CENTRAL
to
AMERICA'S
ECONOMY™

A Tame Taper

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Any opinions expressed here are my own and do not necessarily reflect those of the Federal Open Market Committee.

Introduction

Recent themes in U.S. monetary policy

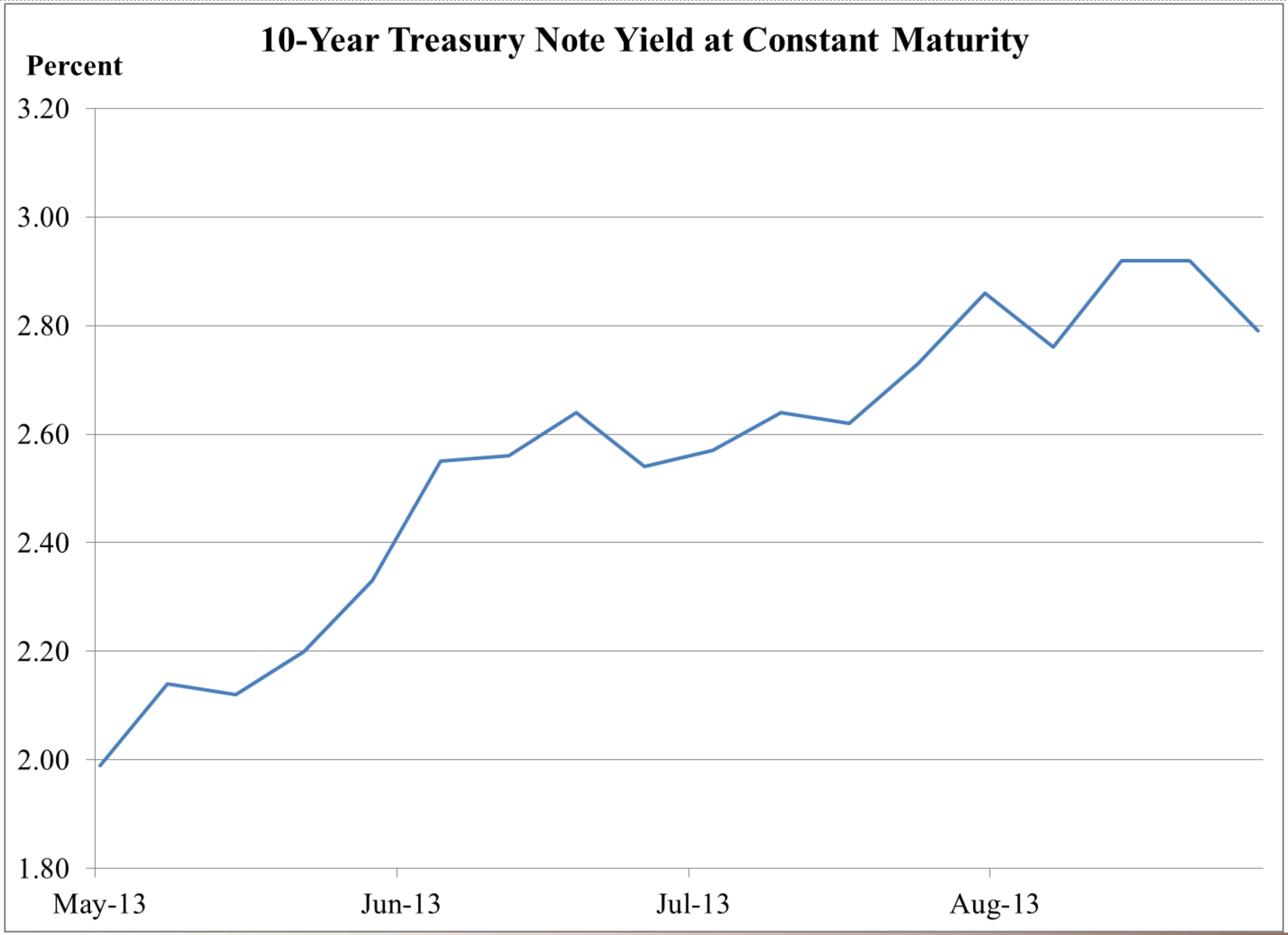
- The taper has been tame compared to last summer.
- Looking through weak first quarter real GDP growth.
- The FOMC is much closer to its goals than at any time in the past five years.
- Inflation: Stabilized at a low level.

Tame Taper So Far

The taper tantrum

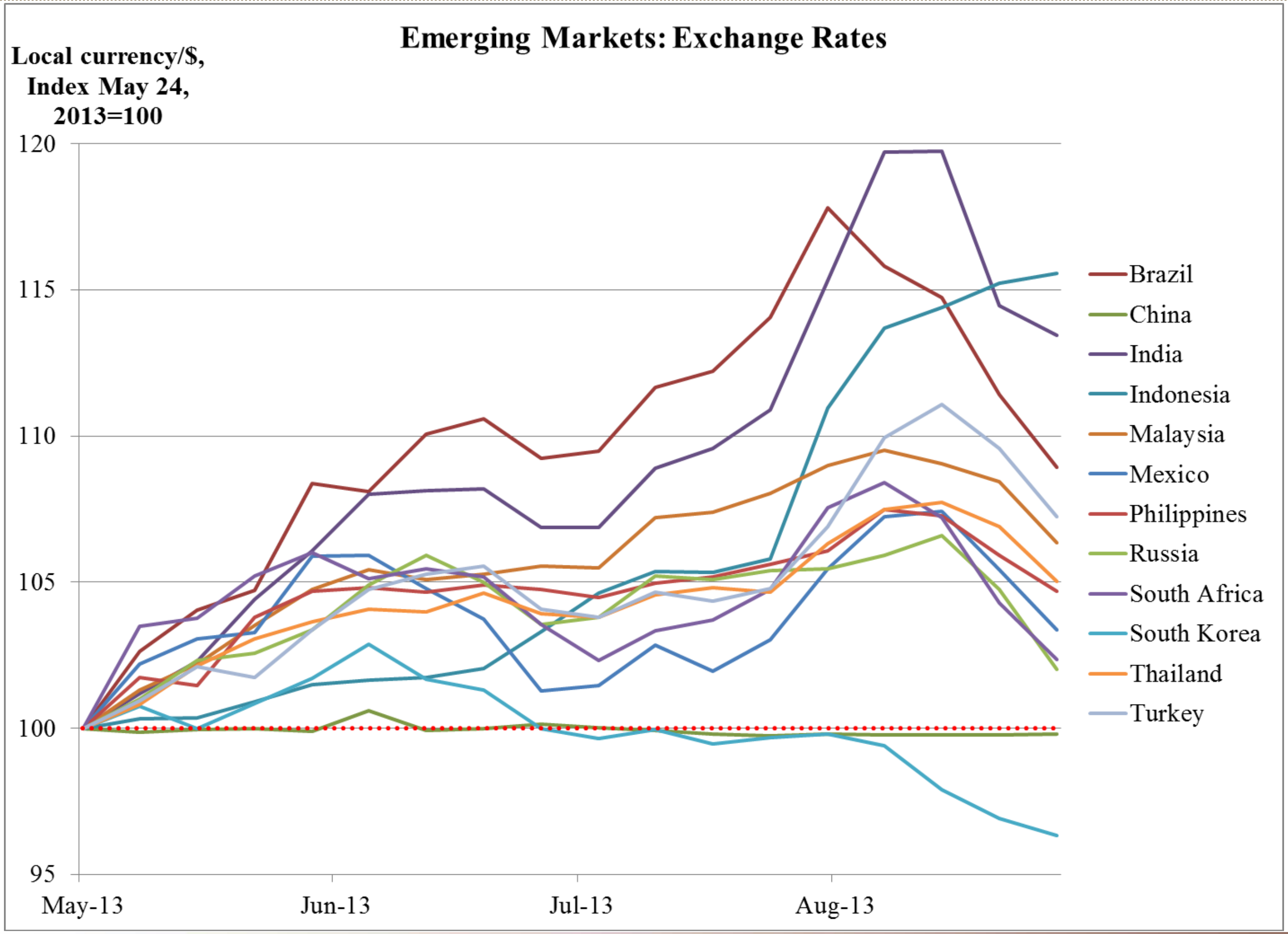
- What happened during the "taper tantrum" in the summer of 2013?
  - U.S. interest rates increased.
  - Emerging-market currencies depreciated against the U.S. dollar.
  - Capital flowed to the U.S.
  - Emerging-market equity prices declined.

