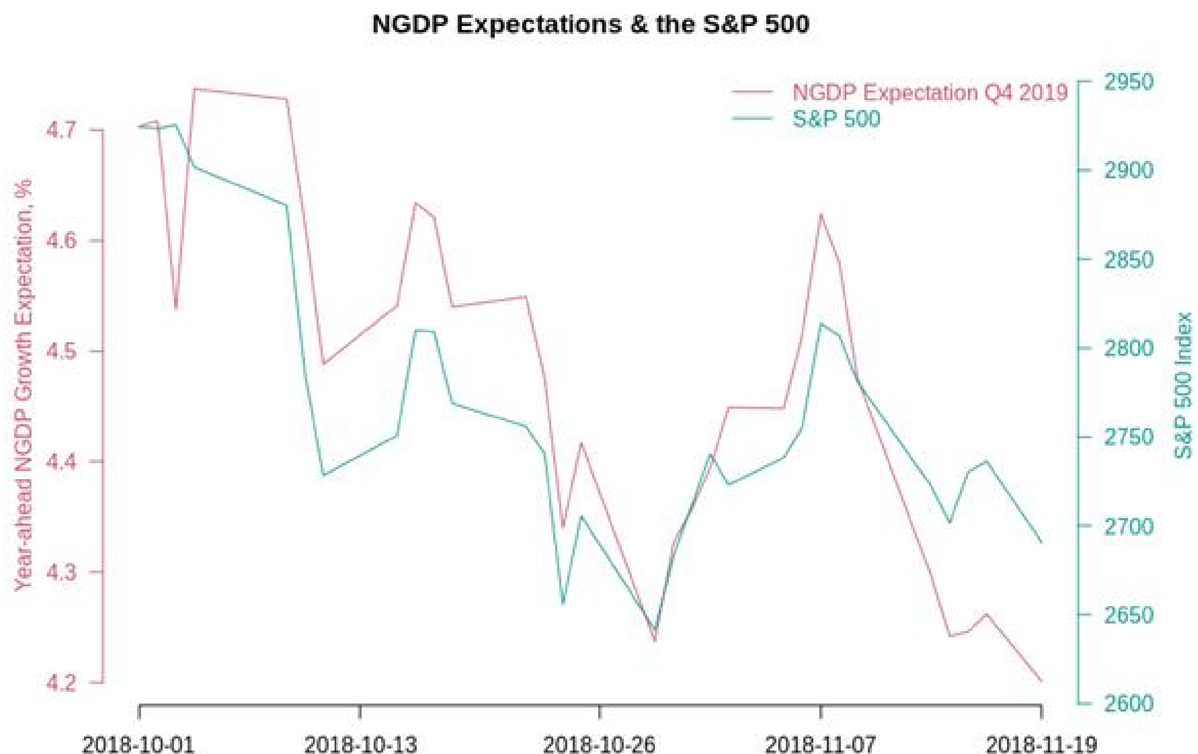
The Incredible Falling S&P 500

The big news in the last month or so has been the jarring volatility in the US stock market. At the time of writing, the S&P 500 is practically back to where it was a year ago and is down some -10% from the peak on 17 September, 2018. Despite the headline-making collapse in the share prices of internet companies such as Facebook, the Nasdaq is down “only” about -14% from peak, showing that the drop in the S&P 500 isn’t entirely due to the bear market in “tech”.

The drop in share prices seems to be mostly due to falling NGDP growth expectations, as shown in the chart below, which compares our market-derived, daily NGDP growth forecast, plotted alongside the S&P 500. Lest we be accused of circular reasoning, yes it is true that the S&P 500 is an input into our NGDP model, but it is only one of 15 prices, yields, and spreads we use, and cannot by itself move the forecast much.

