



KEN STERN & ASSOCIATES

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Recession Ready?

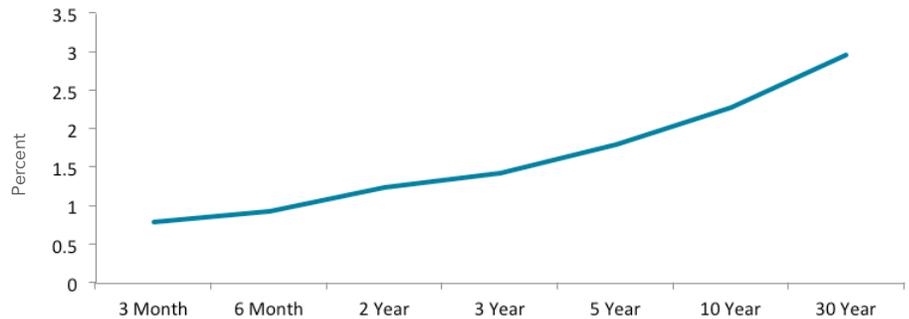
By Anish Ramachandran, CFA

The current U.S. economic expansion is one of the longest on record. As it continues, we can expect to see more questions arise regarding its sustainability. Given mixed economic data such as the May employment report, which showed that job growth is slowing as well as some speculation about the administration's pro-growth agenda being on the ropes, it is no surprise that investors are feeling anxious. Any number of factors can alter the trajectory of the U.S. economy. Despite that possibility, and looking at some of the most common predictive indicators, it is hard to see the U.S. falling into a recession in the next twelve months. This article will take a look at some publicly available data points and show why calls of a recession may be premature.

The Yield Curve

One of the indicators that I watch closely is the steepness of the yield curve, specifically the difference between the yield on ten-year Treasury bonds and three-month Treasury bills. A yield curve is a chart comparing yields of bonds of the same credit quality and different maturity dates for a set point in time. A yield curve is referred to as normal when longer-term rates are higher than shorter ones because people are being paid a higher rate for bearing higher inflation risk. A yield curve is said to be inverted when short-term rates are higher than longer ones; this typically happens when the Federal Reserve raises the federal funds rate over time to fight inflation. Markets tend to be wary of inverted yield curves because it signals a future slowdown in growth. Companies that rely on shorter-term funding may experience decreased profits as borrowing becomes more expensive, which may lead to layoffs. Homeowners, whose mortgage payments are tied to short-term rates, see a higher portion of their income go toward debt service than towards consumption, which is negative for the overall economy.

U.S. TREASURY YIELD CURVE



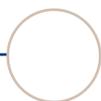
Source: Yahoo! Finance

The current shape of the yield curve is upward sloping and the difference between the 10-year Treasury bond and the three-month Treasury bill is 0.84 percentage points, which, according to research conducted by Estrella and Mishkin (1996), implies a less than 10 percent probability of a recession happening four quarters ahead.

ESTIMATED RECESSION PROBABILITIES FOR PROBIT MODEL USING THE YIELD CURVE SPREAD

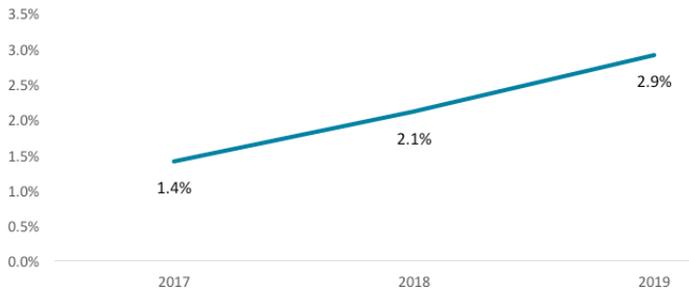
| Recession Probability (%) | Value of Spread (Percentage Points) |
|---------------------------|-------------------------------------|
| 5 | 1.21 |
| 10 | 0.76 |
| 15 | 0.46 |
| 20 | 0.22 |
| 25 | 0.02 |
| 30 | -0.17 |
| 40 | -0.5 |
| 50 | -0.82 |
| 60 | -1.13 |
| 70 | -1.46 |
| 80 | -1.85 |
| 90 | -2.4 |

Source: The Yield Curve as a Predictor of U.S. Recessions



So, when could the yield curve invert? A look at the Federal Open Market Committee ("Fed") Summary of Economic Projections for the Fed Funds Rate, may give us some idea on the time frame.

FOMC SUMMARY OF ECONOMIC PROJECTIONS FOR THE FED FUNDS RATE (MEDIAN)



Source: Federal Reserve

The projections indicate that the policy makers, on average, expect a 0.85 percentage point increase in the federal funds rate by the end of 2018 from the current level of 1.25%. If longer-term yields stay at current levels because of higher international purchases, we could potentially have an inverted yield curve at the end of 2018. Then the talk of a recession in late 2019 or early 2020 may be appropriate.

