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Some Considerations for U.S. Monetary Policy Normalization

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

Introduction

The U.S. monetary policy normalization process

- U.S. monetary policy remains extremely accommodative.
 - The Fed's balance sheet remains at a historically high level.
 - The policy rate remains near zero.
- The U.S. economy, by contrast, is much closer to normal than it has been for many years.
- Now may be a good time to begin normalizing U.S. monetary policy so that it is set appropriately for an improving economy over the next two years.
- Even with some normalization, policy will remain exceptionally accommodative.

Five factors weighing on a decision to begin normalization

- U.S. labor markets have been improving at a rapid pace over the last year.
- U.S. GDP growth prospects remain relatively robust.
- Today's low U.S. inflation is due mostly to temporary factors which will likely reverse over the medium term.
- Some standard Taylor-type rules suggest the U.S. should already be off the zero lower bound.
- Financial stability risks are asymmetric toward staying too long at zero.

This talk

- I plan to comment briefly on each of these five factors in this talk.
- But first, I have a few remarks concerning the FOMC's decision to remove the word “patient” from its March statement.

The FOMC Removes “Patient”

The removal of “patient”

- At its March meeting, the FOMC appropriately returned to data-dependent monetary policy by removing “patient” from its statement.
- The word “patient” was a particular type of forward guidance that suggested the policy rate would not be adjusted in the next “couple of meetings.”
- By removing “patient,” the Committee can return to more standard monetary policy decision-making, under which an appropriate policy rate is decided at each meeting.
- This might be thought of as “the end of forward guidance.”

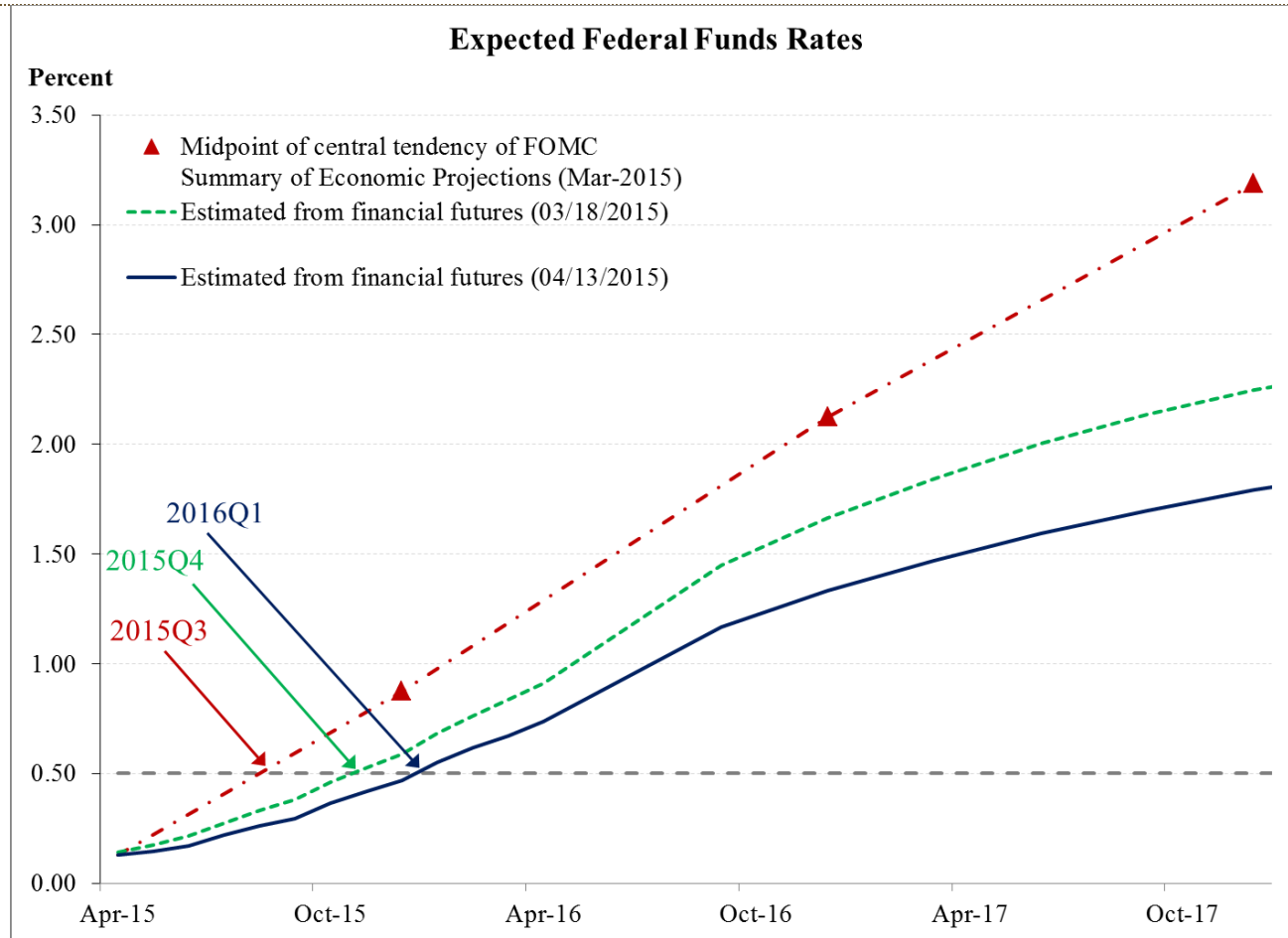
What is next?

- Forward guidance was viewed as appropriate during the period of zero interest rates, but is unlikely to be appropriate in less extreme circumstances.
- Decisions now depend on incoming data relative to forecasts.
 - Better- or worse-than-expected outcomes may push the Committee toward a somewhat different policy rate path.
 - The general trend is that an improving U.S. economy will lead to higher interest rates.
 - To say otherwise risks the “perma-zero” equilibrium experienced by Japan over the last two decades.

