PLOTTING A RECESSION: THE YIELD CURVE AS A HARBINGER OF THINGS TO COME

By: Structured Products
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As a result of recent Fed hikes, some economists have voiced concern regarding the current shape of the yield curve, i.e., it’s too flat. In this article, we hope to provide clarity around these concerns.

**Today’s Yield Curve**

A yield curve is constructed by plotting the interest rate earned on a bond against the time it takes for interest and principal to be paid to the bondholder. Normally, the longer the investment horizon, the higher the yield, which creates an upward sloping yield curve. However, due to the continual increase of short-term rates, the yield curve has been flattening and the spread between short and long-term yields has narrowed.

Based on historical indicators, experts anticipate that the yield curve will become inverted, increasing the possibility of a recession.

**Should We Be Concerned of Flattening?**

Flattening occurs when the spreads between short and long term bonds approach zero. When this happens, the yield curve appears flatter than normal, as shown in Chart 1.

![Chart 1](chart1.jpg)

As the Fed raises the federal funds rate, it becomes more expensive for banks to borrow money. This increase causes pressure on the front end of the yield curve and continued pressure can eventually cause the curve to invert.

Chart 2 shows an inverted yield curve in 2006 prior to the 2008 recession. Many economists say that this inversion of the yield curve is a harbinger of an upcoming recession.

![Chart 2](chart2.png)

**The Yield Curve Predicting Recessions**

Chart 3 shows the 1-year and 10-year treasury yield since 1958. The shaded sections in the chart indicate past recessions. Any time that the 1-year (red line) goes above the 10-year (blue line) the curve is inverted. *Each recession since 1960 has been preceded by an inverted yield curve.*

![Chart 3](chart3.png)

Generally, the economy recovers from a recession through open market activities of the Fed, which involve a lowering of the federal funds target rate. Low interest rates reduce the cost of borrowing, thereby increasing the flow of money and fueling the economy. Bear in mind, however, that rapid economic growth fueled by an increase in the money supply is the very definition of inflation. The normal response of the Fed to inflation involves
tightening the money supply by raising short term rates. Pushing up the yield curve by increasing short term rates flattens the yield curve and we’re back where we started.

**The Yield Curve in 2018**

The Fed continues to raise the federal funds rate to control inflation. After the FOMC meeting on September 26, 2018, the committee increased the federal funds target rate by 25 basis points to make the range between 2.00% and 2.25%. The flattening is still occurring with the long-term yields remaining significantly lower than previous levels in the mid-2000s. This gives the Fed a shorter ceiling to raise rates before the curve inverts. A majority of the Fed indicated that they foresee interest rates above 3% by 2020.

Among other considerations, the flattening of the yield curve is a major precursor to a future recession. If a recession occurs, the Fed funds rate will most likely be lowered to kick start the economy. A recession is defined as two consecutive quarters of negative economic growth as measured by a country’s gross domestic product (GDP). While we are not currently in a technical recession, the shape of the yield curve would suggest that one may be on the way.