Longer-term U.S. interest rates increased



Source: Federal Reserve Board. Last observation: week of September 20, 2013.

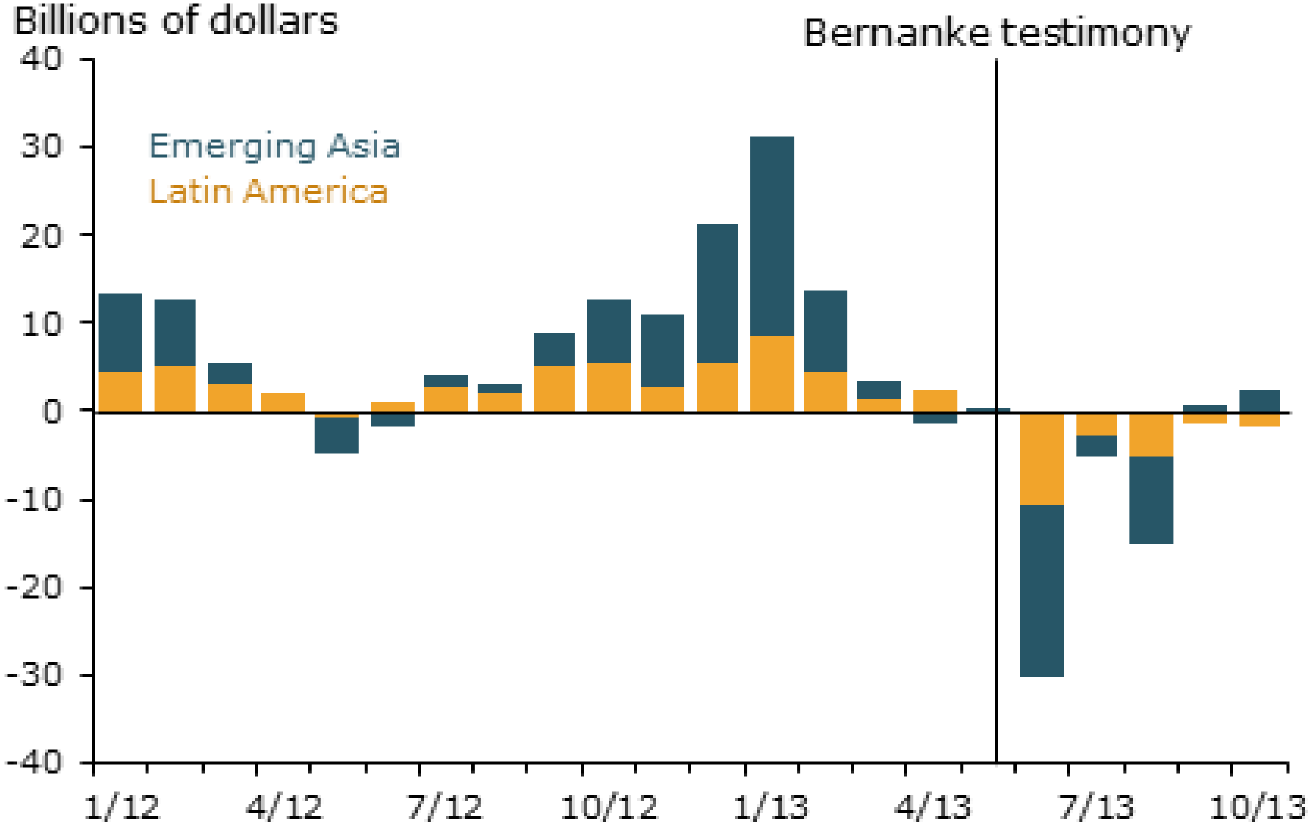
Emerging-market currencies depreciated



Source: author's calculations. Last observation: week of September 20, 2013.

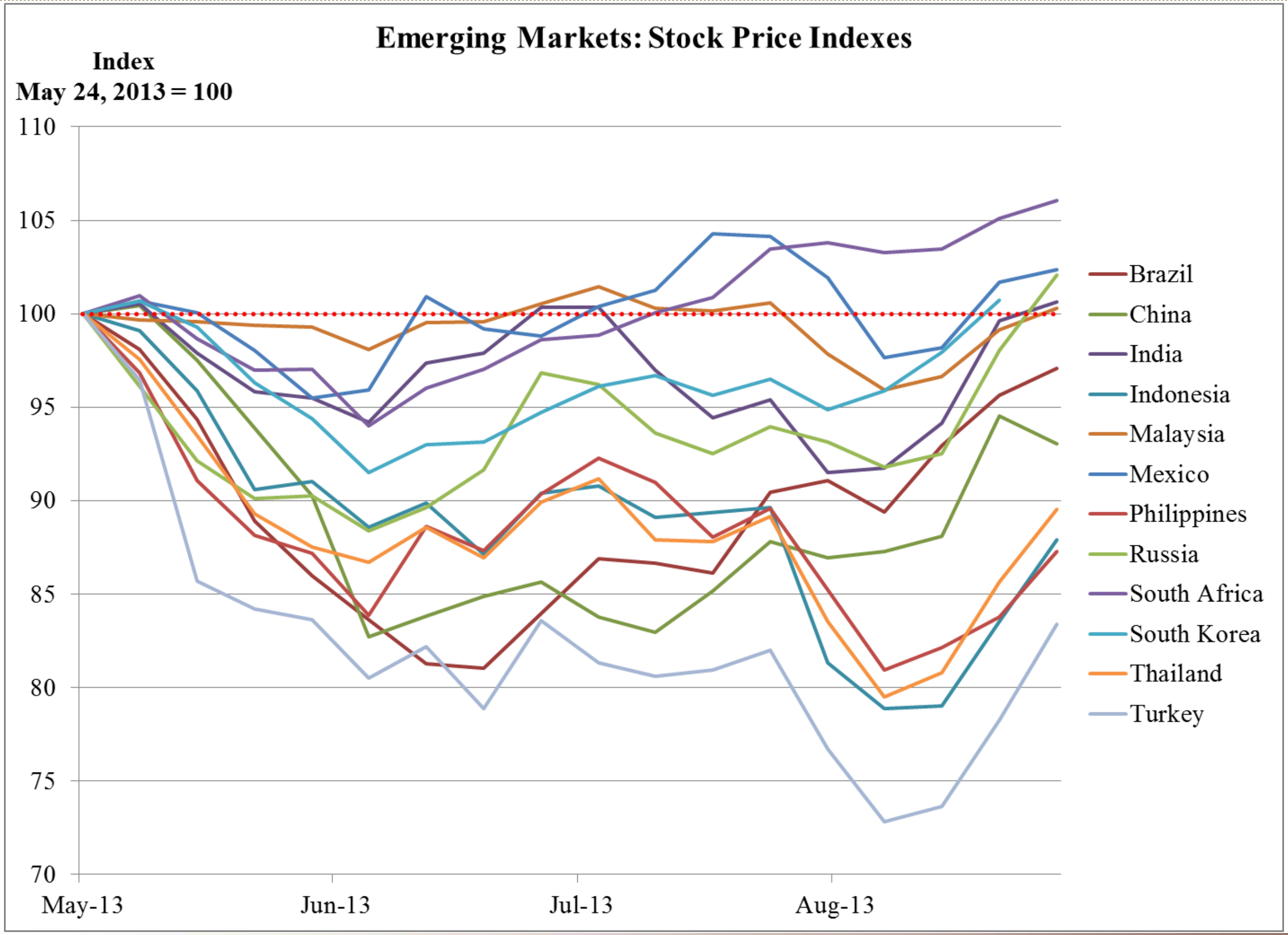
Emerging-market capital inflows reversed

