

SA exclusive, submitted on April 11, 2019

Introduction

The risk of a new recession increased recently, and its proximity became closer. I don't make predictions about exactly when the business cycle will turn down, other than to say that my model now tells me that it will probably happen sometime within the next 6 months.

This assertion doesn't come from my "gut feel" or pure guesswork. It comes from the combination of economic and stock market indicators that, in aggregate, generate a forecast based on Bayesian probability theory.

As of today, April 11th, the probability that the business cycle will peak within the next 6 months is close to 60%. That's high enough for me to take defensive steps that will shield my portfolio from the large drawdowns that accompany recessions. How you play defense, or whether you play defense at all, is up to you.

My Recession Forecasting Model

Developed over the years 2001-2004, my model has 20 indicators that are publicly available to anyone who cares to take the time to do the research. Some indicators come from published government data, others from market trends, and still others from investor behavior patterns.

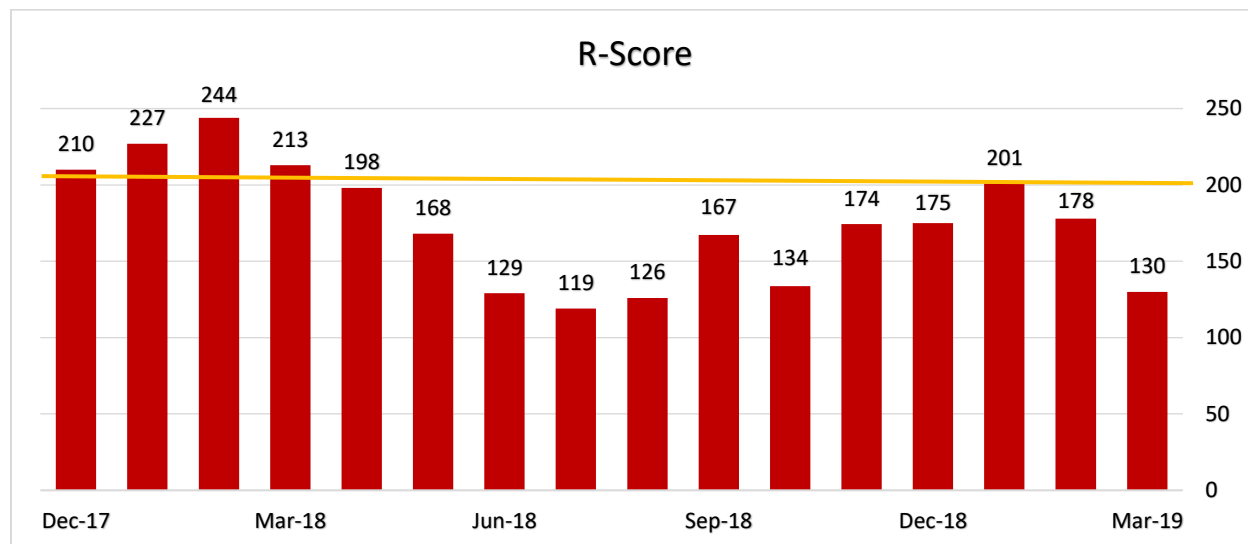
- 5 of the 20 indicators are "leading" in the sense that they have some predictive value.
- 5 indicators are "lagging" in the sense that they are only available weeks after the fact.
- 10 indicators are "coincident" in the sense that they are available in real time, or close to real time, and they either support or contradict the other indicators.

Each of the 20 indicators are carefully weighted according to their predictive value. The indicator with the highest predictive value is the R-Score. By itself, the R-Score can't predict when the next business cycle peak will come, but when I adjust it using Bayes Theorem, I get a signal that is far more accurate than just the R-Score by itself.

The thing that prompted me to write this article was the recent uptick in warning from the R-Score. I haven't yet had confirmation from the other indicators, but it looks like something significant is happening in the business cycle.

I will show the chart for the R-Score and then explain how it's calculated. You home-gamers will appreciate this.

The R-Score



ZenInvestor.org

The R-Score is calculated by combining the Treasury yield curve and the Misery Index. It's a simple calculation because there are just 4 inputs:

1. 10 year Treasury Note yield
2. Fed Funds rate
3. YOY change in the unemployment rate
4. YOY change in the CPI

Subtract the Fed Funds rate from the 10 year rate and you get the yield curve. Then subtract the unemployment rate from the CPI and you get the Misery Index.

Finally, subtract the Misery Index from the yield curve and you get the R-Score. That's all there is to it.

