www.msci.com)

Jonathan Steinberg, Jeremy Schwartz, Rick Harper, Christopher Gannatti, Bradley Krom, Tripp Zimmerman, Michael Barrer, Anita Rausch, Kevin Flanagan, Brendan Loftus, Joseph Tenaglia, Jeff Weniger, Matt Wagner, Alejandro Saltiel, Ryan Krystopowicz, Jianing Wu, and Brian Manby are registered representatives of Foreside Fund Services, LLC.

WisdomTree Funds are distributed by Foreside Fund Services, LLC, in the U.S. only.

You cannot invest directly in an index.



DEFINITIONS

Federal Funds Rate: The rate that banks that are members of the Federal Reserve system charge on overnight loans to one another. The Federal Open Market Committee sets this rate. Also referred to as the "policy rate" of the U.S. Federal Reserve.

Basis point : 1/100th of 1 percent.

Tighten: a decline in the amount of compensation bond holders require to lend to risky borrowers. When spreads tighten, the market is implying that borrowers pose less risk to lenders.

Credit: A contractual agreement in which a borrower receives something of value now and agrees to repay the lender at some date in the future.

Investment grade: An investment grade is a rating that signifies a municipal or corporate bond presents a relatively low risk of default.

Inflation: Characterized by rising price levels.

Credit spread: The portion of a bond's yield that compensates investors for taking credit risk.

Credit risk: The risk that a borrower will not meet their contractual obligations in conjunction with an investment.

U.S. Treasury Bond: a debt security issued by the United States government.

Net interest margin: A measure of the difference between the interest income generated by banks or other financial institutions and the amount of interest paid out to their lenders (for example, deposits), relative to the amount of their (interest-earning) assets.

Correlation: Statistical measure of how two sets of returns move in relation to each other. Correlation coefficients range from -1 to 1. A correlation of 1 means the two subjects of analysis move in lockstep with each other. A correlation of -1 means the two subjects of analysis have moved in exactly the opposite direction.