Emerging Markets: Bond and Equity Fund Flows



Source: Nechio, Fernanda. "Fed Tapering News and Emerging Markets." Federal Reserve Bank of San Francisco *Economic Letter No. 2014-06*, March 3, 2014.

Emerging-market stock indexes dropped

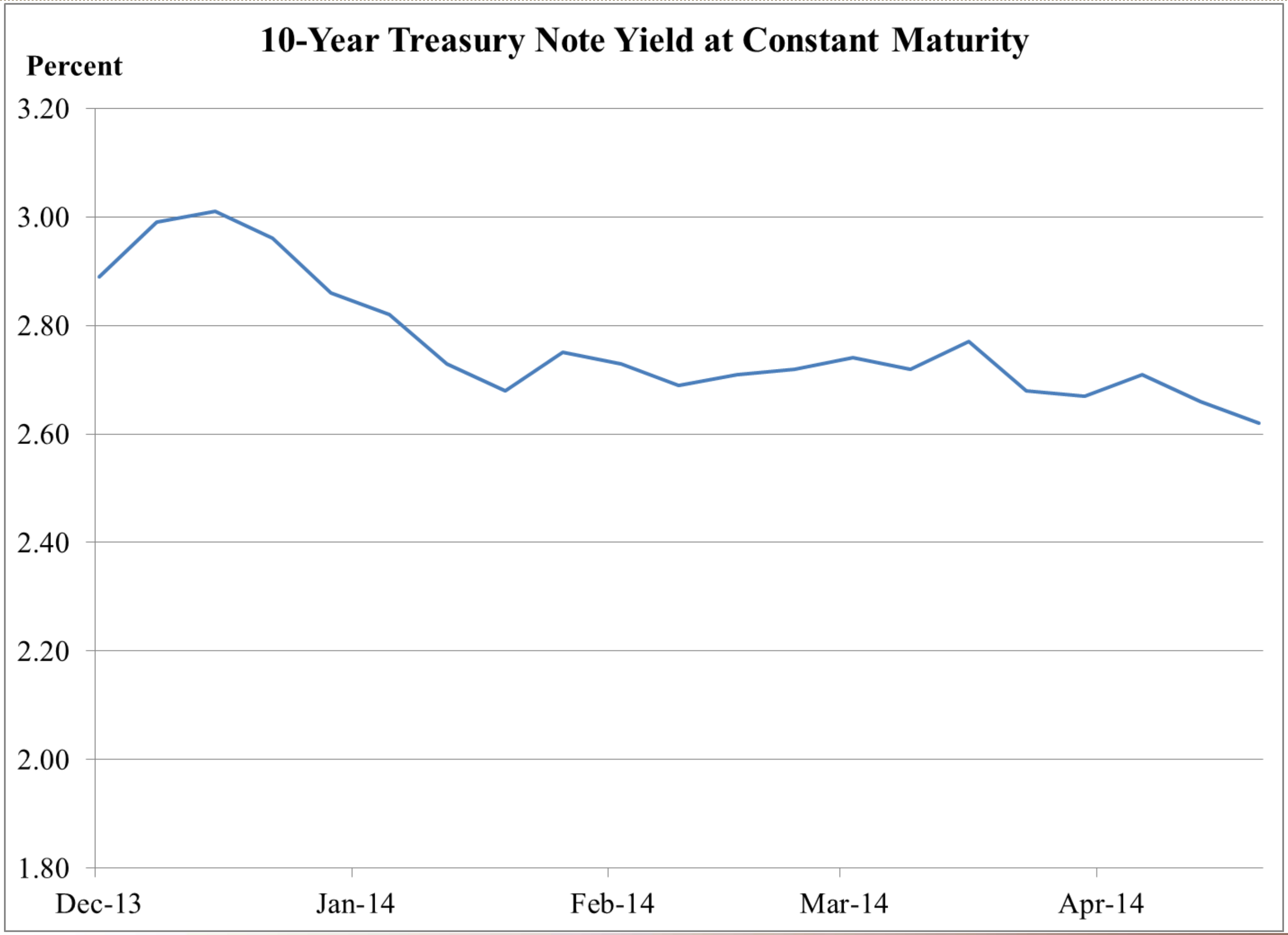


Source: author's calculations. Last observation: week of September 20, 2013.