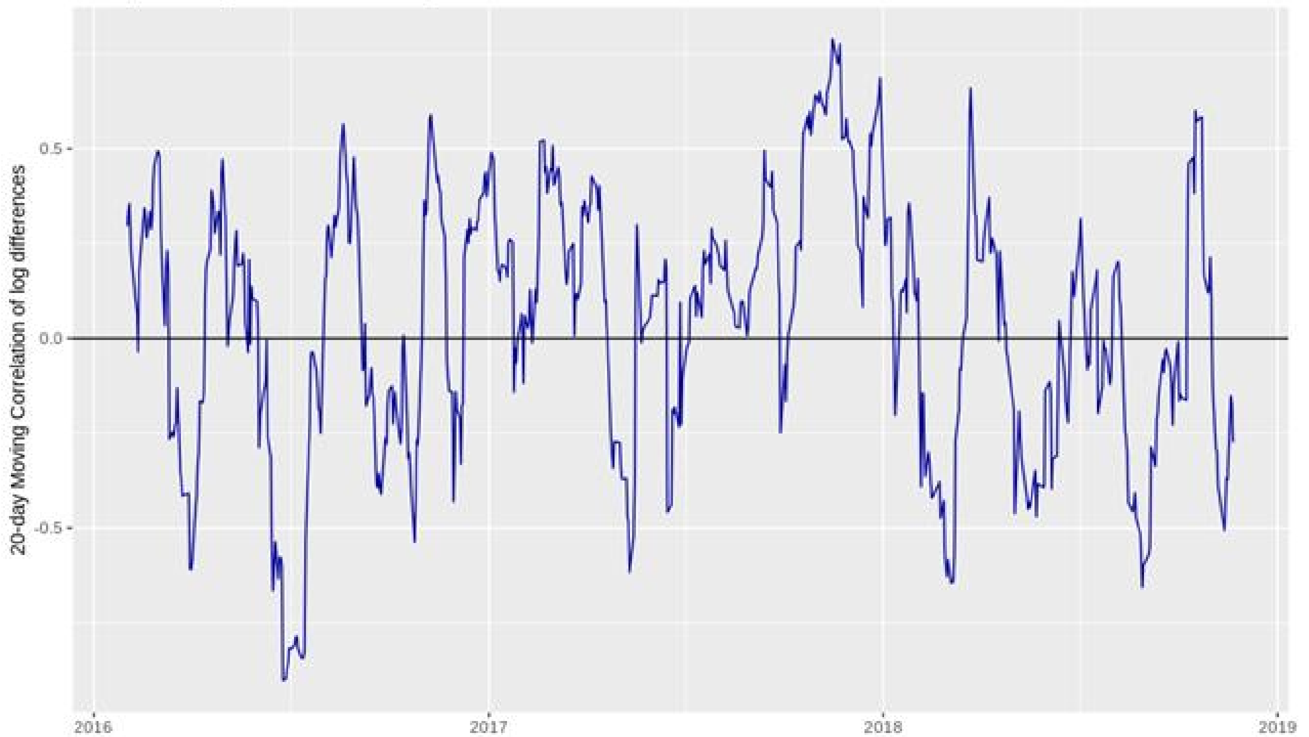


The NGDP expectations indicator shows that the bearish turn in stock prices is being mirrored across a broad array of markets, from commodities to yields and the dollar. This is the only way to move the forecast so much, from 4.7% to 4.2%. If you’re not happy with this state of affairs, blame the Fed, as they’re the ones who

manage NGDP expectations (more or less the definition of “setting monetary policy”).

Another way to test the hypothesis that the market drawdown is driven by NGDP expectations is to look at the moving correlation between share prices and the dollar index. This approach relies on a Market Monetarist assumption of how the economy works but is independent of the statistical methodology used to produce the NGDP forecast. If stocks are moving opposite to the dollar (negative correlation), that’s an indication that speculation about future monetary policy is the dominating factor: weaker dollar, higher stock prices, and vice versa. If the dollar is tracking with stocks (positive correlation), that´s a sign that supply-side speculation is dominating share price movements. If the correlation is low (say under +/- 0.1), then it’s either a mix of supply and demand considerations or something else entirely.

The plot below shows the 20-day moving correlation between log differences (a daily percentage change) in the S&P 500 and the dollar index. Data from 2016 are included to give a sense of how this indicator moves. Since early November, the moving correlation has been negative, signaling a dominant role for demand-side factors, which are ultimately the market’s interpretation of Fed intentions. Because this indicator is backward-looking, we can conclude that demand-side factors have been dominant since the start of October, consistent with the message told by the comparison of NGDP expectations and share prices shown in the first graph.



Recently measured inflation is tracking around 2%, Oil prices are falling, the dollar is strong, wage growth is lower than it was in 2005-2007, and the 5-year inflation breakeven is around 1.8%. Within this context, it’s hard to make a case for further interest rate increases by the Fed, be it in December or in the first half of 2019. If the Fed doesn’t reverse course soon, (and that might only mean a short, dovish “forward guidance” quip) 2019 will be a big disappointment, though 4.2% NGDP growth won’t put the US economy into recession.