



The Inverted Yield Curve

May 29, 2019

by Cam Harvey, Jim Masturzo
of Research Affiliates

Jim Masturzo: Hi, Cam. In our earlier video, *The Flattening Yield Curve*, we reviewed your longstanding research on the shape of the yield curve and its macroeconomic implications. Can you provide a brief overview for our viewers?

Campbell Harvey: I think the idea is very intuitive. Basically, the idea is that longer-term interest rates are typically higher than shorter-term interest rates. Think about a certificate of deposit. If you lock your money up for five years, you get a much better rate than locking it up for three months or a year. So normally longer-term bonds have a higher yield than shorter-term bonds, but that's not always the case. In certain rare situations the yield curve inverts, which means that the shorter-term interest rate is higher than the longer-term interest rate. One of the reasons this might occur is that investors are piling into longer-term bonds, like the 10-year US Treasury bond, which is viewed as the safest bond in the world. Doing that drives up the bond's price and drives down its yield, relatively more so than the shorter-maturity Treasury notes. As I stated in my dissertation in 1986, I found that these inversions have a very particular pattern in the business cycle. They precede recessions. This is why the yield curve is getting a lot of attention today. It is a harbinger of bad times to come.

Jim: A few weeks ago we saw the 10-year Treasury bond's yield dip slightly below the three-month Treasury bill's yield. What do you think this foretells for the economy or are we still in a wait-and-see mode?

Cam: The last time the 10-year yield was below the three-month yield was in July 2007. Do you know what happened after that? Obviously, the Great Recession of 2008–09. Investors should take this very seriously. That said, in my dissertation I stated that the inversion must be sustained at least over a full quarter—just inverting for a couple of days or a week is not enough. The logic behind using a full quarter is that GDP is what we're trying to forecast, and GDP is measured over a quarter, not over a day. Nevertheless, any inversion has got to be bad news.

Jim: As you mentioned earlier, the yield curve is getting a lot of press these days, but not so in the 1980s when you were working on your dissertation. Do you think this could just be a self-fulfilling prophecy?

Cam: That's a very insightful question. You're correct that after my dissertation nobody paid attention to me. I got a little attention after the Crash of 1987, when the consensus among the pundits was there would be a recession in 1988. But my model said 4% growth, which was very different from the consensus. And it turned out that growth was over 4%. One point to make about the inverted yield curve is that it doesn't just predict recessions, it also doesn't give a false signal—at least over the last 60 years that we've measured it. The recession of 1990–91, the recession of 2001, the global financial crisis—all were forecast correctly. I suppose with all the publicity the inverted yield-curve signal has gotten, investors expect this indicator to perform, and so it could actually be a self-fulfilling prophecy. What we are really doing is giving investors a tool to better forecast real GDP growth. If they use the tool, they're more prepared for a recession. Consumers also. When the yield curve inverts, it's not the time to borrow money to take a vacation to Orlando. It is the time to save, to build a cushion. Maybe, instead of being a self-fulfilling prophecy, the inverted yield curve is a tool that allows consumers and investors to take measures which could indeed slow the economy as well as protect themselves. It could also maximize the chance we will experience a soft-landing recession, not a global financial crisis. We can deal with a softlanding. We know the business cycle is not going to go away. There will be some high-growth phases, there will be some low-growth phases. If the low-growth phases are soft, it's better for the economy as a whole.

Jim: It sounds like investors should be slightly more defensive, a little more risk-off posturing, given an inverted yield curve. Any other advice you would give to investors or our viewers?

Cam: Yes. One crucial piece of advice is that many indicators are forward looking. The stock market is traditionally a forward-looking indicator, but it's notoriously unreliable in forecasting recessions. Investors might see the stock market is doing well, but the yield curve is inverted. Investors can't be fooled by what's going on in the stock market, because it is way more complex than a yield on a Treasury security. The stock market will deliver much more noise. Don't be fooled because the stock market is going up. Investors should look at their portfolio and consider the valuations of the factors or stocks they're invested in. We've had a very long bull market. The beginning of the bull market coincided with the end of

the global financial crisis. We are at 119 months right now. The average length of a business cycle is 58 months. The current bull market is more than double the norm. Now is exactly the time to take some risk off and to prepare for a downturn that could occur within the next year or year and a half.

Jim: So, to summarize, the yield curve is now inverted, the three-month yield is higher than the 10-year yield, but it has only been so for a few weeks. Your research says we should wait at least a quarter before making any real inferences from the inversion because there are a lot of indicators to watch.

Cam: That's exactly right. My model is a very simple model. It has one variable, and the world is more complex than one variable. Even though the stock market is a very noisy indicator with a lot of false signals, it is important to look at the stock market as another indicator. Indeed, there are many things investors should look at as leading indicators of the business cycle. For example, Duke University has been doing an annual survey of CFOs for the last 25 years. These CFOs know their firm's CAPEX plan for the next year and their firm's employment plans. They are exactly the people we should be listening to because they know some very important information. Although a myriad of information needs to be taken into account to judge the direction of the economy, the one indicator that has a really good track record—and yes, I might be conflicted in that I published it in my dissertation—is the inverted yield curve, which should be considered very carefully.

Jim: Great. Thanks, Cam. You've given our viewers some very useful information.

Cam: Thank you.

© Research Affiliates