Ghosts and Forecasts

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Introduction

Macroeconomic forecasting on the FOMC

- Federal Open Market Committee (FOMC) participants regularly make forecasts.
  - This time of year provides a good window to evaluate previous forecasts to see what can be learned from them.
- On what dimensions was the Committee right, and on what dimensions wrong, in its forecasts for 2014?
- What are the implications for forecasts and monetary policy in 2015?

Fed forecasts

- The Fed releases forecasts on real GDP growth, the unemployment rate, inflation and the policy rate.
- The forecasts are made by FOMC participants each quarter, without attribution to individuals.
- I will point out the St. Louis Fed's forecasts as we consider the range of forecasts of Committee participants in recent years.

Main themes for today's talk

- The FOMC forecasts are special because the Committee also decides on monetary policy for the U.S.
  - We will treat FOMC forecasts as unconditional statements of what will actually happen, but only after acknowledging this difficulty.
- The FOMC has been surprised in the same way two years in a row.
- The nature of this surprise pulls the Committee in two different directions on monetary policy.

The Monetary Policy Assumption

The policy assumption clouds FOMC forecasts

- When FOMC participants are asked to submit forecasts, it is under an “appropriate monetary policy” assumption.
  - What does this mean?
- This aspect of the exercise clouds the meaning of these Committee forecasts.
- This is a long-standing problem with FOMC forecasts.

The Ghost of Christmas Future

The problem as explained by Dickens

- Consider "A Christmas Carol" by Charles Dickens.
- The Ghost of Christmas Future shows Scrooge a scary vision of events to come, but only under Scrooge's present-day policy of cold-heartedness.
- If Scrooge changes his policy today, then perhaps the vision shown to him by the Ghost of Christmas Future will not materialize.
- In the story, Scrooge does change policy and his future unfolds in a very different way.
- Did the Ghost of Christmas Future make a "bad forecast"?

The Dickens problem for the FOMC

- FOMC participants are like the Ghost of Christmas Future.
- They must produce a vision of what is to come for the economy, but under a monetary policy assumption.
  - Should participants project possible outcomes under their own policy assumption? If so, these participants might then predict good outcomes.
  - Or, should participants project possible outcomes under a policy path likely to be chosen by the Committee, even if these participants view a different policy as appropriate? These participants might then predict less satisfactory outcomes.
- Participants in fact use very different policy assumptions.
  - There is currently no resolution to this problem.

The forecast assessment for today

- Outside observers often simply treat the FOMC prognostications as forecasts of what will actually happen.
- That is how I will look at these forecasts today.
- However, I will do so with your understanding that this is not completely fair.
  - For a technical discussion of this and related issues, see Martin Ellison and Thomas J. Sargent, 2012, "A Defense of the FOMC," published in the *International Economic Review*, and my related commentary, "Discussion of Ellison and Sargent," at the Workshop on Uncertainty Over the Business Cycle, Frankfurt, Germany, 2009.

FOMC Forecast Assessment 2014

The data

- We will consider the FOMC forecast ranges for three variables: Real GDP growth, unemployment and inflation.
- There is a "central tendency," which omits the three highest and three lowest projections.
- The forecasts are the ones made in June for the following January-December calendar year.
- Full data for 2014 are not yet available, and we fill in using private sector estimates.

