

Yes, The Yield Curve Matters

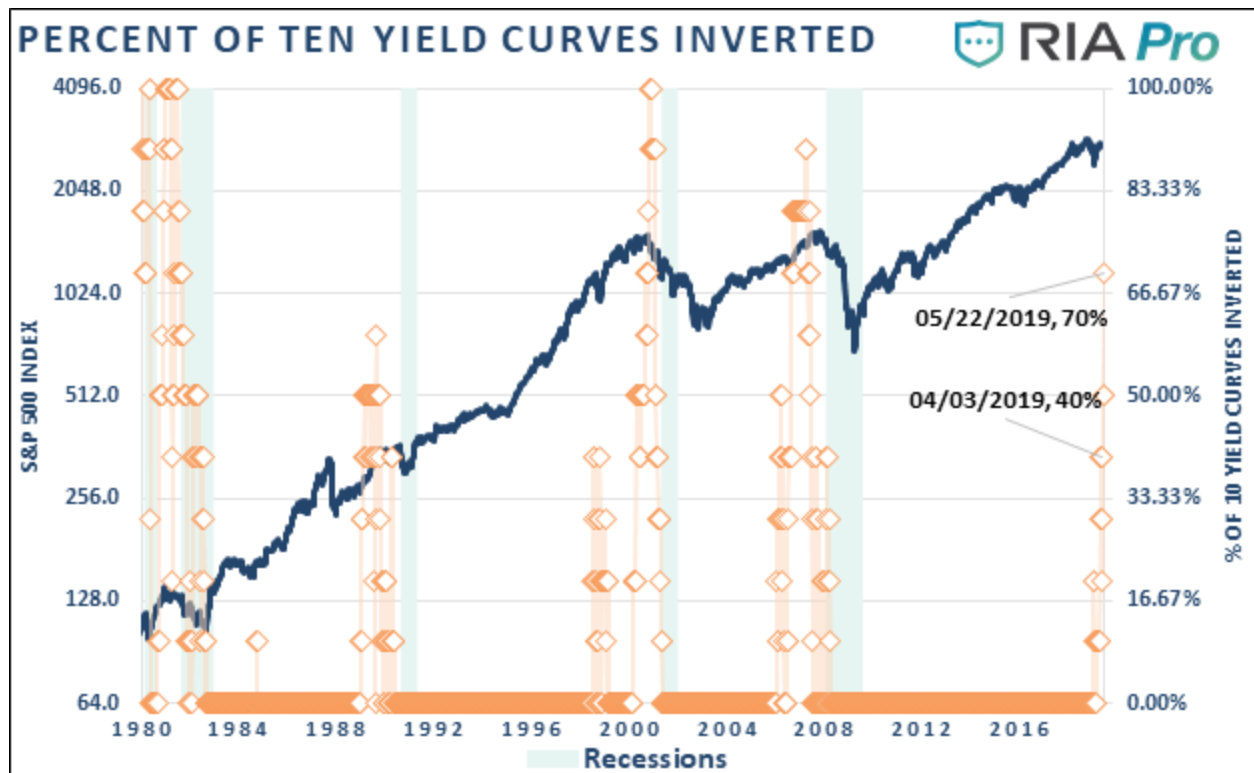
Recently several subscribers asked us why an inverted yield curve is a strong predictor of a coming recession. We will address the question in this article but first, we provide current context with two graphs that update you on the status of yield curves, and in the process help explain why this question is being asked with increasing frequency.

The first graph below, courtesy of the St. Louis Federal Reserve, clearly shows why the yield curve is becoming more and more of a concern for the Federal Reserve, along with many economists and the media. Since 1976, the last five recessions, denoted by gray bars, were preceded by a flattening and inversion of the 2yr/10yr Treasury yield curve. Currently, the curve is sitting at a mere 17 basis points (0.17%) and threatening inversion.



While the 2yr/10yr curve is the most popular yield curve to follow, it can be somewhat limiting as it only applies to those that borrow and lend in the two and ten-year maturity sectors. For example, the 2yr/10yr curve is not as important for a bank considering using customer deposits to make five-year auto loans. In this case, the bank's chief concern is likely the 3-month/5yr curve.

The next graph steps beyond the 2yr/10yr curve to examine many variations of Treasury curves and provide a broader perspective of the entire Treasury yield curve.



As shown, 70% of 10 important yield curves are inverted, up from 40% in early April.

With an understanding of the current state of the yield curves, we examine the profitability of lending to explain better why the yield curve has such a big effect on the economy.

The Profitability of Lending

There are essentially two ways that a bank or lender makes money lending. They can arbitrage time or credit, and most frequently they do both at the same time. Lenders employ time arbitrage when they borrow for short periods and lend that same money out for longer periods. Credit arbitrage occurs when a higher rated entity with a lower cost of capital borrows and then lends to a borrower with a lower credit standing and higher cost of capital.