The actual taper

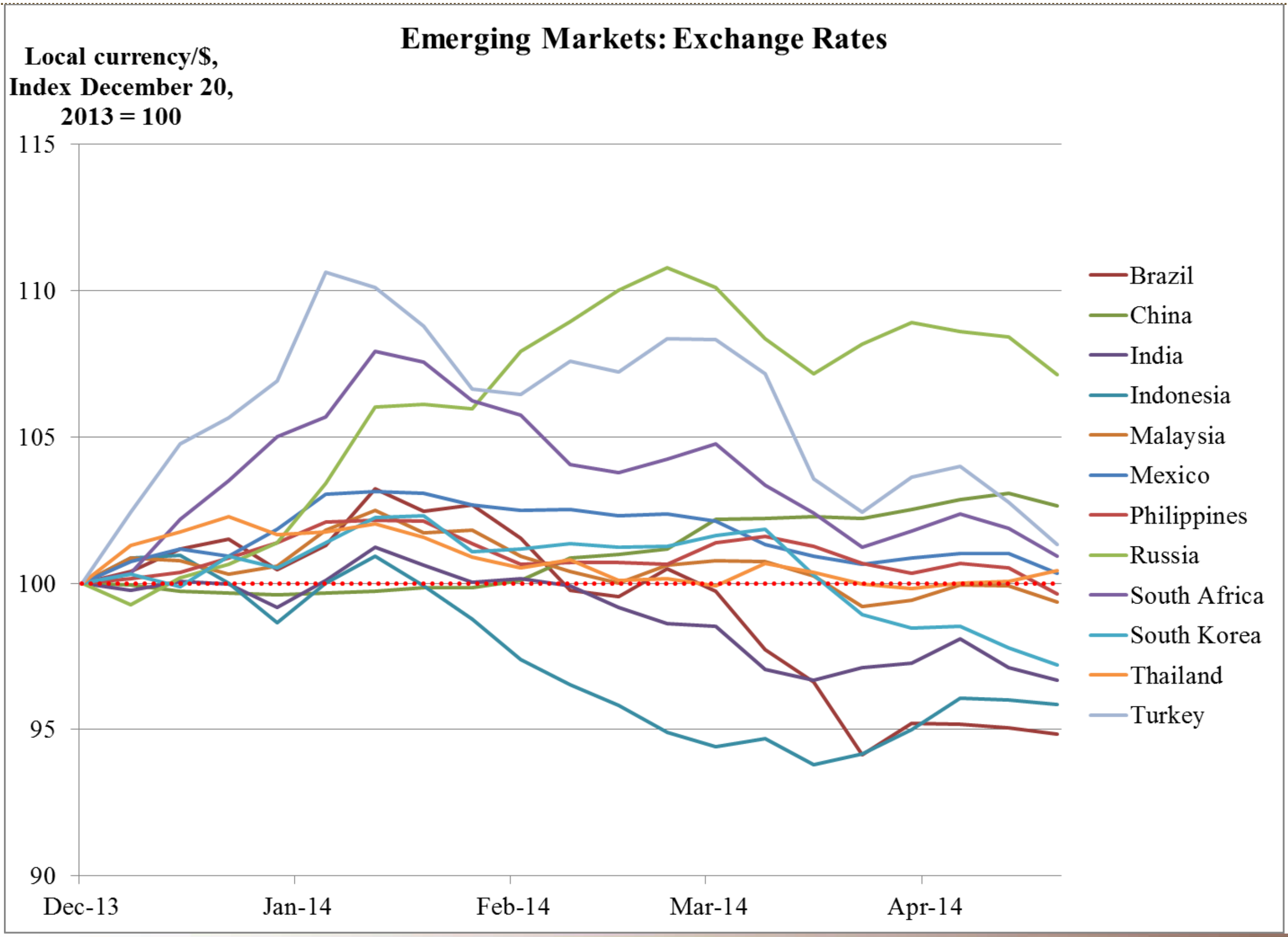
- The taper tantrum during the summer of 2013 was based on perceptions of Fed actions.
- The actual taper did not occur until December 2013.
- The FOMC has reduced its pace of asset purchases four times by $10 billion each time.
- Yet the effects on global financial markets have been much less striking.

Longer-term U.S. interest rates declined



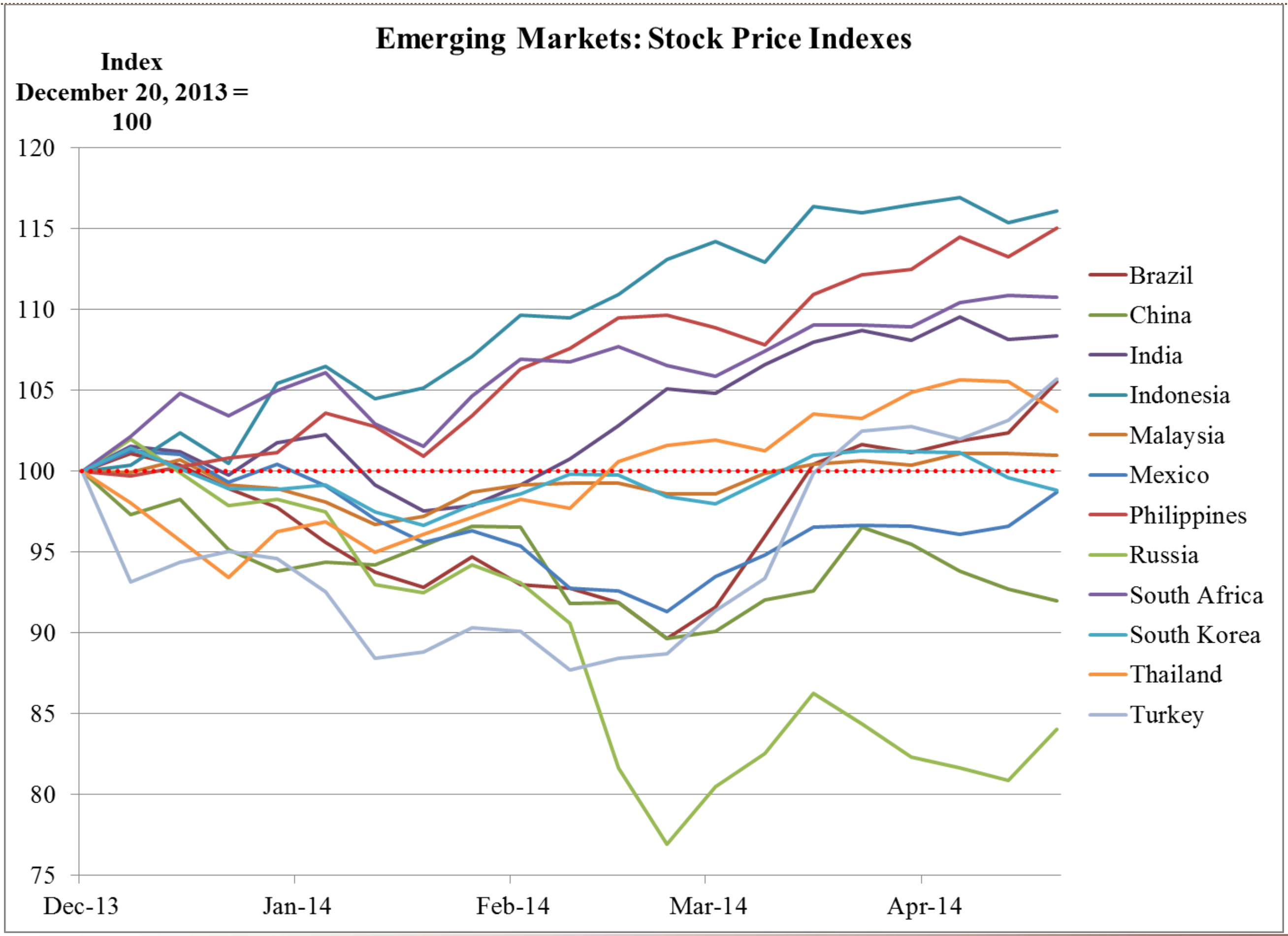
Source: Federal Reserve Board. Last observation: week of May 9, 2014.

Most emerging-market currencies appreciated



Source: author's calculations. Last observation: week of May 9, 2014.

Most emerging-market stock indexes increased



Source: author's calculations. Last observation: week of May 9, 2013.