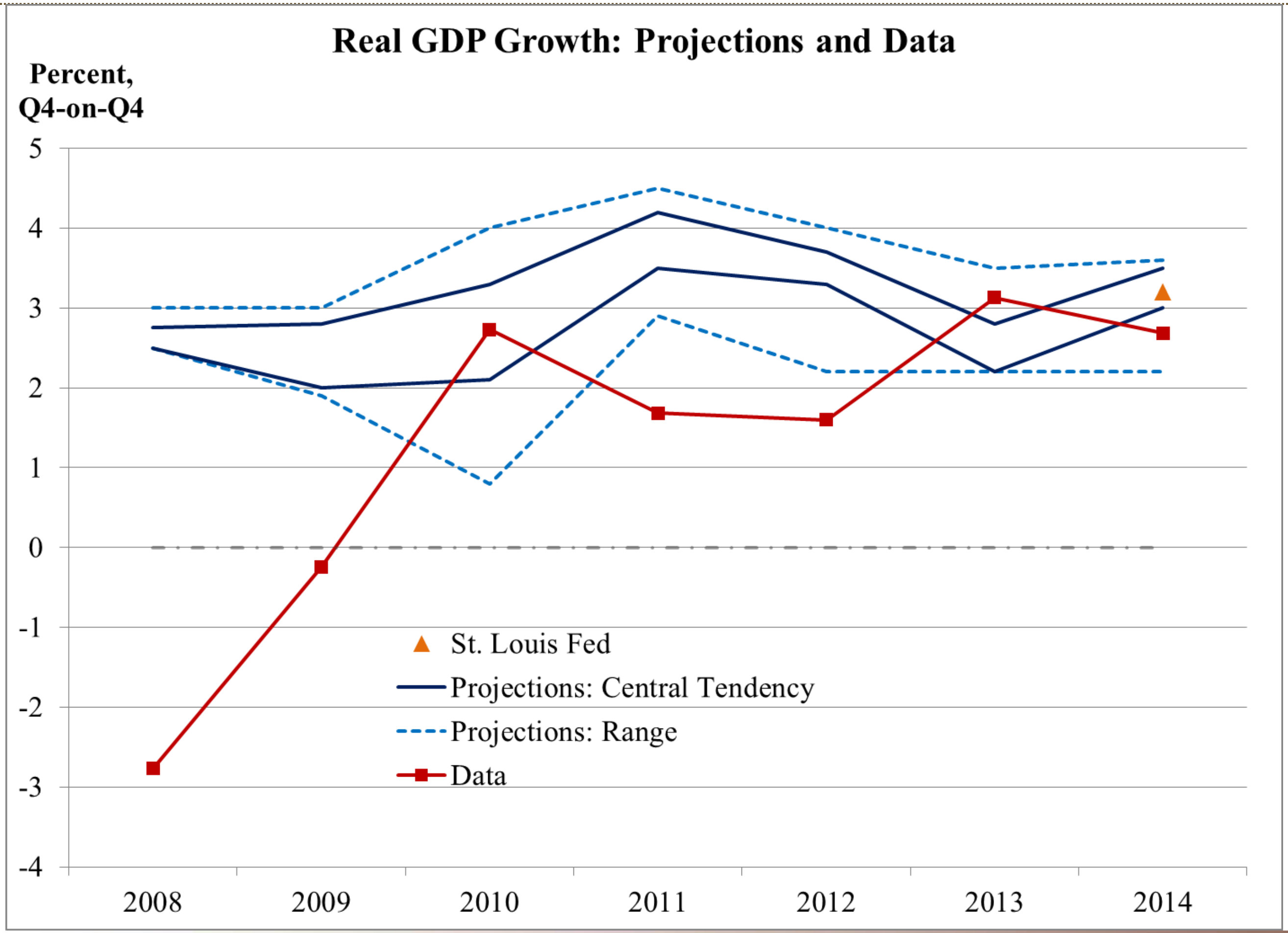
The forecast record

- *The Committee often misses in the sense that the entire range of forecasts is too high or too low.*

- In 2014, the FOMC was:
  - about right on real GDP growth,
  - too pessimistic on unemployment, and
  - too sanguine that inflation would remain near target.

- This is the same set of misses as in 2013.