The current expected policy rate path

- Currently, financial markets expect the policy rate to cross the 50-basis-point level in the first quarter of 2016.
- This is somewhat later than indicated in the March Summary of Economic Projections (SEP).
- This difference of views on the nature of the U.S. policy rate path will need to be reconciled at some point.

Expected policy rate path mismatch



The five factors

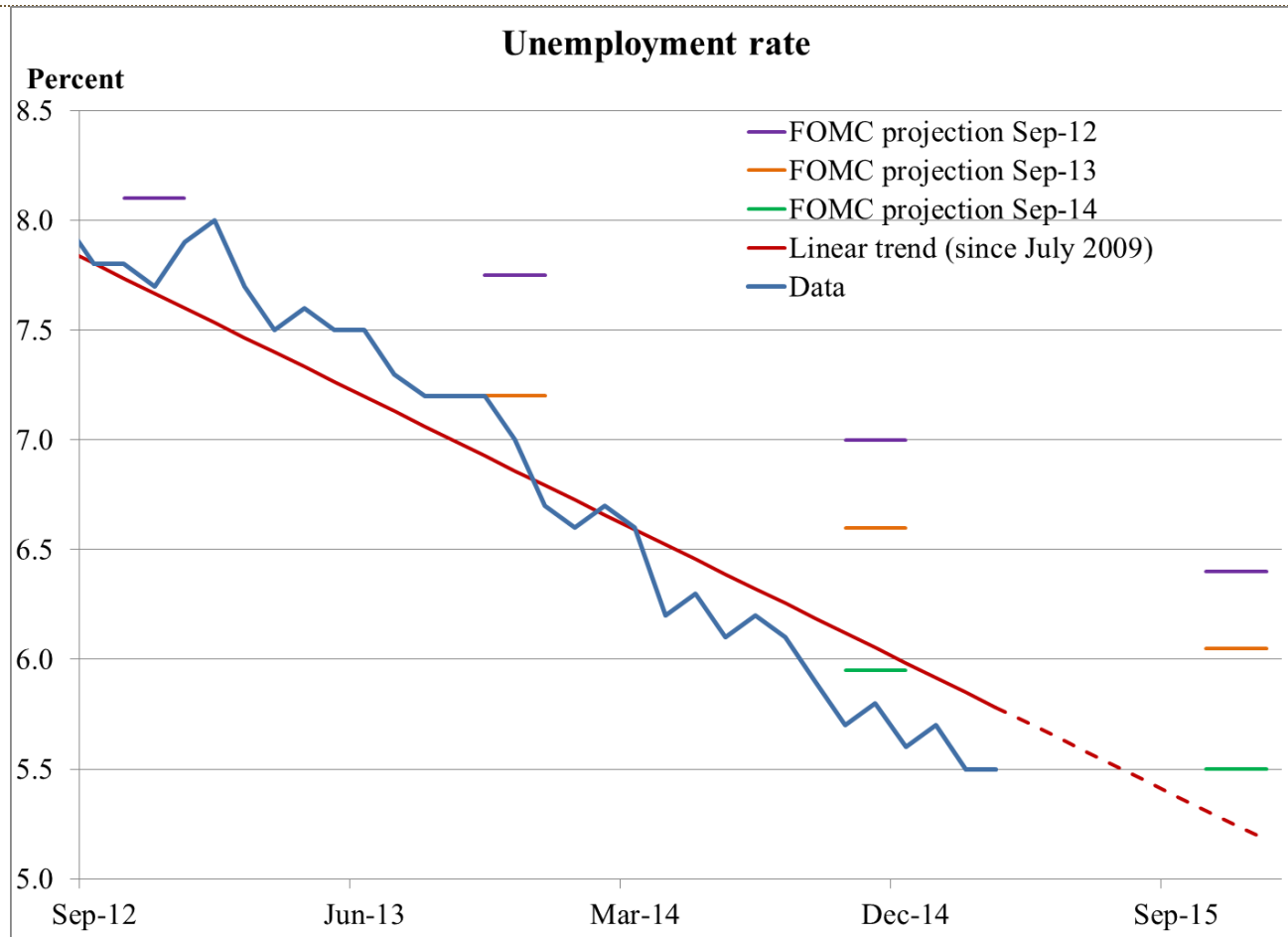
- Let me now turn to the five factors I mentioned earlier that are weighing on the decision to begin normalization of U.S. monetary policy.
- I am not claiming that this list is exhaustive—we can discuss other factors in the Q&A.

Continued Improvement in U.S. Labor Markets

Unemployment

- The unemployment rate has generally fallen faster than the FOMC expected, and jobs have been created at a rapid pace.
- Today's unemployment rate is approaching the range of longer-run or normal values suggested by the FOMC.
- Estimates of the long-run value of unemployment have wide confidence bands and tend to shift over time.
 - Statements about shifts in this value are unlikely to be statistically meaningful.