Interpreting the taper

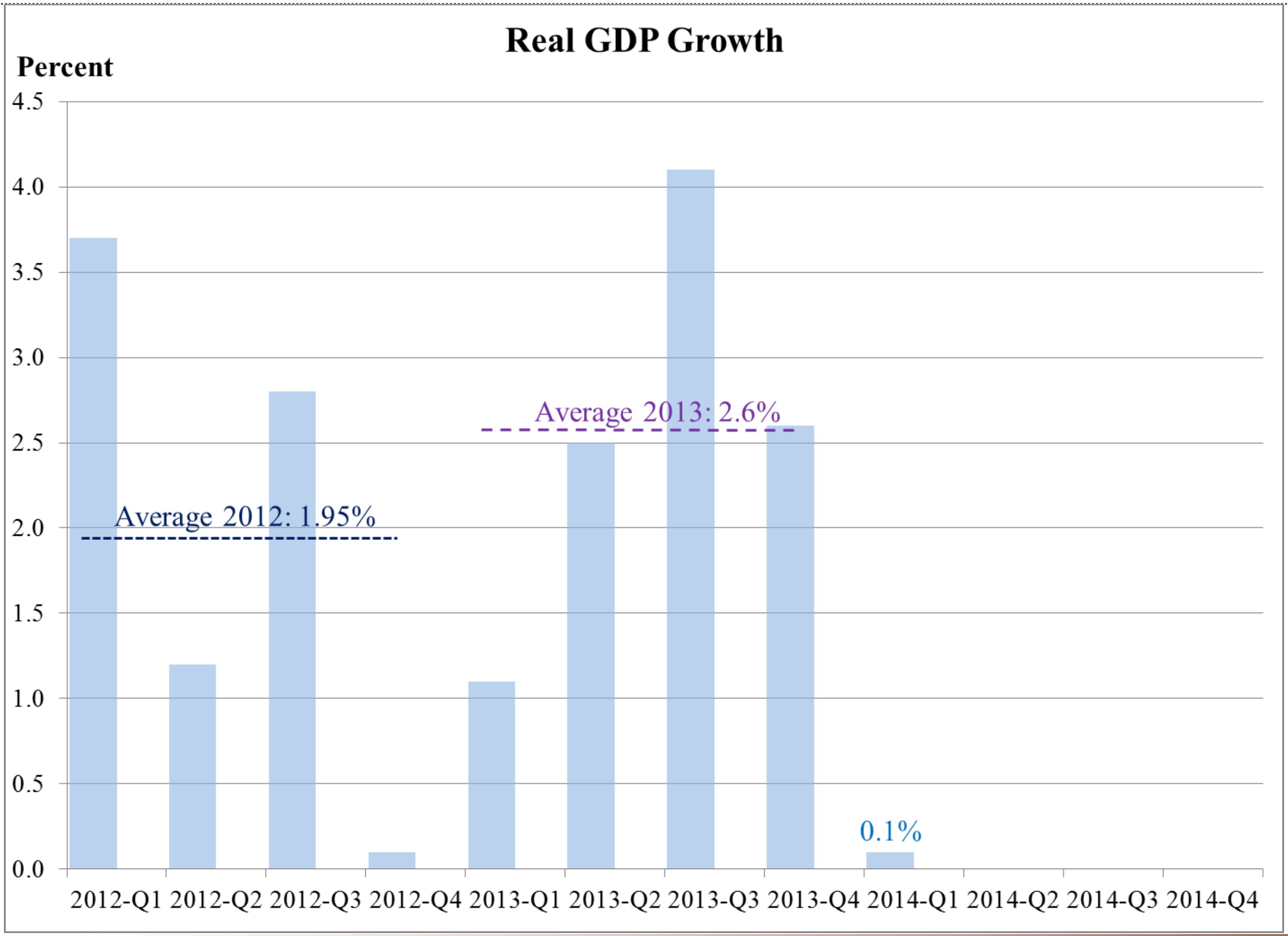
- The FOMC took no explicit policy action at the June 2013 meeting, yet triggered a significant movement in global financial markets.
- Since December 2013, the FOMC has taken four explicit policy actions, yet triggered far less of a financial market response.
- One interpretation is that as of June 2013, it was premature to argue that the U.S. economy was strong enough to pull back on asset purchases.
- As of December 2013, better growth and employment data justified the taper decision.

Looking Through First-Quarter Data

First-quarter GDP growth

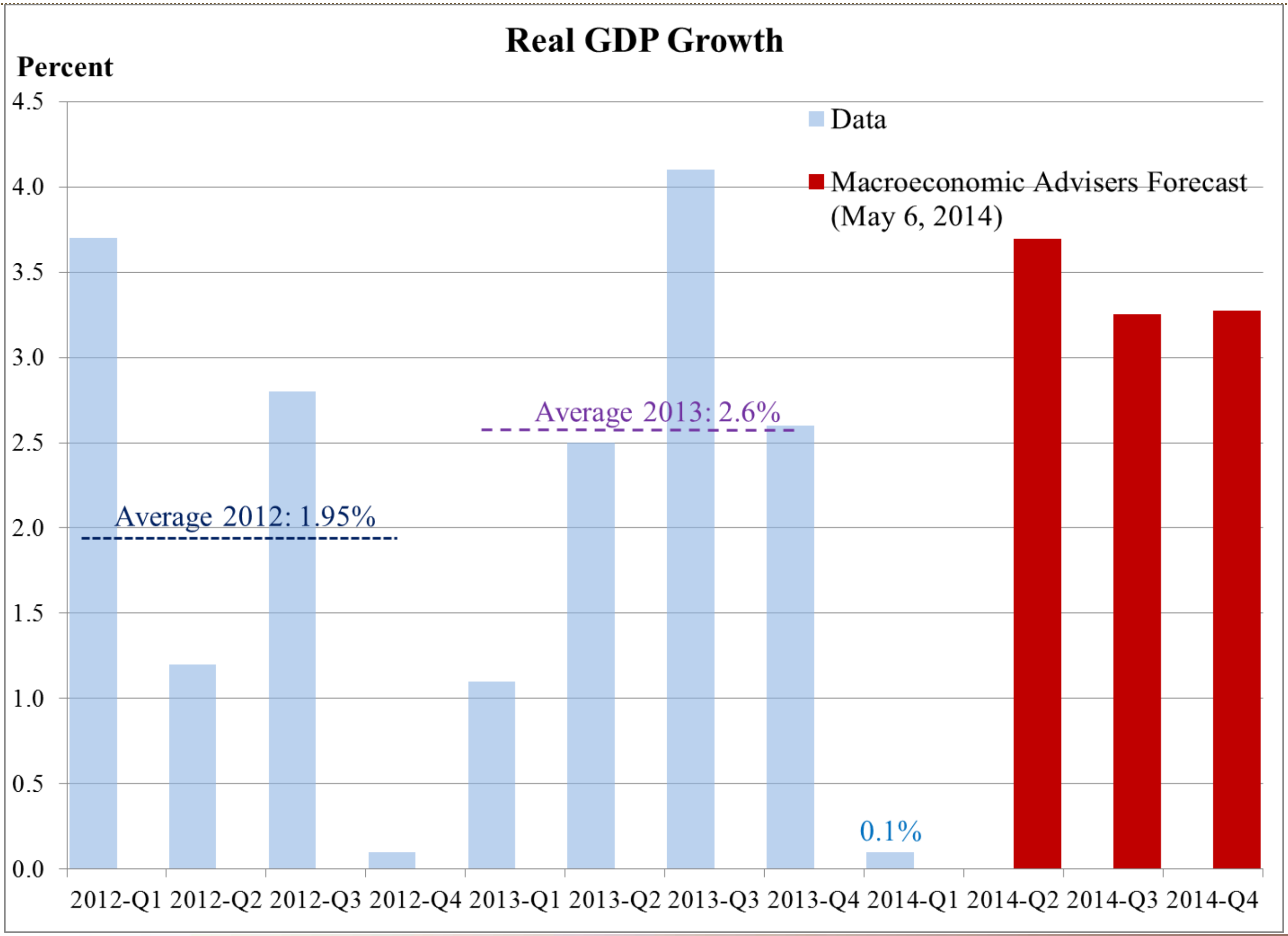
- The reported annualized U.S. real GDP growth rate for 2014 Q1 was close to zero.
- Some tracking estimates are calling for an even lower reading once revised data are taken into account.
- The weak first-quarter performance has been widely attributed to particularly cold and snowy winter weather.