Real GDP growth

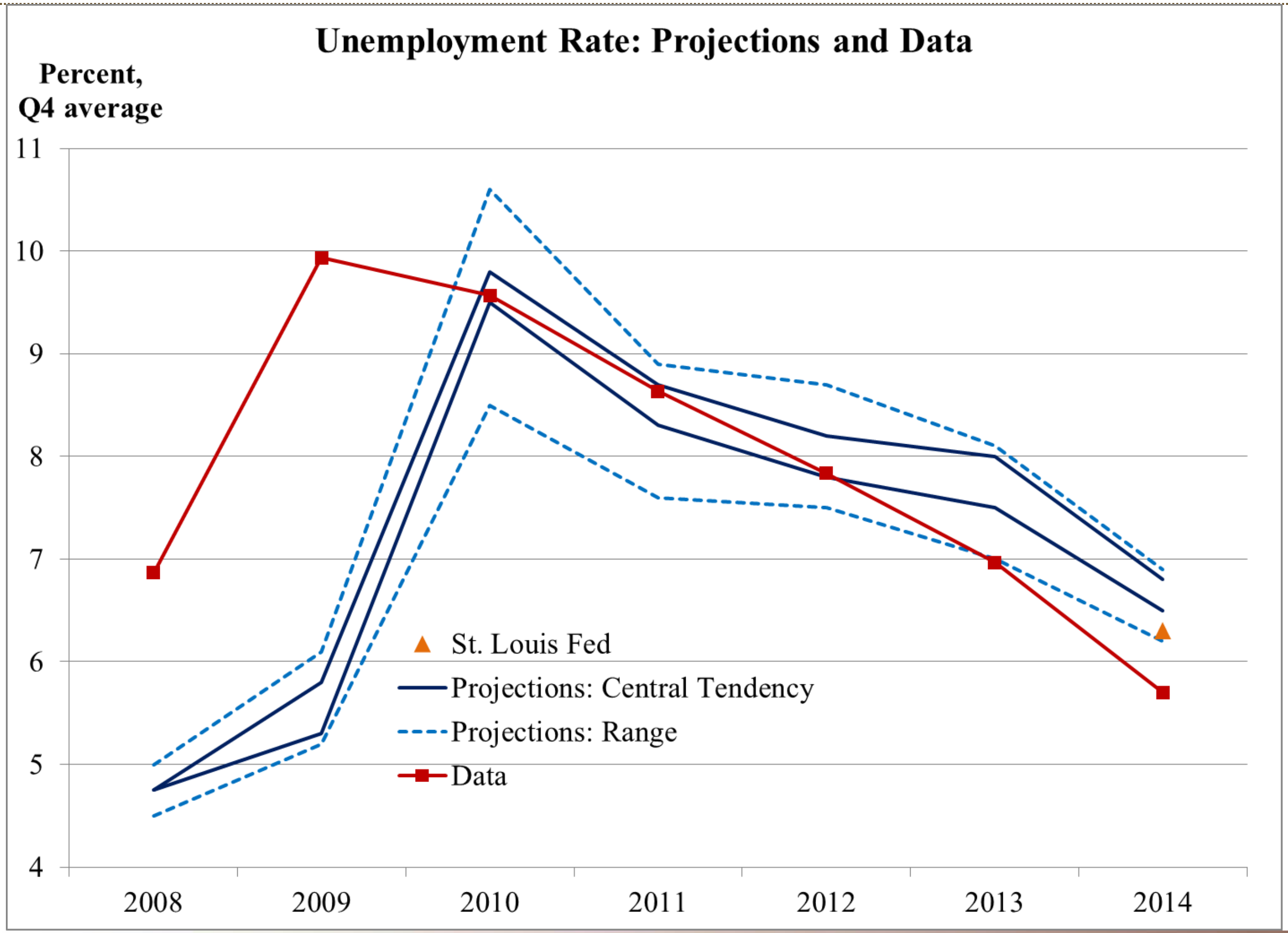


Source: FRB Economic Projections of Federal Reserve Governors and Reserve Bank Presidents in the Monetary Policy Report to the Congress from the previous July. The 2014-Q4 figure is the MA January 2015 forecast.

Remarks on real GDP growth

- The central tendency of the Committee underestimated real GDP growth slightly in 2013 and overestimated real GDP growth in 2014.
  - This leaves the level of real GDP approximately correct over the two-year period.
  - In this sense, the Committee has been about right recently.
- The big misses for this variable were 2011 and 2012, as well as during the recession years 2008 and 2009.
- Bottom line: The growth forecast was about right for 2014.