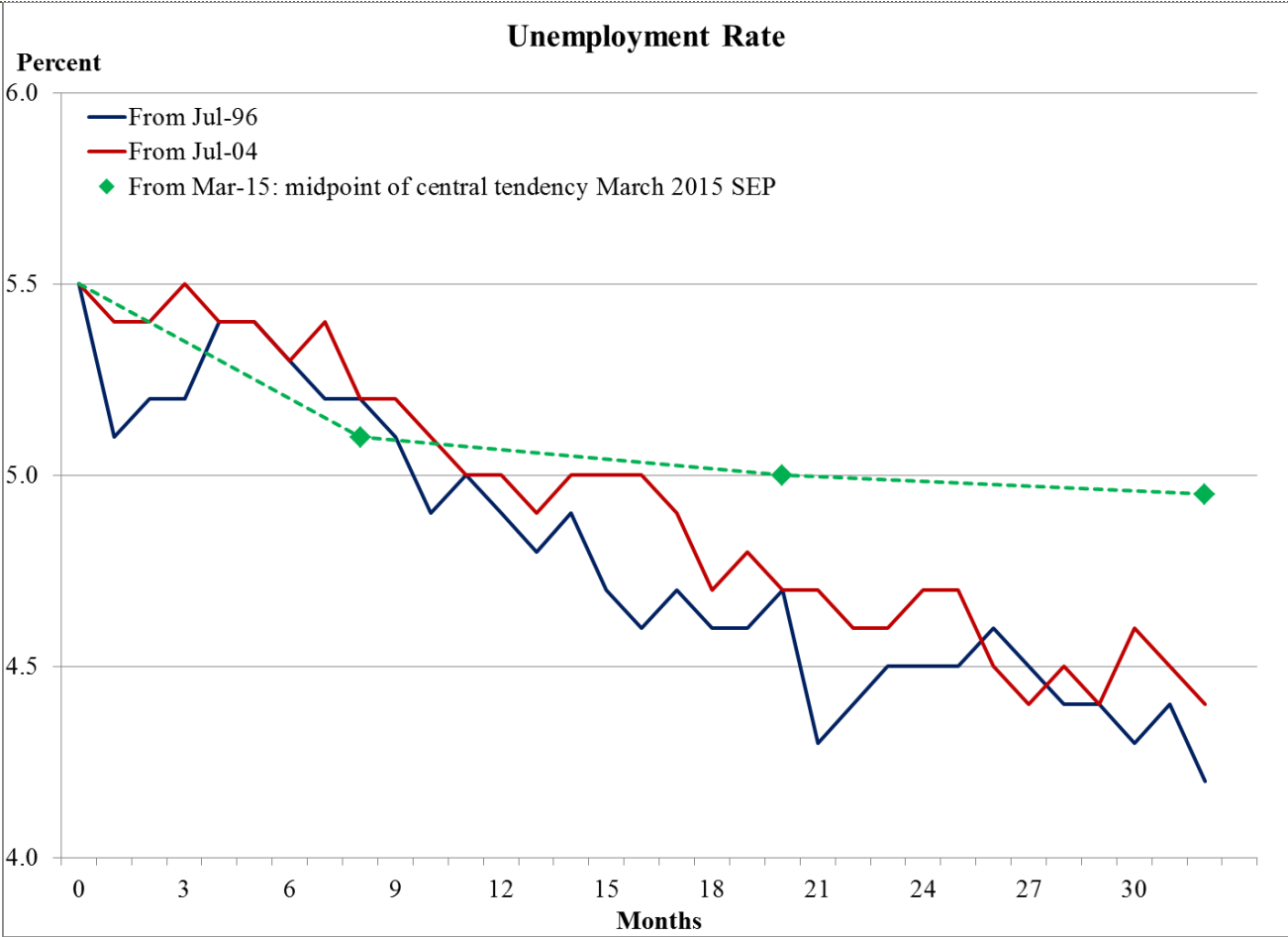
Unemployment falls more rapidly than forecast