Time Arbitrage: This is the oldest money-making trick in the book. It is frequently referred to as borrowing short and lending long. The risk to the lender of using time arbitrage is that short term borrowing rates rise in the future and effectively reduce or eliminate profits. An inverted yield curve, coupled with poor lending practices was the cause of the Savings and Loan crisis of 1987-1989.

The steeper the yield curve, the more potential profit, and the more incentive for a bank to borrow short and lend long. Conversely, the flatter the curve the less incentive. An inverted curve can lead to losses for lenders employing this strategy.

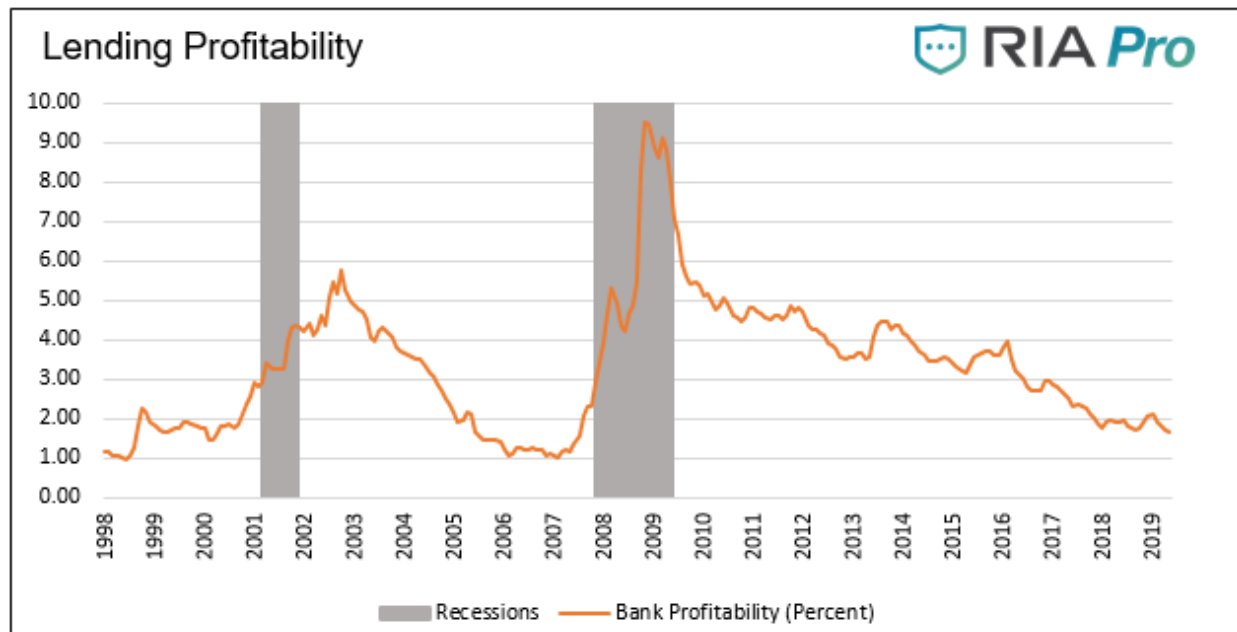
The key takeaway is that in an economy heavily dependent on the creation and refunding of debt, anything that detracts from a willingness to lend money causes economic weakness.

Credit Arbitrage: The riskier a borrower, the higher the interest rate to borrow money. Banks tend to be highly rated, thus allowing them to borrow at lower rates and then turn around and lend the money to lesser rated borrowers at higher rates. As the shape of the yield curve greatly affects time arbitrage, credit spreads play a big role in credit arbitrage. When spreads are tight, as they are now, the potential profit of lending is reduced, and therefore lenders are less incentivized to lend. Currently, credit spreads, as quantified by BBB-rated corporate bonds, are historically tight. Once default expectations are factored in the incentive to lend is minimal.

Quantifying Profitability

With an understanding of the two predominant types of lender arbitrages, we now provide a rough estimate of banking profitability based on the 2yr/10yr yield curve as a proxy for time arbitrage and BBB-rated corporate OAS spreads as a proxy for credit arbitrage. The following graph combines the two measures of probability to quantify the incentive for banks to lend.

Not surprisingly, the most recent recessions occurred when profitability, using these measures collapsed. The current reading is at levels seen before the 2001 recession and slightly above those preceding the financial crisis of 2008.



Data Courtesy St. Louis Federal Reserve

Summary

Tax reform, hurricane/fire disaster relief and a surge in the government's deficit all provided an economic boost over the last few years. As we have written in the past, these economic tailwinds will no longer meaningfully contribute to economic growth. Real gross domestic production (GDP) will likely shrink to its natural growth rate of 1.5-2.0%. However, flat to inverted yields curves and tight credit spreads are becoming a headwind to growth.

If the yield curves stay flat and/or flattens or inverts further and credit spreads remain tight, it is highly likely lending will be curtailed. Assuming this were to happen, we could be staring down the barrel of another recession, which is what the bond markets appear to be telegraphing. **That is why the yield curve matters!**