Real GDP growth—recent data



Source: Bureau of Economic Analysis. Last observation: 2014-Q1.

Real GDP growth with forecasts for 2014



Source: Bureau of Economic Analysis and Macroeconomic Advisers. Last observation: 2014-Q1.

Interpreting Q1 GDP growth

- While first-quarter GDP growth was weak, growth in coming quarters is still predicted to be robust.
- The average quarterly pace of growth in 2014 may still be an improvement relative to 2013.

Much Closer to Goals

The FOMC is much closer to its goals

- Over the past five years, unemployment in the U.S. has been high and inflation has remained relatively low.
- This situation has led to an extraordinary monetary policy response.
- But today, Fed goals are within sight.
- This helps to justify the FOMC's tapering of asset purchases.

An objective function

- The distance of the economy from the FOMC's goals can be measured with a simple objective function:

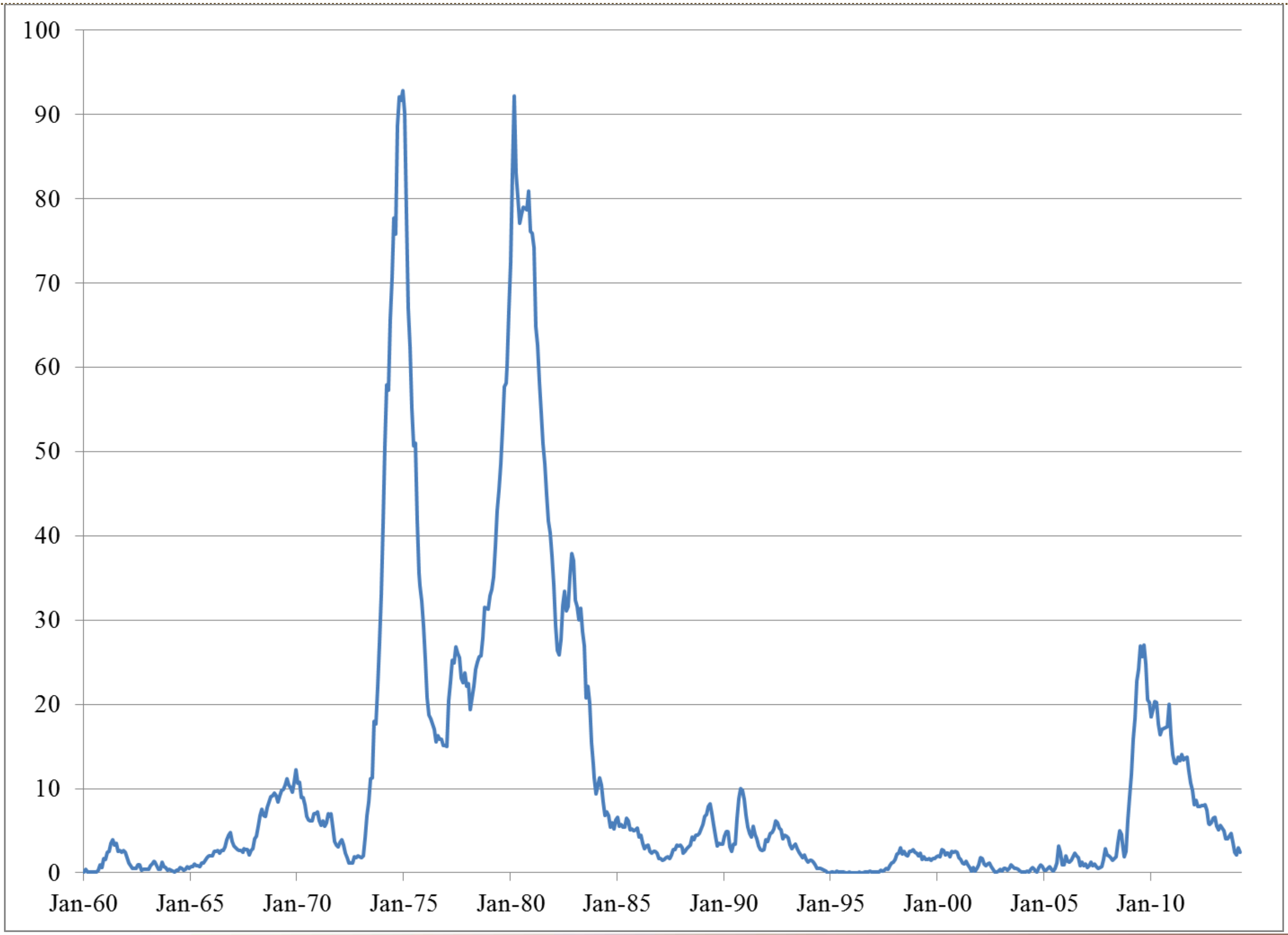
$$\text{Distance from goals } = (\pi - \pi^*)^2 + (u - u^*)^2.$$

  - π is inflation and π^* is the target rate of inflation, in percentage points.
  - u is the unemployment rate and u^* is the long-run average rate of unemployment.
- This version puts equal weight on inflation and unemployment and is sometimes used to evaluate various policy options.