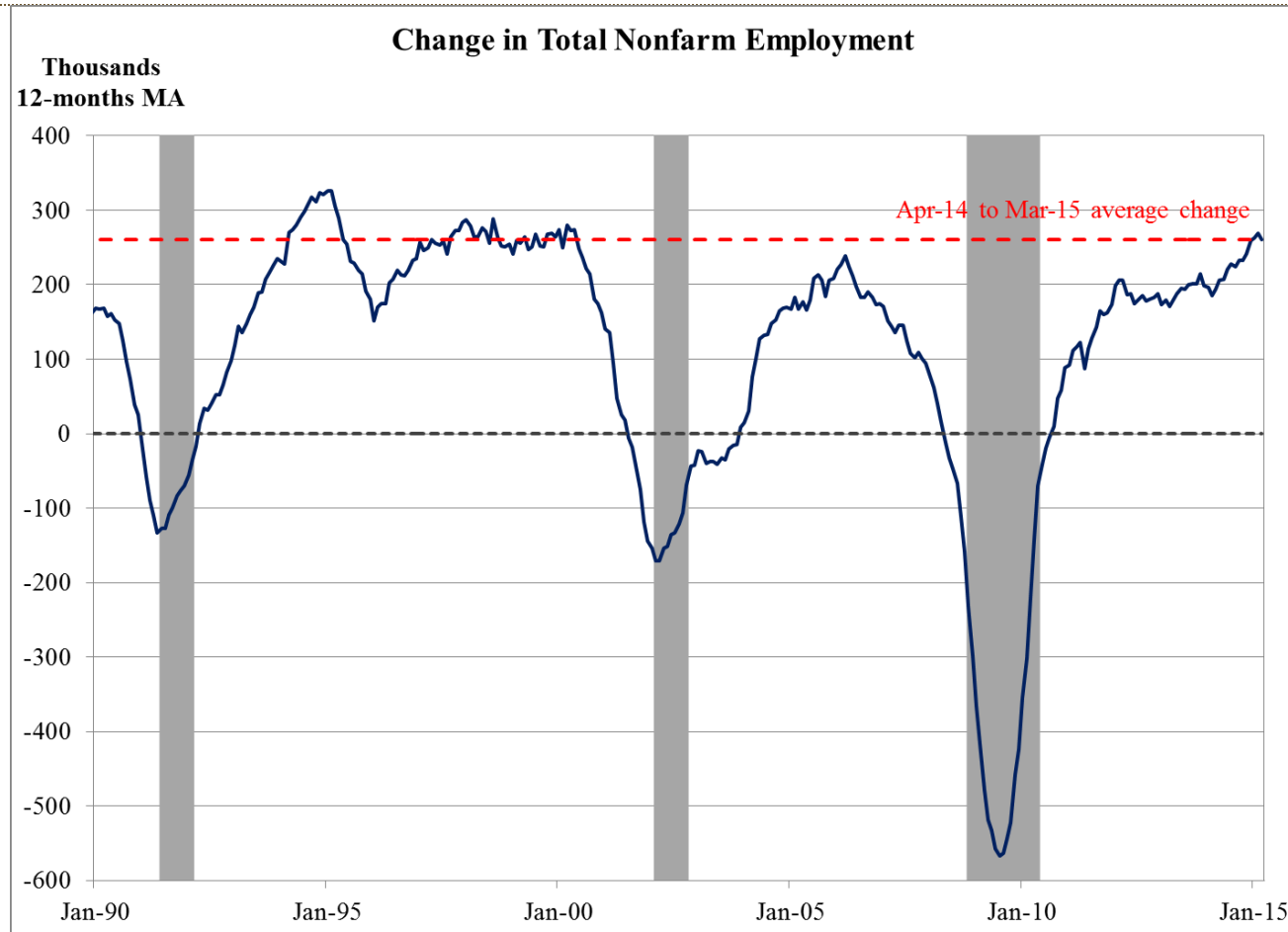
Unemployment projections

- The SEP central tendency suggests that unemployment will decline only gradually from its current level.
- This is the same type of projection that was made in previous years.
- The history of the last two expansions in the U.S., the 1990s and the 2000s, suggests that unemployment will reach much lower levels.

Unemployment may fall faster than current projections



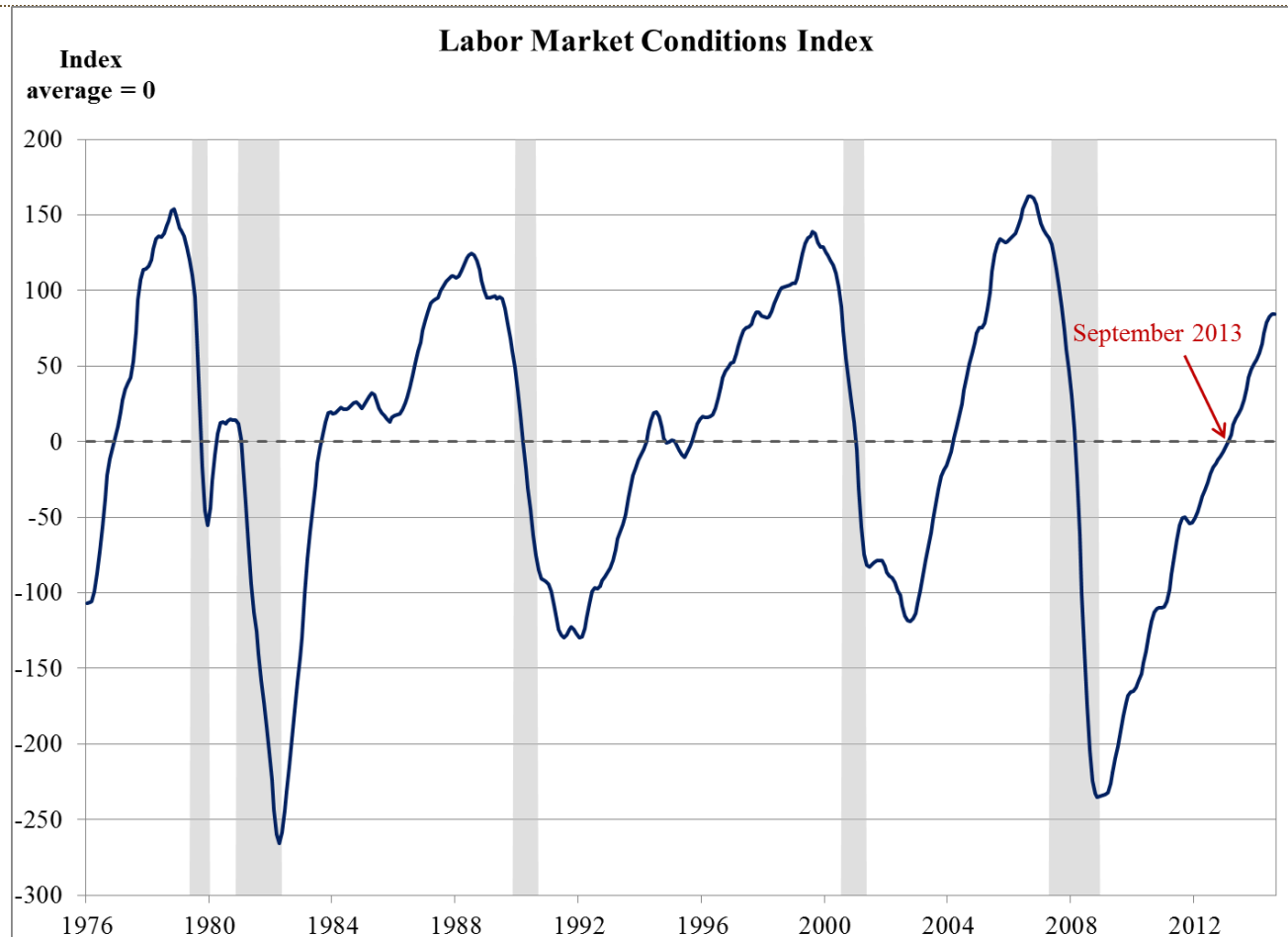
Employment growth in the previous year



Broader measures of labor market performance

- Unemployment and nonfarm payroll employment are the two workhorse indicators of U.S. labor market performance, but there are many other possible indicators.
- One way to account for the signal that several indicators are sending jointly is to create an index of labor market conditions. Such an index has been created by Fed Board staff.
- The level of this index has risen above its long-run average value.
- This suggests that accounting for a variety of labor market indicators, labor market performance today is above average.