Unemployment



Source: FRB Economic Projections of Federal Reserve Governors and Reserve Bank Presidents in the Monetary Policy Report to the Congress from the previous July.

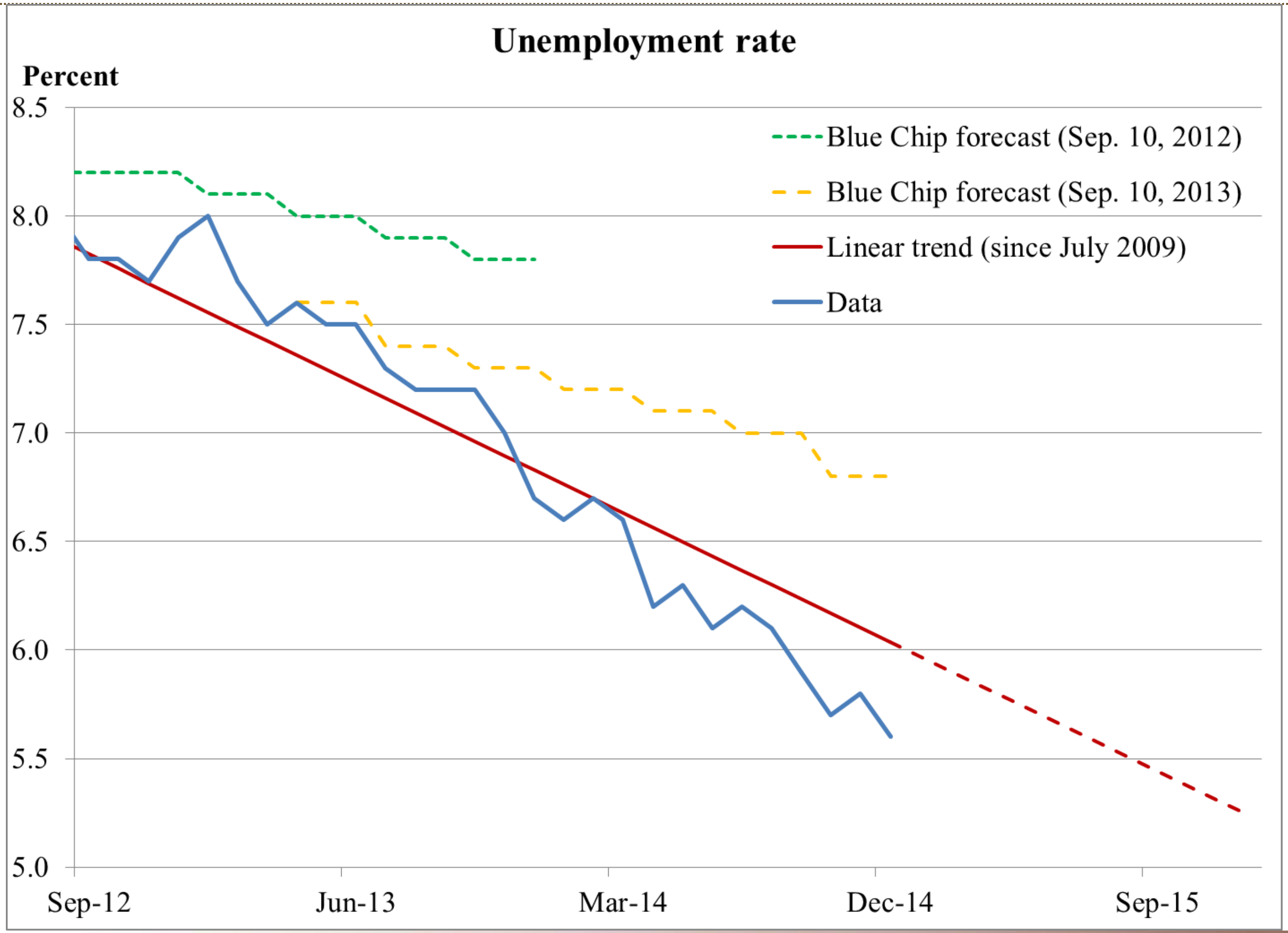
Remarks on unemployment

- The Committee missed the large decline in unemployment in 2014, expecting less labor market improvement than was observed.
- For 2014, the St. Louis Fed had the second lowest estimate for the end-of-year unemployment rate—we were at the low end of the Committee range.
  - Despite being optimistic for this variable, we were still too high for 2014.
- Bottom line: The FOMC was too pessimistic on labor market improvement.

