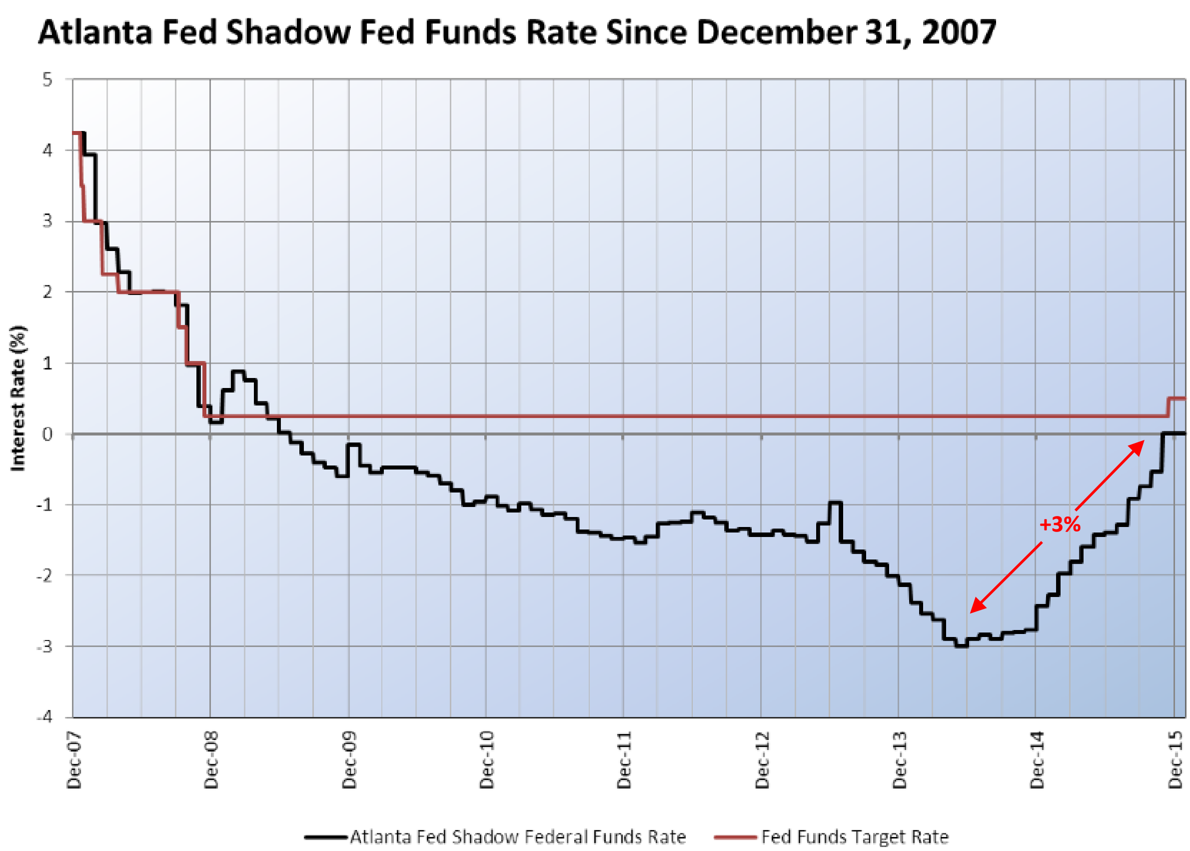
End of Quantitative Easing & Future Fed Funds Rate

The Great Recession of 2008 caused the Federal Reserve to take unprecedented measures to jump start the economy and avoid potential deflation. With the Fed Fund rates close to zero, the Fed was looking at quantitative easing as an unconventional measure to further stoke the economy. There is a long history of Fed Fund Rates and its impact on the economy. However, the impact to the economy in light of near zero interest rates is hard to find.

Economists Jing Cynthia Wu and Fan Dora Xia from University of Chicago came up with a novel way to measure the impact from these stimulative measures during near zero interest rates. They created the "Shadow Fed Funds Rate" a measure of the underlying Fed Funds Rate. By their calculation, through July 2014, this Shadow Fed Funds Rate was actually -2.8%. Recently, the Atlanta Federal Reserve Bank has calculated that since the summer of 2014 as the Fed eased out of quantitative easing, the monetary policy has tightened by 300 basis points. That's 18 months before the 25 basis point increase they made to the actual Fed Funds rate this past December.



Source: Federal Reserve Bank of Atlanta, Federal Reserve, Bloomberg LP, Wright Investors' Service, Inc.

Since 1983 (not including the "once-and-done" 25 basis point increase in March, 1997), the Fed has raised rates six times, with an average increase of 2.8%. Therefore a 3% tightening through elimination of quantitative easing has significant implications in terms of monetary policy and creates a headwind on our fragile economy.

The following table sets forth the Fed's median expectations as of December 16, 2015 for the Funds rate for the next three year-ends:

Pace of Policy Firming	2016	2017	2018	Long Run
Median	1.375%	2.375%	3.25%	3.50%

Adding these amounts to the already-realized 300 basis points of "shadow" monetary tightening would bring the overall increases to levels greater than those implemented in previous cycles. While it remains to be seen whether this monetary tightening would have the same impact as traditional tightening through the Fed Funds rate, the Fed should heed the positive impact this type of monetary easing has had in the recent past.

Couple the headwind higher rates would likely create for the economy with the impact it would have on the US Dollar (higher), commodity prices (lower), more deflationary pressures, further stress on developing market economies, and it is easy to conclude that the Fed's expectations for significant rate increases are unlikely to be met.

In light of this, we expect that, at most, the Fed may gradually raise the Funds rate to 2% by the end of this cycle. As a consequence, we expect US Treasury yields to remain low for the foreseeable future.

January 29, 2016

For more information on the Atlanta Fed Shadow Fed Funds Rate Wu-Xia model:
http://faculty.chicagobooth.edu/jing.wu/research/pdf/wx.pdf