Now, one of the main reasons why investors are fearful of a slowdown in the near-term is because of the length of the current expansion. The current expansion has been running for 32 quarters and has a chance to beat a previous 40 quarter expansion (Q1 1991- Q1 2001) if we see a recession in late 2019 or early 2020.

| Trough | Peak | Duration (qtrs) | Average growth rate (%AR) |
|---------|---------|-----------------|---------------------------|
| Q4-1949 | Q2-1953 | 15 | 7.1 |
| Q2-1958 | Q2-1960 | 8 | 5.6 |
| Q4-1970 | Q4-1973 | 12 | 5.1 |
| Q1-1961 | Q4-1969 | 35 | 4.9 |
| Q1-1975 | Q1-1980 | 19 | 4.5 |
| Q3-1980 | Q3-1981 | 4 | 4.4 |
| Q4-1982 | Q3-1990 | 31 | 4.3 |
| Q2-1954 | Q3-1957 | 13 | 4.0 |
| Q1-1991 | Q1-2001 | 40 | 3.6 |
| Q4-2001 | Q4-2007 | 24 | 2.8 |
| Q2-2009 | To Date | 32 | 2.0 |
| Average | | 21 | 4.4 |

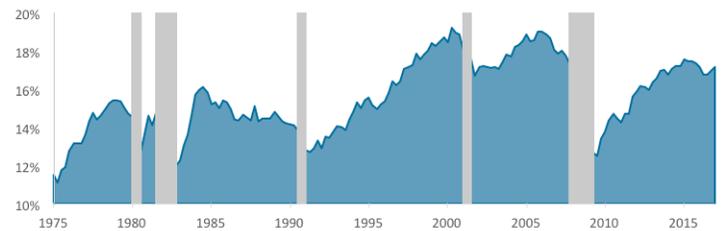
Source: Deutsche Bank

It is important to remember that expansions don't die of old age, but are brought to an end by specific developments in the economy such as the following examples.

Economic Imbalances

The recession in 2001 and the financial crisis in 2008 were a result of overinvestment in business capital and residential structures respectively. During both these recessions, private investment as a percent of GDP had risen to nearly 20 percent.

PRIVATE FIXED INVESTMENTS AS PERCENTAGE OF GDP



Source: Federal Reserve Bank of St. Louis

Investment spending has been slower in this expansion as both businesses and individuals continue to shore up their balance sheets and don't necessarily see many high growth opportunities. Business spending has been a laggard in this economy and is one reason why we see low levels of labor productivity. As business confidence grows, and the current administration's tax reform is implemented, we may see companies boost capital spending allowing workers to produce more with newer tools such as faster computers. As we can see, the current level of investment relative to GDP is close to 17%. If business spending does pick up, possibly aided by a lower corporate tax rate, economic growth should increase. Though it may take a few more years to reach the 20 percent mark again, once achieved, that level may imply an economic peak and indicate that a recession may be in the near future.

International Shocks

Global developments have contributed to economic downturns in the U.S. in the past. Oil shocks caused by the war in the Middle East were a big contributor to U.S. recession in the early 1980s. The rise in energy prices exacerbated inflation pressures that led to significant monetary tightening. International shocks are hard to predict but something like an Italian debt crisis may cause more global uncertainty.

Perhaps the biggest immediate concern is the Chinese Economy. China has been transitioning from a manufacturing to a service based economy and has experienced a slowdown in economic growth. So far, the Chinese government has been able to avert a crisis by using both monetary and fiscal tools. If growth were to fall further, and the government response is not strong enough, this could be a catalyst for a global slowdown, as many companies in the U.S. and around the world are exposed to the Chinese consumer.

Federal Open Market Committee Tightening

The third and most common cause of recessions in the U.S. is the monetary tightening by the Fed in response to an overheating economy. Looking at inflation data, current inflation is below the 2 percent target and there are no signs of overheating despite a low level of unemployment.

Sources:

Estrella, A. and Mishkin, F. 1996. The Yield Curve as a Predictor of U.S. Recessions. Current Issue in Economics and Finance

Yahoo! Finance

Federal Reserve Bank of St. Louis

www.economistsview.typepad.com

Deutsche Bank Research: The Next US Recession

PERSONAL CONSUMPTION EXPENDITURES
(EXCLUDING FOOD & ENERGY)



Source: Federal Reserve Bank of St. Louis

As employment increases and wages grow, we should expect higher inflation. The Fed has made it clear that it will be gradual in its rate hikes, and has even admitted that it might not deviate from its gradual stance even if inflation gets above its 2 percent target. The only caveat that may alter Fed's thinking is if Congress passes a large infrastructure bill as that could add few points to the GDP, leading to higher wages and inflation. Then we could possibly see acceleration in the rate hike schedule, and an earlier inversion of the yield curve which could bring a recession earlier than 2019 or 2020.

Conclusion

The current expansion began in June 2009 and has a chance to be one of the largest historical expansions if it stretches into late 2018 or early 2019. The factors that seem most likely to prevent this outcome are the Fed deciding to raise rates too quickly, or an international economic shock such as a debt crisis or a trade war. At the moment, the Fed is unlikely to increase the pace of its rate hikes given the low inflation and choppiness in the employment data, and the prospects of an international shock, although uncertain, are low given that Europe and emerging markets are expected to see increased economic activity. Given these factors, the prospect of a U.S. recession in the next twelve months seems low. So, when you hear someone on the television talking about the U.S. diving into a recession soon, see what indicators they are considering. My other suggestion is to mute your television. 📺

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