Private sector forecasts for unemployment

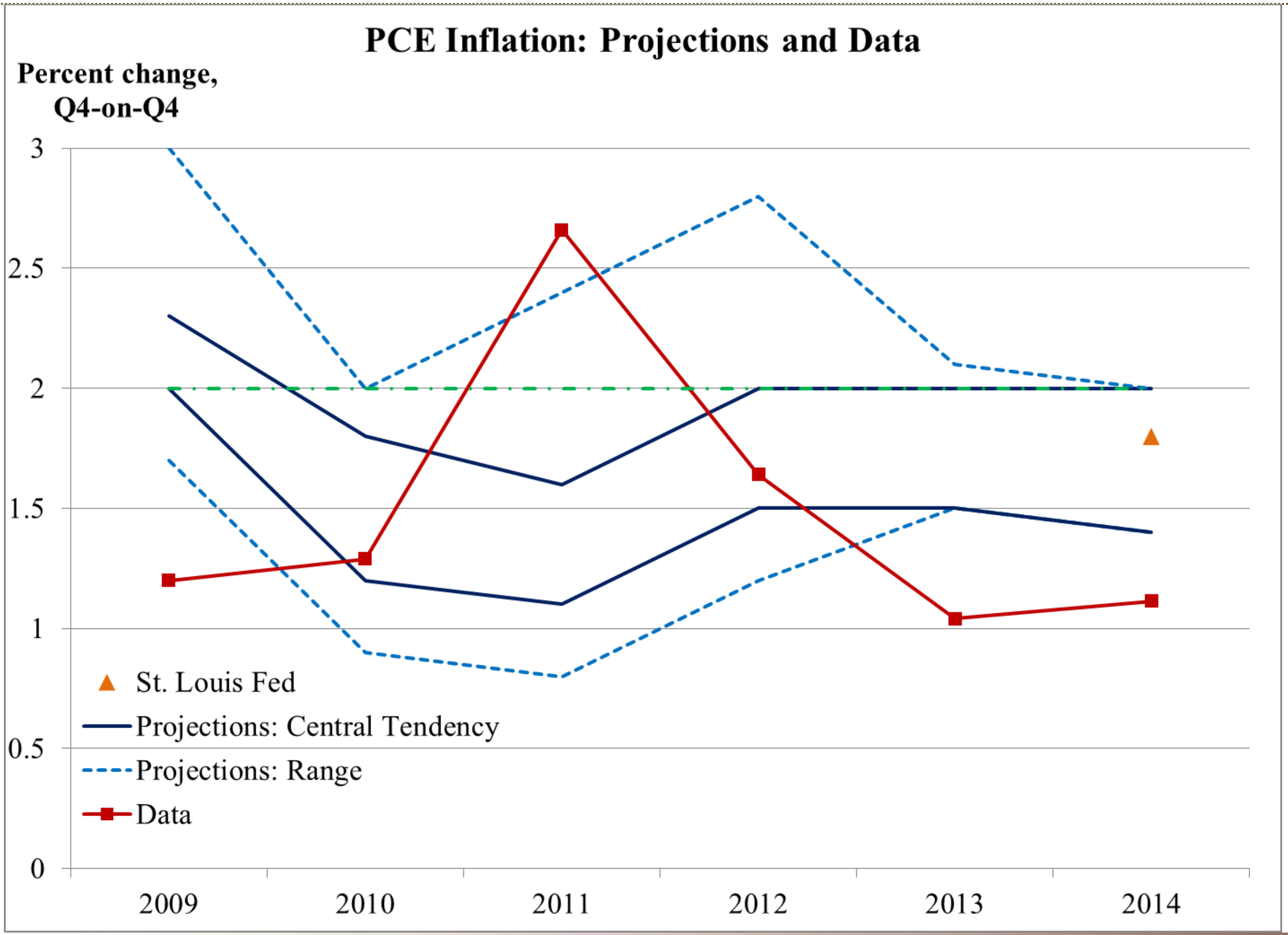
- The private sector forecasting community has also been far too pessimistic on unemployment.
- The following chart shows forecasts for unemployment made at the launch of QE3 in September 2012, and one year after that, for the end-of-year unemployment rate in 2013 and 2014.
- Both of these forecasts were too high by a full percentage point or more.
- Unemployment is one of two workhorse measures of labor market performance (along with nonfarm payroll employment).

