

## Negative Interest Rates and Market Implications (02/16/2016)

Recent weeks have seen considerable discussion about negative yields and negative interest rates, not the least of which were comments made by Federal Reserve Chair Janet Yellen. Negative interest rates—or in effect, paying a financial institution to store cash—seems counterintuitive. But, major central banks are using this unconventional tool in their efforts to stimulate economic growth. The expectation is that they will encourage banks to increase lending activity, resulting in more consumer and business spending. In addition, negative interest rates could lead to the devaluation of a country's currency, making exports more competitive.

In June 2014, the European Central Bank (ECB) cut the deposit rate, or the rate banks receive for funds deposited at the central bank, to negative and lowered it further twice since then. The central banks of other countries—including Japan (most recently in January 2016), Sweden and Switzerland—have also adopted a negative interest rate strategy. On Feb. 10, 2016, in a testimony before the Committee on Financial Services, Yellen was questioned on the possibility of negative interest rates in the U.S., and she commented that the concept is not "off the table" but that further analysis is required to determine its feasibility—legally and structurally.

Nevertheless, she said there are no expectations "that the FOMC (Federal Open Market Committee) is going to be soon in the situation where it is necessary to cut rates" given the strengthening labor market and continued moderate expansion in economic activity. However, the market appears to disagree—with the 10-year Treasury yield down 52 basis points (bps) since the beginning of the year to 1.75% as of Feb. 12, 2016—so it will be interesting to see if weakness in either, or both, of these indicators changes Yellen's view.

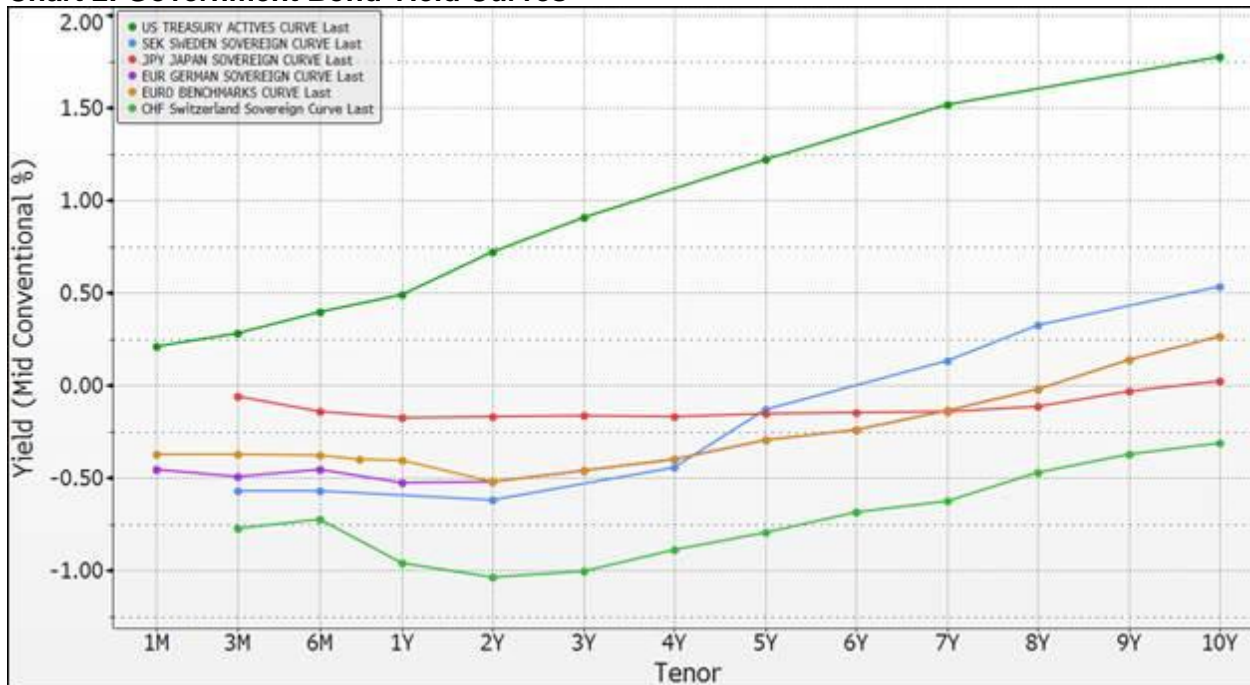
**Chart 1: Central Bank Policy Interest Rates**



Source: *Bloomberg*

As central bank rates serve as a benchmark for borrowing costs, some sovereign bond yields have turned negative—particularly at the shorter end of the yield curve, and in some cases, as far out as six years and even beyond (e.g., Germany, Japan, the Netherlands and Switzerland). Negative yields on market instruments are different from negative rates at central banks. As interest rates have fallen near zero, prices of bonds have traded above par, resulting in their yields becoming negative. In addition, as central banks continue asset purchase programs to stimulate the economy, the additional demand has resulted in even higher bond prices and greater negative yields.

**Chart 2: Government Bond Yield Curves**



Source: Bloomberg

The impact of negative interest rates on the capital markets is akin to an extreme case of low interest rates. Negative yields on government securities lead to even lower yields on investments, putting further pressure on net interest margins and profitability of banks. They could pass through the added costs to their customers, but it would be at the risk of customers withdrawing deposits or losing customers altogether. Since U.S. insurance companies, for the most part, invest in assets that are priced to earn an expected return above a benchmark government rate, a negative yield on the relevant U.S. Treasury rate would result in a lower expected return unless the market-based premium expanded to offset that negative impact. In addition, insurance companies would likely find it challenging to meet long-term liabilities in a negative yield environment—particularly life insurance companies that offer products with fixed rates. Although there has been limited evidence of insurance companies reaching for yield in the past several years, a sustained period of negative yields (after what has already been a lengthy period of low interest rates) could create significant challenges that might encourage them to take on added, and potentially excessive, risks and invest in higher yielding assets at an increasing rate. Negative yields would also significantly affect the money market funds space—a \$3.1 trillion market as of Dec. 31, 2015, according to U.S. Securities and Exchange Commission (SEC) data. Money market funds typically invest in highly-rated short-term corporate or government debt for a small return. If these returns turn negative, the business model of money market funds would no longer make sense, and the liquidity and capital preservation they provide would no longer be available to investors. Although negative yields in the U.S. seems unlikely, the Capital Markets Bureau will continue to monitor developments and trends in the U.S. and global economies and report as deemed appropriate.