An objective function

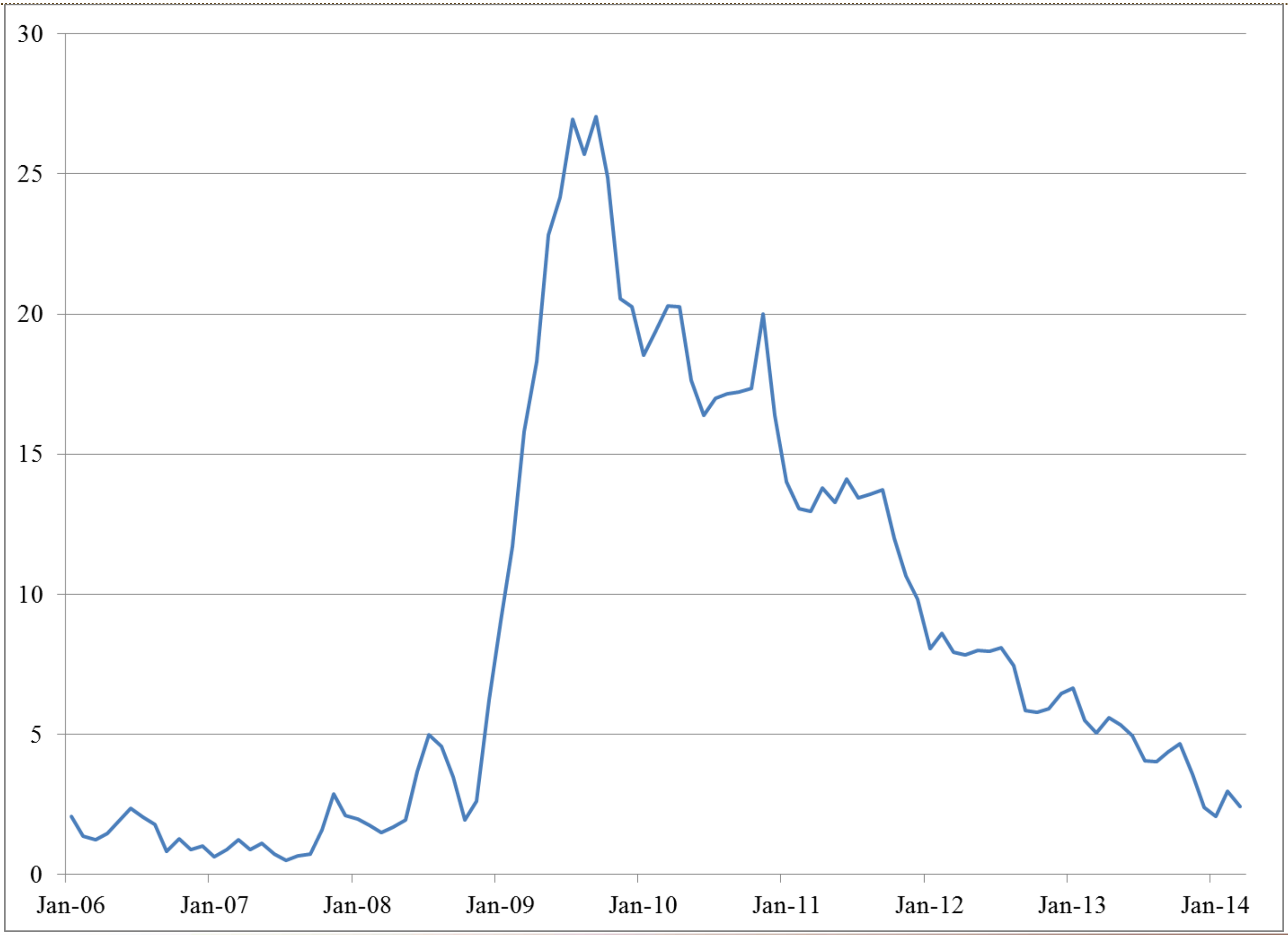
- Set $\pi^* = 2$, the FOMC's inflation target.
- For π I will use the year-over-year PCE headline inflation rate.
- Set $u^* = 5.4$, the midpoint of the central tendency of the FOMC Summary of Economic Projections.
- How far away is the Fed from its goals?

Objective function value since 1960



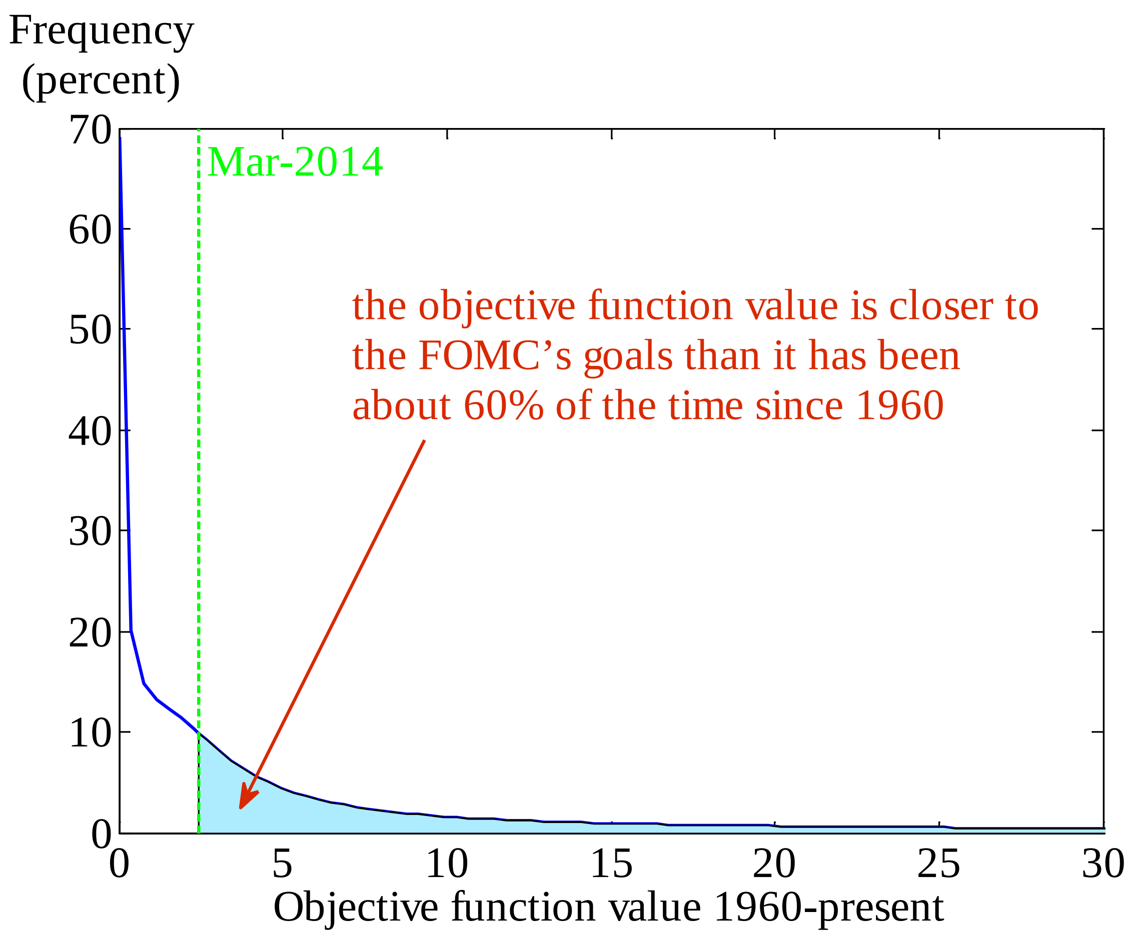
Source: Bureau of Economic Analysis, Bureau of Labor Statistics and author's calculations. Last observation: March 2014.

Objective function value since 2006



Source: Bureau of Economic Analysis, Bureau of Labor Statistics and author's calculations. Last observation: March 2014.