Unemployment



Source: Bureau of Labor Statistics and Blue Chip Economic Indicators. Last observation: December 2014.

Headline inflation



Source: FRB Economic Projections of Federal Reserve Governors and Reserve Bank Presidents in the Monetary Policy Report to the Congress from the previous July. The 2014-Q4 figure is the MA January 2015 forecast.

Remarks on inflation

- The Committee overestimated inflation again in 2014, similar to 2013.
- The St. Louis Fed was, along with the entire Committee, too high.
- The pattern for core inflation (which excludes food and energy) forecasts is similar.

Implications for Current Monetary Policy

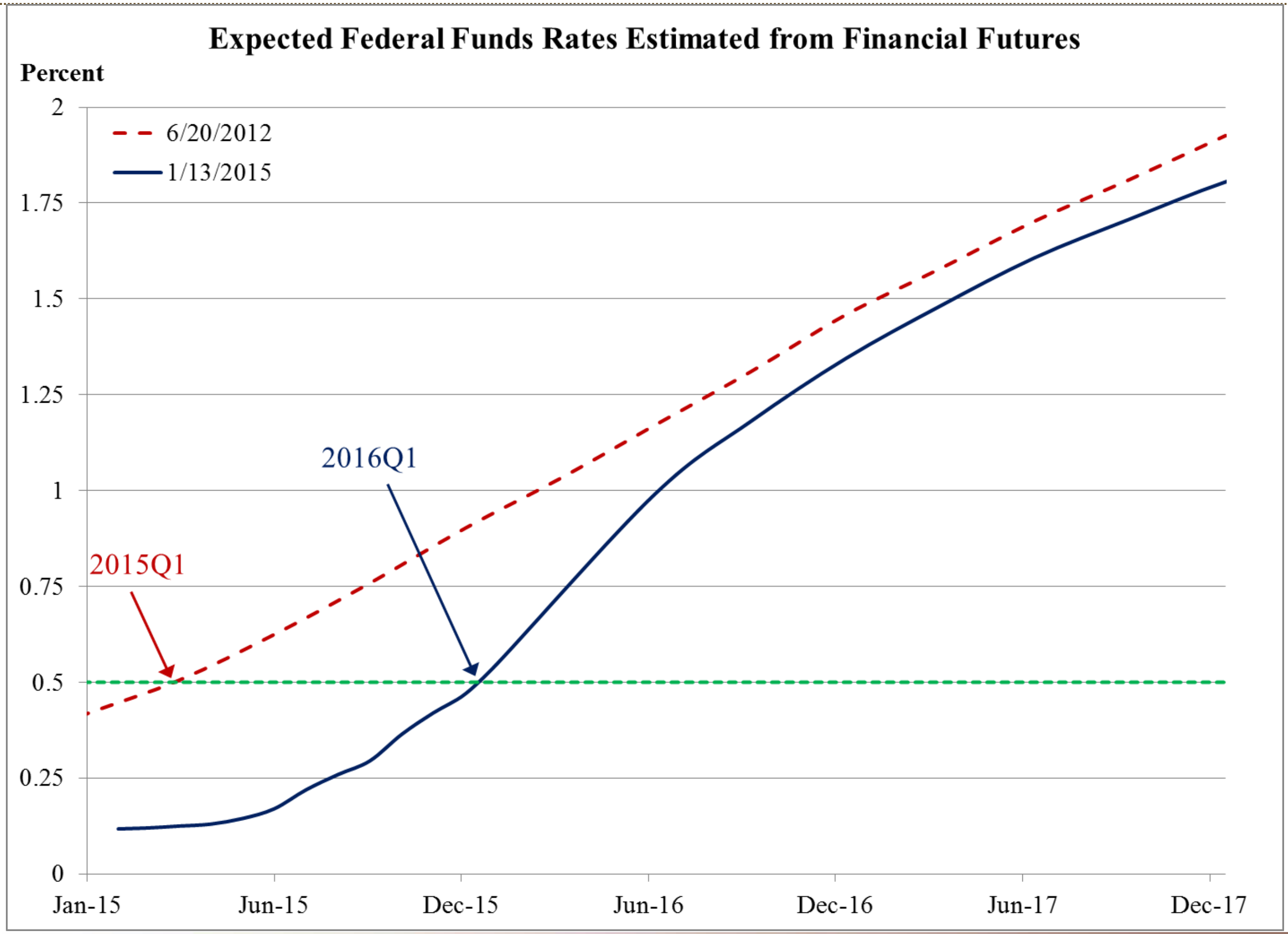
Implications

- The Committee has been surprised in the same direction for two years in a row.
- The surprise has the following form:
  - Real GDP growth not too different from expectations.
  - Labor markets stronger than expectations.
  - Inflation lower than expectations.
- This constellation of surprises pulls the Committee in different directions with respect to monetary policy choices.

Better-than-expected real variables

- In traditional central banking, when real macroeconomic performance exceeds expectations, policymakers chart a more aggressive course for interest rates.
- The generally good real GDP growth, coupled with the sharp and surprising improvement in labor markets, suggests somewhat earlier and faster policy rate increases than would otherwise be the case.
- Has the Committee shifted market expectations toward an earlier and higher path for the policy rate in response to this surprise?
  - Answer: No.

Market expectations of the policy rate path



Source: Bloomberg and author's calculations. Last observation: January 13, 2014.

Inconsistency?

- The Committee received better-than-expected news on the real economy over the last two years, and yet adjusted policy in the direction of maintaining low interest rates for a longer time.
- By itself, this suggests some inconsistency in recent monetary policy decisions.