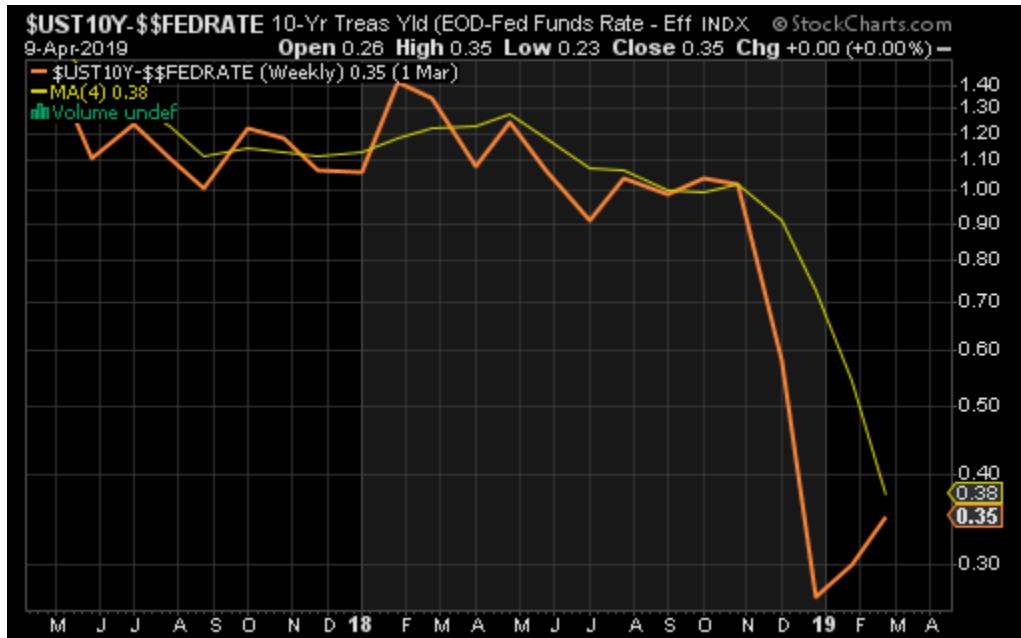
How to interpret The R-Score

As the above chart shows, the critical level for the R-Score is 200. As long as this indicator stays above 200 the business cycle is deemed to be in positive territory and the economy is expanding. Once the reading goes below 200, alarms are sounded. The longer this indicator stays below 200, the louder the alarms are. We have now gone 11 out of 12 months below 200.

As I said earlier, the R-Score alone doesn't have enough predictive value. It needs confirmation from the coincident indicators before it can be verified as meaningful.

Charts of the Treasury Yield Curve and the Misery Index

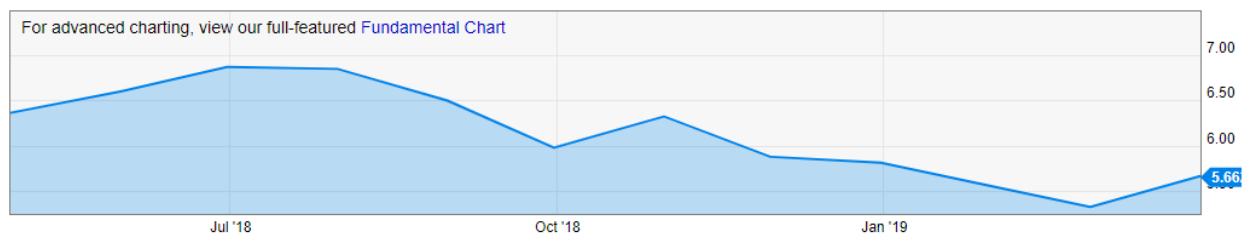
2 Year chart of the Treasury yield curve



[Stockcharts](#)

The curve inverted for three days at the end of March and has since rebounded slightly. Since this is one of the 4 inputs to the R-Score it deserves attention by investors.

1 Year chart of the Misery Index



[Ycharts](#)

As the above chart shows, the Misery Index has recently ticked higher, which is one of the causes of the decline in the R-Score.

5 Year chart of the Misery Index



[Ycharts](#)

Taking a longer view, we can see that the Misery Index is still very low. It's the recent uptick that has perturbed the R-Score.

Final Thoughts

The stock market tends to peak several months before a business cycle peak. While it's entirely possible that the R-Score may bottom out and move up above the 200 level, this is unlikely based on past recessions.

How you, as an equity investor, choose to play this is a personal choice. I've been telling clients to raise cash for several months, but not to abandon stocks altogether. Having a contingency plan in place before the market tops out would be invaluable for most investors. This involves setting up a series of defensive steps to take, based on the level of recession threat. The higher the threat level, the more defensive your posture should be.