Labor market conditions index is above average



Source: Federal Reserve Board and St. Louis Fed calculations. Last observation: March 2015.

See <http://www.federalreserve.gov/econresdata/notes/feds-notes/2014/Updating-the-labor-market-conditions-index-20141001.html>.

Summary for labor markets

- In summary, labor markets continue to improve and are approaching or even exceeding normal performance levels.
- Normal labor markets have typically been associated with a positive policy rate.
- Labor market outcomes will likely significantly overshoot long-run levels over the next two years, since monetary policy will remain highly accommodative even as normalization begins.

U.S. Growth Prospects Remain Robust

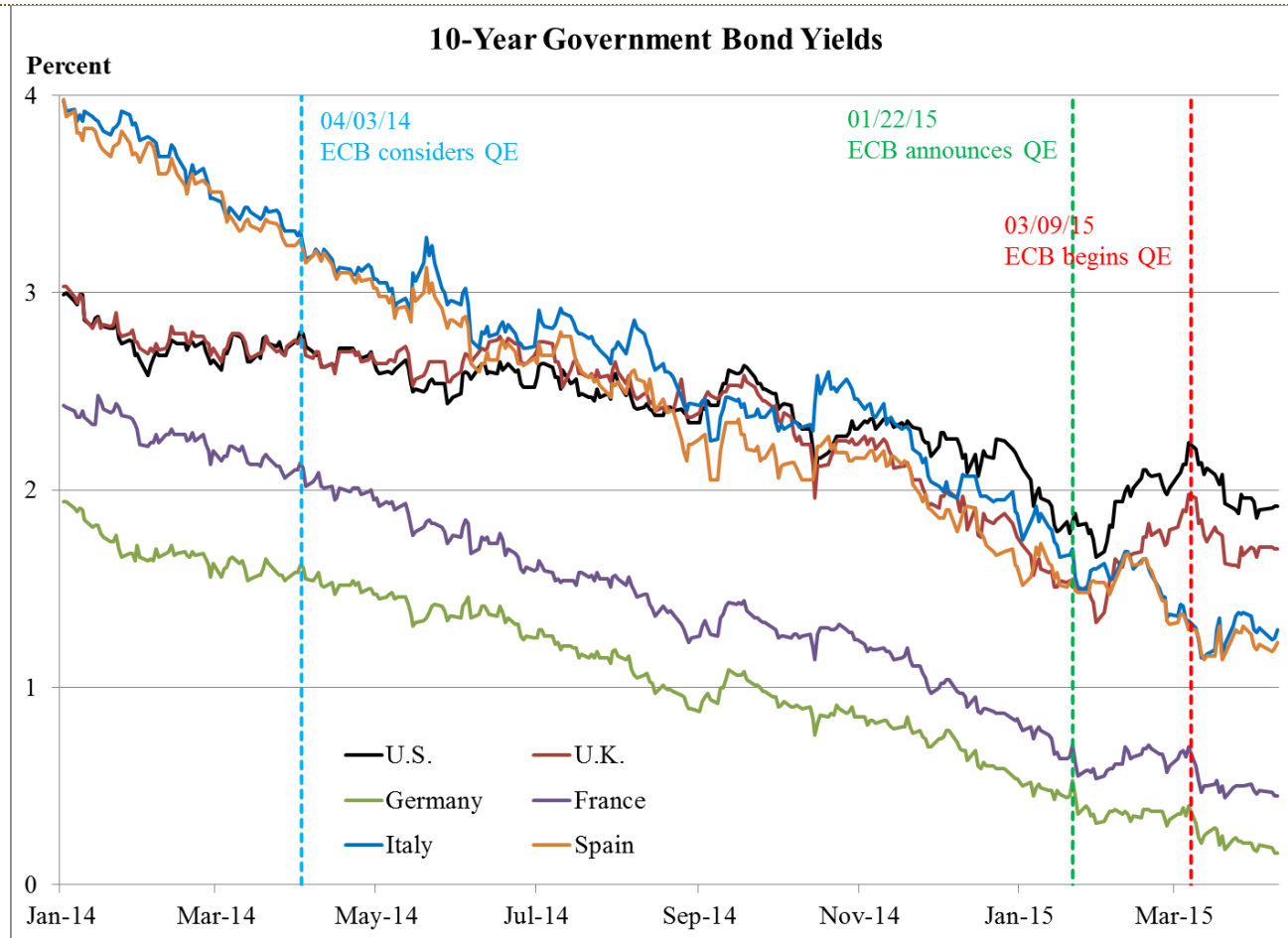
U.S. growth prospects remain robust

- If we use a tracking estimate of 1.5 percent for Q1 U.S. real GDP growth at an annual rate, then the four-quarter growth rate is running at about 3.3 percent.
- I think that the U.S. economy is likely to maintain a growth rate near 3 percent over the medium term.
- Since potential growth rates in the U.S. now center around 2 percent, a 3 percent growth rate represents growth well above trend.