  - In particular, an adjustment like this makes it hard for the private sector to infer the Committee's reaction function to incoming data.
  - Why didn't the Committee adjust in the normal way to better-than-expected news on the real economy?

Lower-than-expected inflation outcomes

- However, there is another variable: Inflation.
- The improvement in the real economy has not been accompanied with upward movements in inflation so far.
  - The level of inflation is not so low that it can alone justify a policy rate of zero.*
- Still, low inflation readings and declining inflation expectations may indicate a loss of credibility for the Committee's 2 percent inflation target.
- An important tenet of modern central banking is that a central bank must protect its credibility with respect to its inflation goal.

*See J. Bullard, November 2014, *Does Low Inflation Justify a Zero Policy Rate?*, remarks delivered at the St. Louis Regional Chamber Financial Forum, St. Louis, Mo.

Bottom line

- The bottom line is that there have been positive surprises relative to forecasts during 2013 and 2014 concerning the labor market.
- This normally would have led to a more aggressive plan for the policy rate compared to expectations as of the summer of 2012.
- Instead, market expectations for the policy rate have moved in the opposite direction, raising questions about the nature of the Committee's reaction function to incoming data.
- Surprisingly low inflation readings provide one possible explanation for this development.

Summary

Summary

- In a forecasting sense, the FOMC has been surprised in the same way two years in a row.
- The surprise has been that real GDP growth has been about as expected, but labor markets have improved more rapidly than expected, while inflation has remained low.
- This type of surprise pulls the Committee in different directions.
  - Better real performance suggests a more aggressive rate policy.
  - Lower-than-expected inflation outcomes weigh on the credibility of the Committee's inflation target, and suggest a less aggressive rate policy.

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