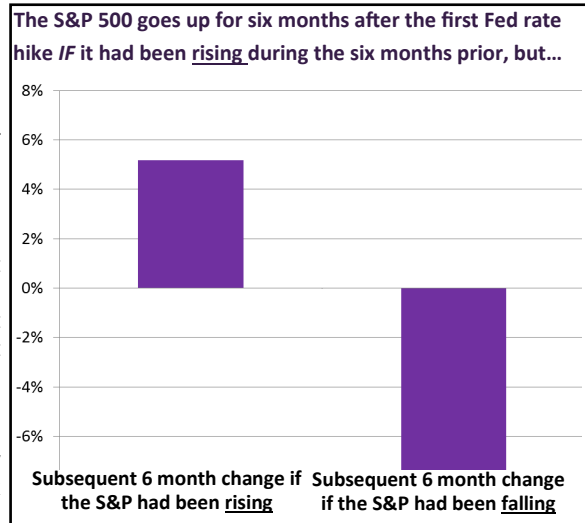


## Trading Places with Chair Yellen

On September 17<sup>th</sup> the Federal Reserve announced that it would continue on down its path of 8 years of accommodation. More recently, Fed policymakers have reiterated that the Fed will be “data dependent,” focusing on economic data in deciding when to begin to raise rates. But the reality is that the target rate has remained steady near 0% despite improvements in a variety of economic indicators. What other tools might investors use to develop a monetary policy outlook.

At Matarin, we consider stock market returns to be a strong leading indicator of real economic growth. Given that the S&P 500 was down 5.6% in the 6 months leading up to the Fed’s 9/17 meeting, we began to ask ourselves how likely it may be that the Federal Reserve itself is reacting to stock market events. To evaluate this question, we looked back at the history of all available data to identify every occasion on which the Fed began to hike rates for the first time in a tightening cycle. Since 1971 there have been 24 such occasions, but on only 4 of these had the S&P 500 actually been *down* over the course of the prior 6 months. Apparently, the Fed is not inclined to raise rates when the stock market is falling. And historically when the first rate increase in a cycle has been coincident with falling stock prices, the subsequent 6-month S&P 500 return has been -7.4% on average. On the other hand, when the first rate increase has been coincident with rising stock prices, the subsequent 6-month S&P 500 return has been +5.2% on average.

In retrospect, we can see that the most ill-fated of these initial rate hikes which followed down markets were those which accompanied economic signals that were not supported by evidence of real growth. For example, in March 1974 the Fed hiked rates because inflation had more than doubled during the prior year, but at the same time real GDP growth had actually been slowing. So perhaps it is not surprising that the markets continued to fall. In January 1982, the Fed was targeting money supply (M1) as the primary means of achieving its objectives. Rates were increased because money supply was above target, but in fact real growth was falling again in this case. In fact in retrospect we are now able to say that the US economy at the time was in recession, and indeed the negative stock market returns following the 1982 initial rate hike reflect that. By contrast, in March 1984, the Fed increased rates due to concerns that the economy was expanding too quickly. By this time, the Fed was targeting bank reserves, and there was a concern that excessive demand for bank credit would cause inflation. Year-over-year real GDP growth was 7.8%, and would remain over 7% for the next year. In this context, it is not surprising that the stock market continued to rise despite higher interest rates. Similarly, when the Fed increased rates in March 1988, the intermediate term stock market returns were very weak, reflecting the impact of the Crash of '87. However, the Fed raised rates in response to signals that the economy was recovering more quickly than it had anticipated, and because wages and prices had begun to rebound along with GDP. The stock market followed the economy modestly higher.



So what does this tell us about the current environment? Perhaps the Fed should look past the level of inflation relative to its target (1.8% core vs. 2% target) and past the current unemployment rate versus its long-term equilibrium rate (5.1% vs. 4.9% equilibrium), both of which do signal that it is high time to raise rates above the zero bound. Instead, perhaps the Fed should consider trends in real economic growth. There, we see that the Fed itself expects GDP growth in a range of 2 to 2.3% for each year between now and 2018 – well below our economy’s long-term average. From the stock market’s perspective, these low growth expectations make it look like a risky time for a rate hike. Fortunately, with the Fed having only raised rates during weak stock market environments on 4 of 24 past occasions, the evidence does seem to suggest that the Fed may end up waiting for the intermediate term trend in the market to rise before it begins to increase rates in this cycle.

## Matarin “Back to School” Quiz

In honor of the “back to school” season, Team Matarin has put together the brief pop quiz below. (Don’t stress if you did not study, this is meant to be fun... and informative.) If you choose to accept the challenge, please e-mail your answers to [mcotton@matarin.com](mailto:mcotton@matarin.com). Top scorers will receive a Matarin pen (market value less than \$1), and bragging rights!

- In Q3, the Russell 2000 index underperformed the S&P 600 index by 2.65%, as unprofitable names (which are systematically excluded by S&P) lagged. Over the past 20 calendar years, on an annualized basis, by how much has the S&P 600 outperformed the Russell 2000? a) 0% b) 0.5% c) 1% d) 2%
- Airlines were the top performing small cap industry in Q3 returning 12% What was the worst performing small cap industry in Q3? (Hint: Biotech was NOT in the worst five, falling only 23% in Q3) a) air freight b) gas utilities c) energy equipment d) pharmaceuticals
- There was no joy for Joy Global shareholders in Q3, as it was the worst performer in the S&P 500, down 58%. What was the best performing S&P 500 stock in Q3? a) Cablevision b) Chubb c) Wynn Resorts d) TECO Energy

Extra credit: Which one of these quotes was *not* from Yogi Berra and who said it? a) When you come to a fork in the road, take it. b) Life moves pretty fast. If you don't stop and look around once in a while, you could miss it. c) It ain't over 'til it's over. d) It's like déjà vu all over again.