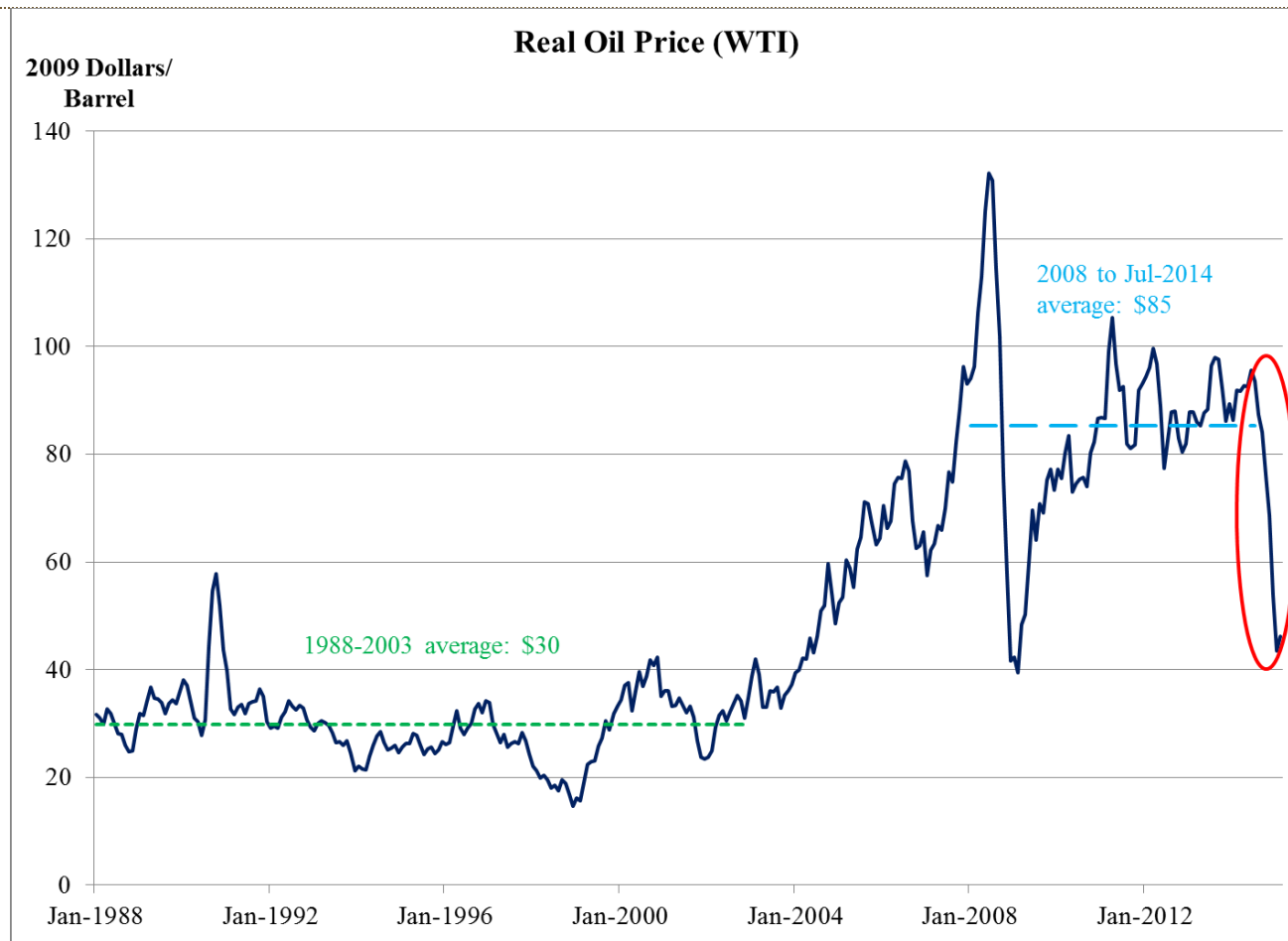
Tailwinds

- The U.S. is being aided by two important tailwinds.
- First, the persistent decline in global oil prices is providing an important benefit to the U.S. economy.
 - Anecdotal evidence suggests that consumers may react more to lower oil prices as 2015 proceeds provided that the price shock comes to be viewed as very persistent.
- Second, the onset of sovereign-debt quantitative easing in the euro area has driven U.S. yields lower.
- Both lower oil prices and lower long-term yields tend to be important factors for U.S. macroeconomic performance.

