

YIELD CURVE INVERSION: SHOULD YOU BE WORRIED?

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“The Treasury bond yield curve inverted... for the first time in five years. That gave shudders to those who see the phenomenon as a harbinger of recession . . . ‘I think sometimes it portends a recession, sometimes not,’ says Marshall E. Blume, finance and management professor at Wharton. This time, it probably does not, he adds. ‘All the forecasts are quite favorable. There aren’t any real excesses in the economy at the current time’ “.

Recognize this quote? Probably not – it was published over 13 years ago, in January, 2006. Less than two years later, the U.S. economy had tumbled into what has become known as “The Great Recession,” the worst economic period since the Great Depression of the 1930s. (In fairness to Professor Blume, neither then-Fed Chair Ben Bernanke nor Fed economists saw the tsunami wave approaching, either.)

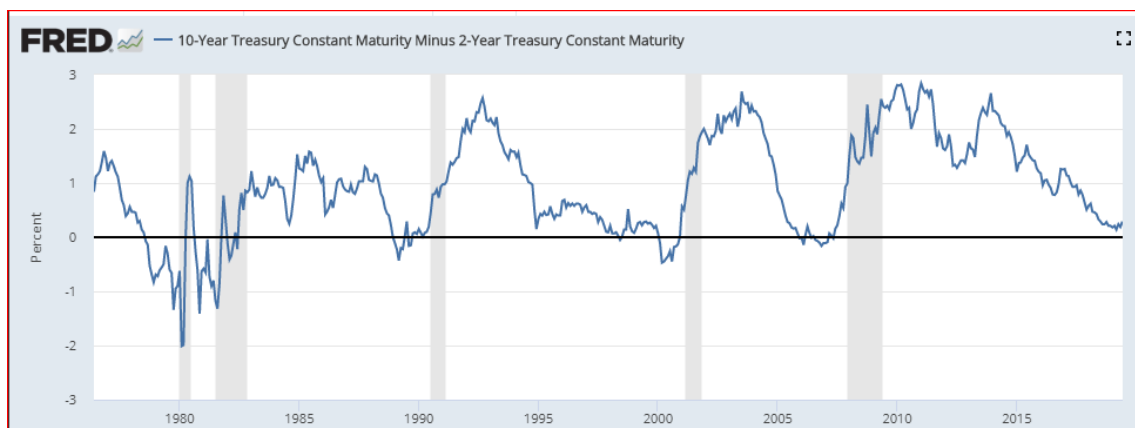
So – did the yield curve actually predict the Great Recession? And can it be used as an economic forecasting tool? Before we address that, let’s define terms.

The “yield curve” is a plot of the yields on US Treasury securities against their maturities at a point in time. Yield curves are typically characterized by the shape of the plot: upward-sloping, downward-sloping, or flat. An upward-sloping curve (long-term yields greater than short-term yields), is said to be “normal”, because it is the pattern most frequently observed. An “abnormal” or “inverted” curve occurs when short-term rates exceed longer-term rates.

The first person to attempt to explain the shape of the yield curve was Dr. Irving Fisher, one of the first “celebrity economists” who did most of his work in the first half of the twentieth century. According to Fisher, market yields are determined by investor expectations about future inflation, as well as the respective desires of borrowers and lenders. A rational lender will attempt to maintain his purchasing power over the life of a loan, and, therefore, require a higher rate if he expects prices to rise in the future.

And, to the extent that the demand for loans (and inflation) increases as the economy expands, a “normal” curve is associated with a growing economy, while an “inverted” curve with a future downturn. Hence, the “recession coming” headlines that pop up every time the yield curve inverts.

One frequently-used measure of inversion is the difference or “spread” between 10-year and 2-year US Treasury instruments, holding all else equal. Here’s a picture of that relationship over the last four decades (1976-2019).



But – how valid is the yield curve as a recession predictor? Most economists would hedge a bit here – while recessions are usually preceded by an inverted curve, so are many periods of economic growth. So, using the yield curve as a forecasting tool is kind of like the men’s cologne in “Anchorman” – “60 percent of the time, it works every time.”



As indicated in the 10-year/2-year spread plot above, the yield curve inverted (i.e., the 10-year/2-year difference was negative) 16 times between June, 1976 and June, 2019. Over the same period, there were five recessions (as indicated by the gray vertical bars). Conclusion: every recession of the last four decades was indeed preceded by a yield curve inversion - - but the signal was wrong approximately 2/3rds of the time. If we take the inversion point closest to the onset of the recession for the five times the signal was correct and count the number of months between inversion and recession, we find that the average time lag was approximately 16 months, with the lag ranging from 8 months to as long as 21 months. So – the “signal” signaled numerous “false positives,” and when accurate, varied widely in terms of the length of time that it preceded a recession.

Three things to know before panicking at the first sign of inversion: first, US Treasury instruments are traded in some of the broadest and deepest markets on the planet, so rates change minute-by-minute. Using them to forecast the U.S. economy months or years out is, therefore, an iffy proposition.

Second, the magnitude of the current “slope” is miniscule by historical standards. Economists used to say that a signal was likely to be valid when the 10-year rate exceeded the 2-year rate by 3 percentage points (e.g., 4 percent vs. one percent). The current differential is just over one-quarter of one percent (25.2 “basis points”) – virtually no difference. Put another way, today’s “spread” is about 1/12th of that used as an indicator in the past.

Finally, it should be noted that Fisher’s theories presume free and competitive markets in which buyers and sellers trade actively, and in which there is virtually no interference. To the extent that this assumption is violated, the logical underpinnings of the theory no longer hold precisely, and inferences drawn from it are subject to a lot more variability. For better or worse, the Federal Reserve has implemented monetary policy by trading actively in the financial markets since the Great Recession, which means that observed rates are likely to be as reflective of Fed policy as of investors’ expectations.

Bottom line: as important as the credit markets are in the economy, it is probably a mug’s game to attempt to use the slope of the yield curve to make short-term buy/sell decisions.