Distribution of objective function values



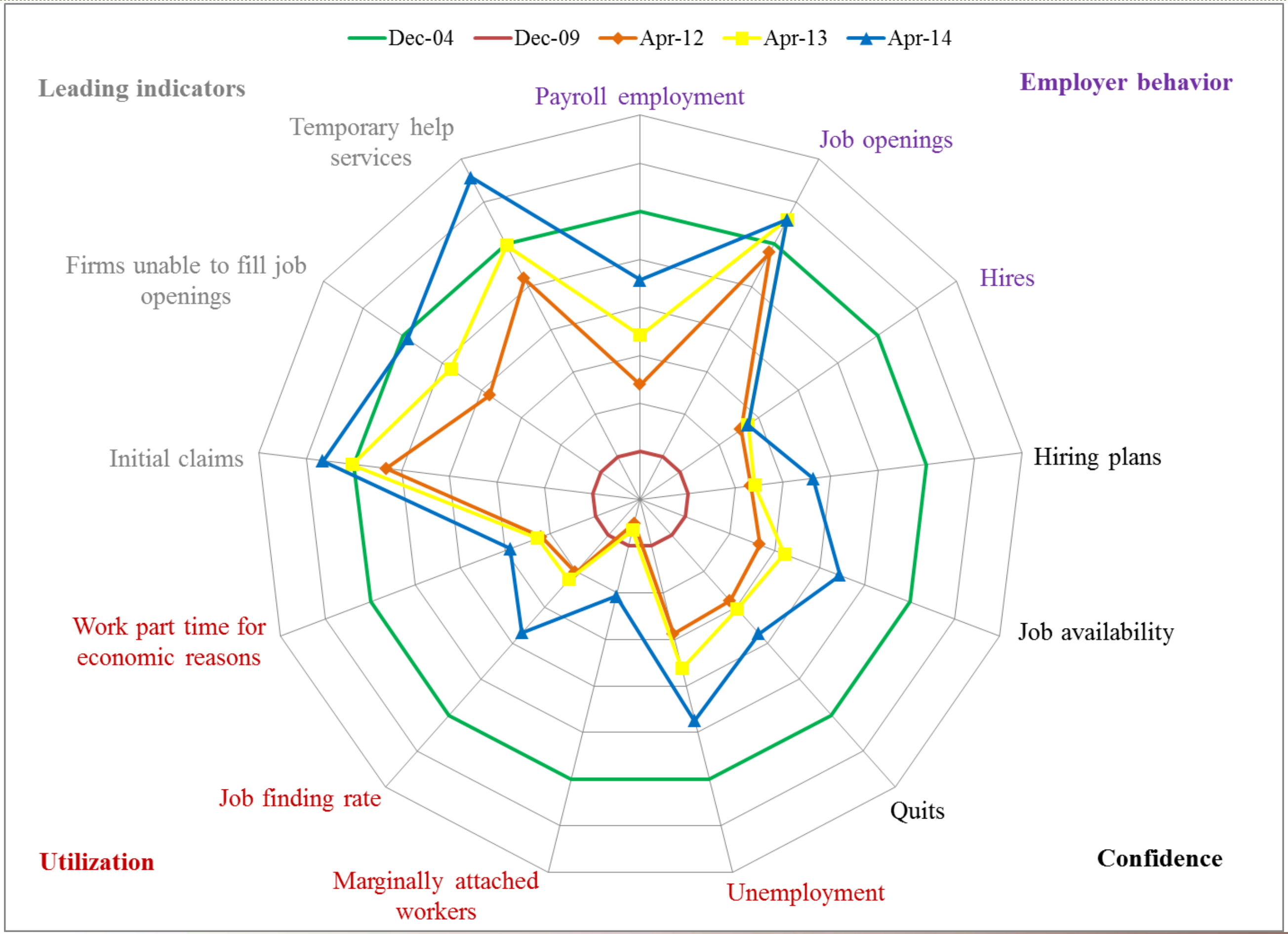
Source: Bureau of Economic Analysis, Bureau of Labor Statistics and author's calculations. Last observation: March 2014.

Monetary Policy

Monetary policy

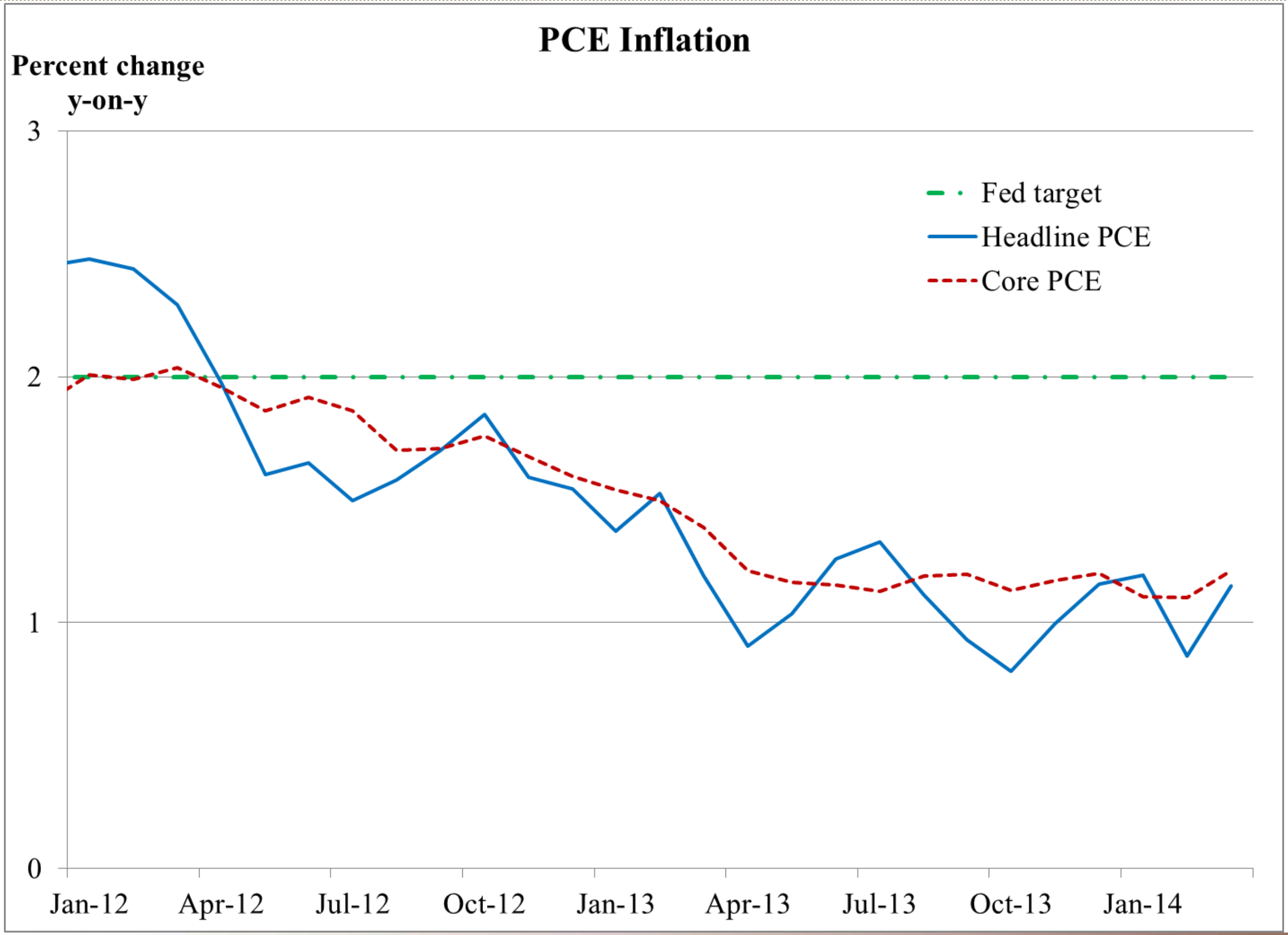
- Question: If the Fed is relatively close to its objectives, why is monetary policy so far from normal?
- Two reasons:
  - Labor markets do not seem to be fully recovered.
  - Inflation remains low.
- I can illustrate these two points with two charts.

The labor market in one chart



Source: Bureau of Labor Statistics, Conference Board, National Federation of Independent Business, and author's calculations, based on a chart constructed by the FRB of Atlanta. Last observation: April 2014.

Inflation remains low



Source: Bureau of Economic Analysis. Last observation: March 2014.

Conclusion

Conclusion

- The FOMC's reductions in the pace of asset purchases have proceeded smoothly so far.
- First-quarter real GDP growth was weak, but forecasts for the remainder of the year are strong.
- The FOMC is much closer to its policy goals than it has been in the past five years.
- Inflation remains low.

Federal Reserve Bank of St. Louis
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Federal Reserve Economic Data (FRED)
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