Long-term U.S. yields driven lower by ECB QE



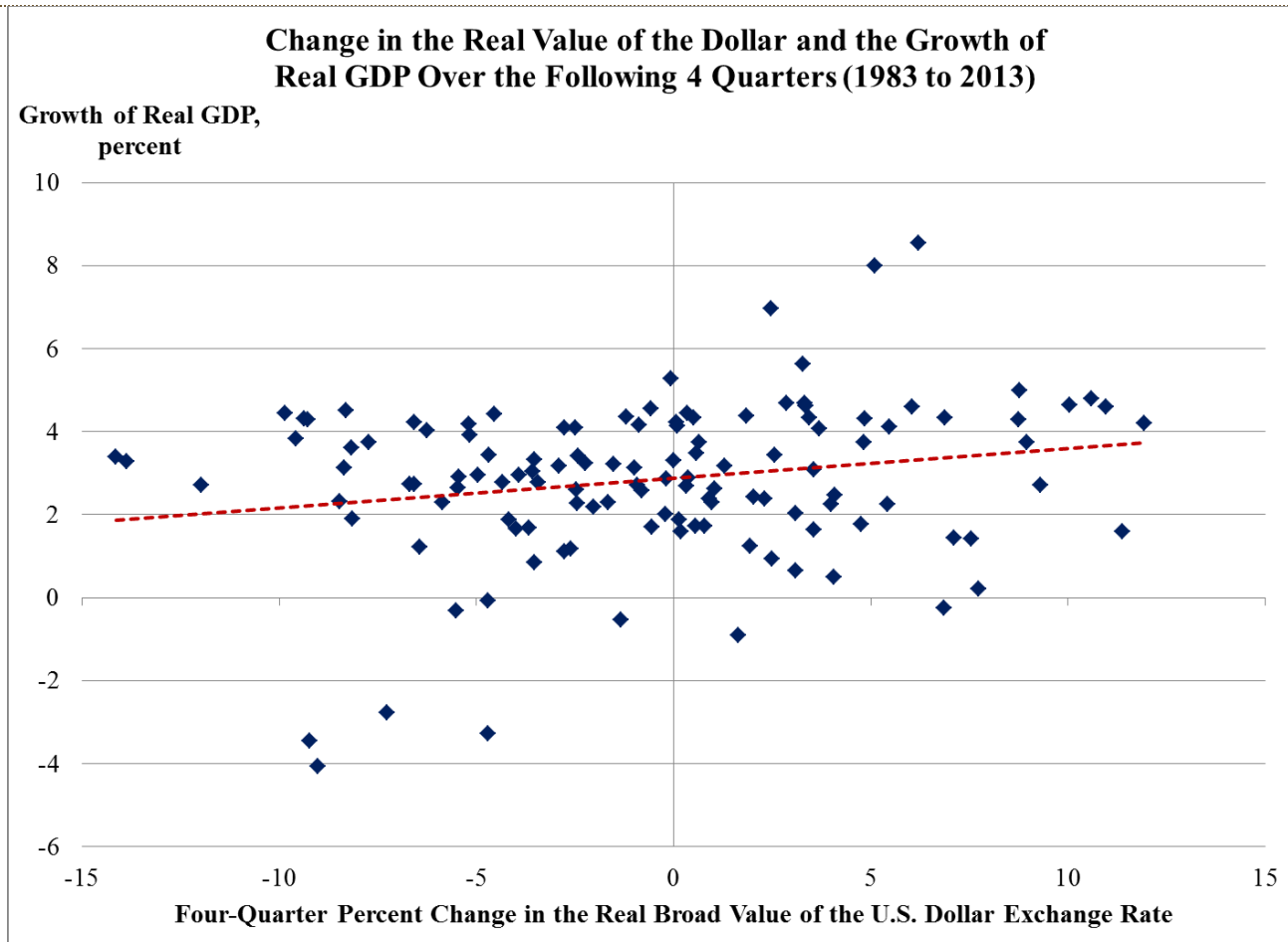
Real dollar oil price: Return to the old regime?



Exchange rates

- The specter of ECB sovereign-debt quantitative easing has tended to weaken the euro and strengthen the dollar.
- This is a natural consequence of a change in the relative monetary policy stance of the Fed and the ECB.
- However, real exchange rate movements are not reliably associated with future GDP growth in the U.S. data since 1983, as shown in the following chart.
- This one picture summarizes a broader range of macroeconomic research that suggests limited effects of exchange rate movements on U.S. economic performance.

Real dollar fluctuations and future real GDP growth approximately uncorrelated

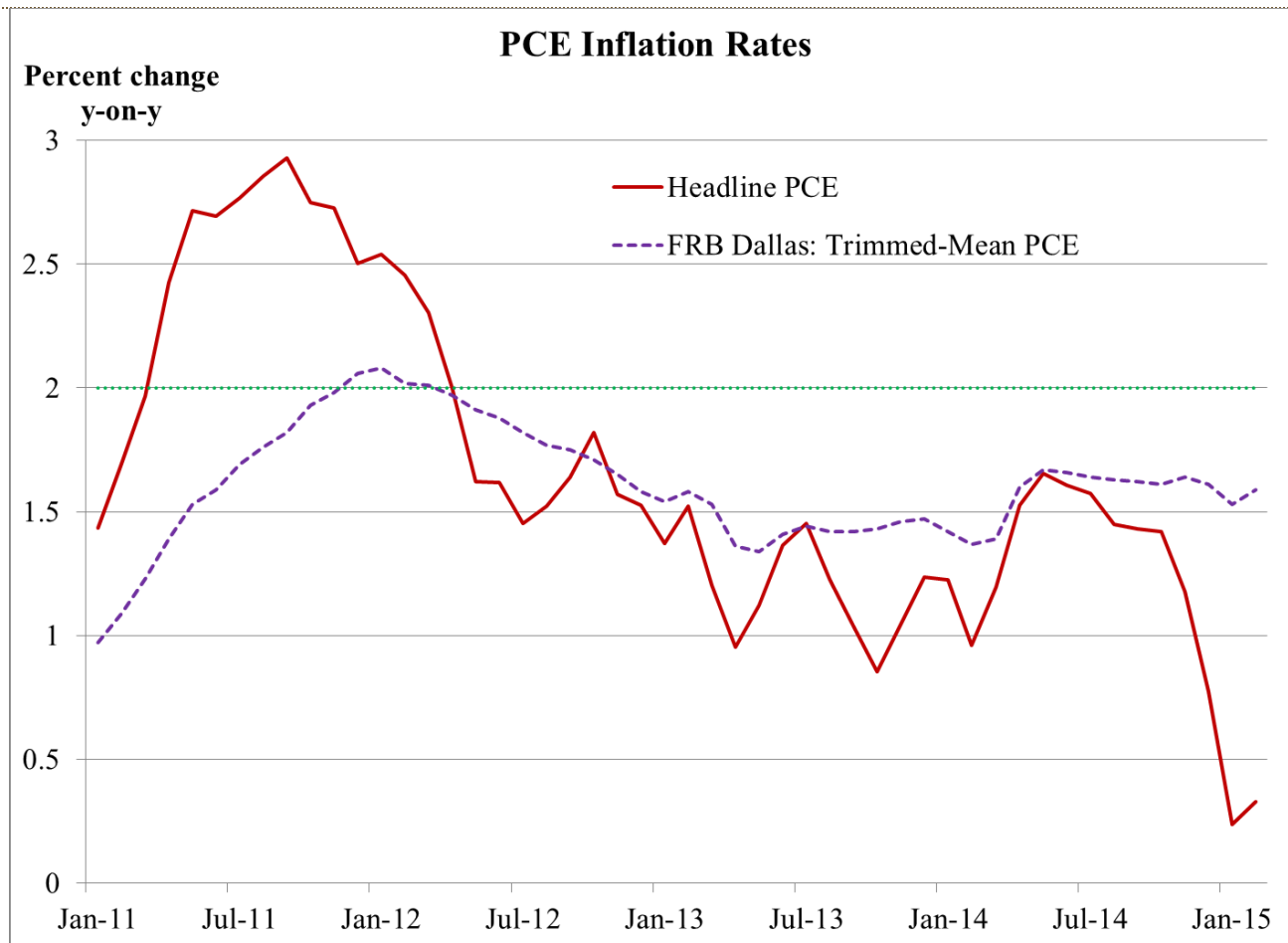


U.S. Inflation Is Temporarily Low

Inflation

- The FOMC's inflation target is 2 percent.
- Inflation was above target as of January 2012, but ran below target in 2013 and 2014.

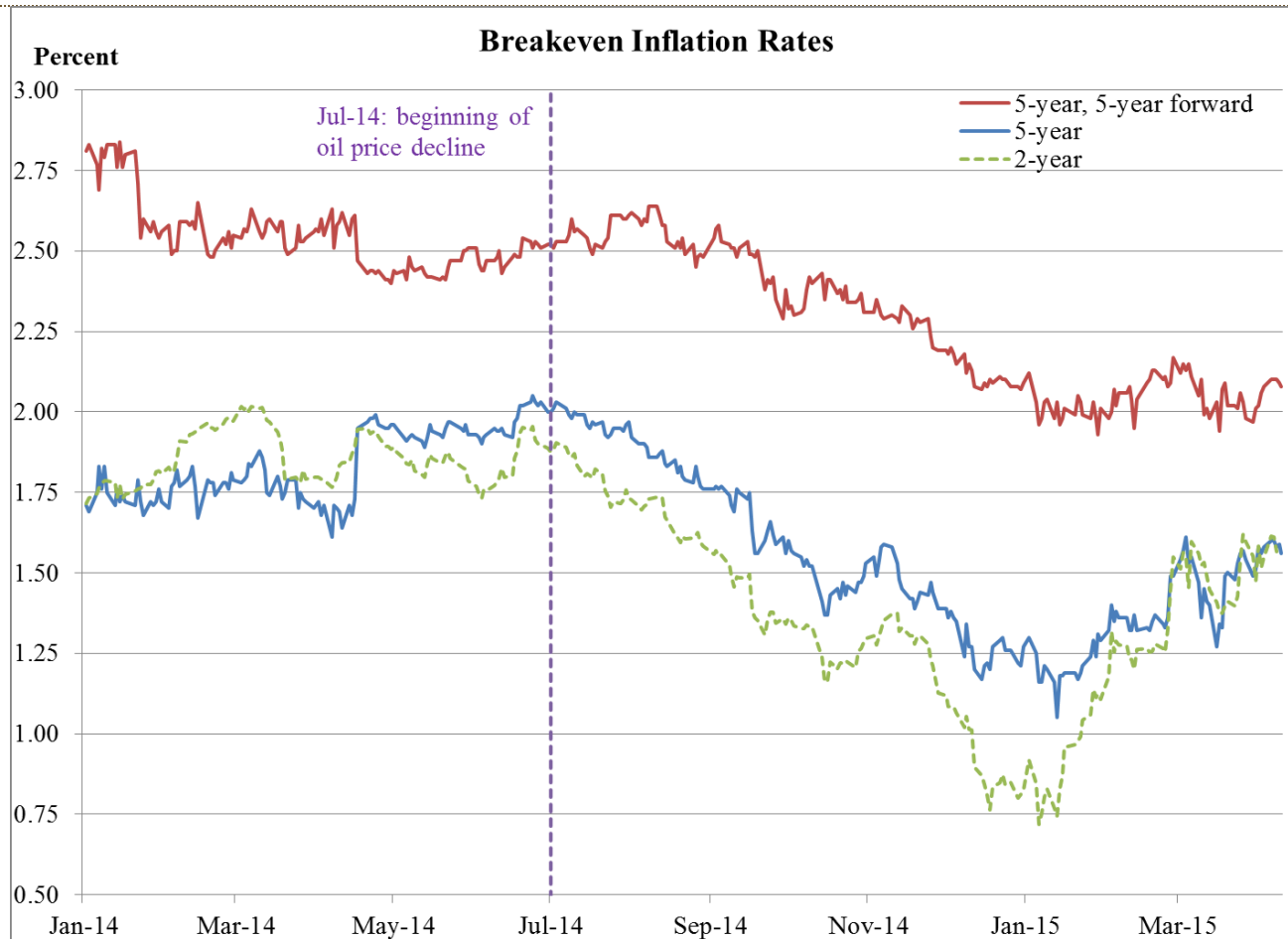
Personal consumption expenditures (PCE) inflation



Inflation expectations

- Inflation expectations are one of the most important determinants of actual inflation, according to modern macroeconomic theories.
- Market-based measures of inflation expectations have declined to low levels in recent months.
- Most likely, these expectations will rise back toward the FOMC's inflation target in coming months and quarters.
- However, this bears careful watching. Inflation and inflation expectations moving away from target is a concern.

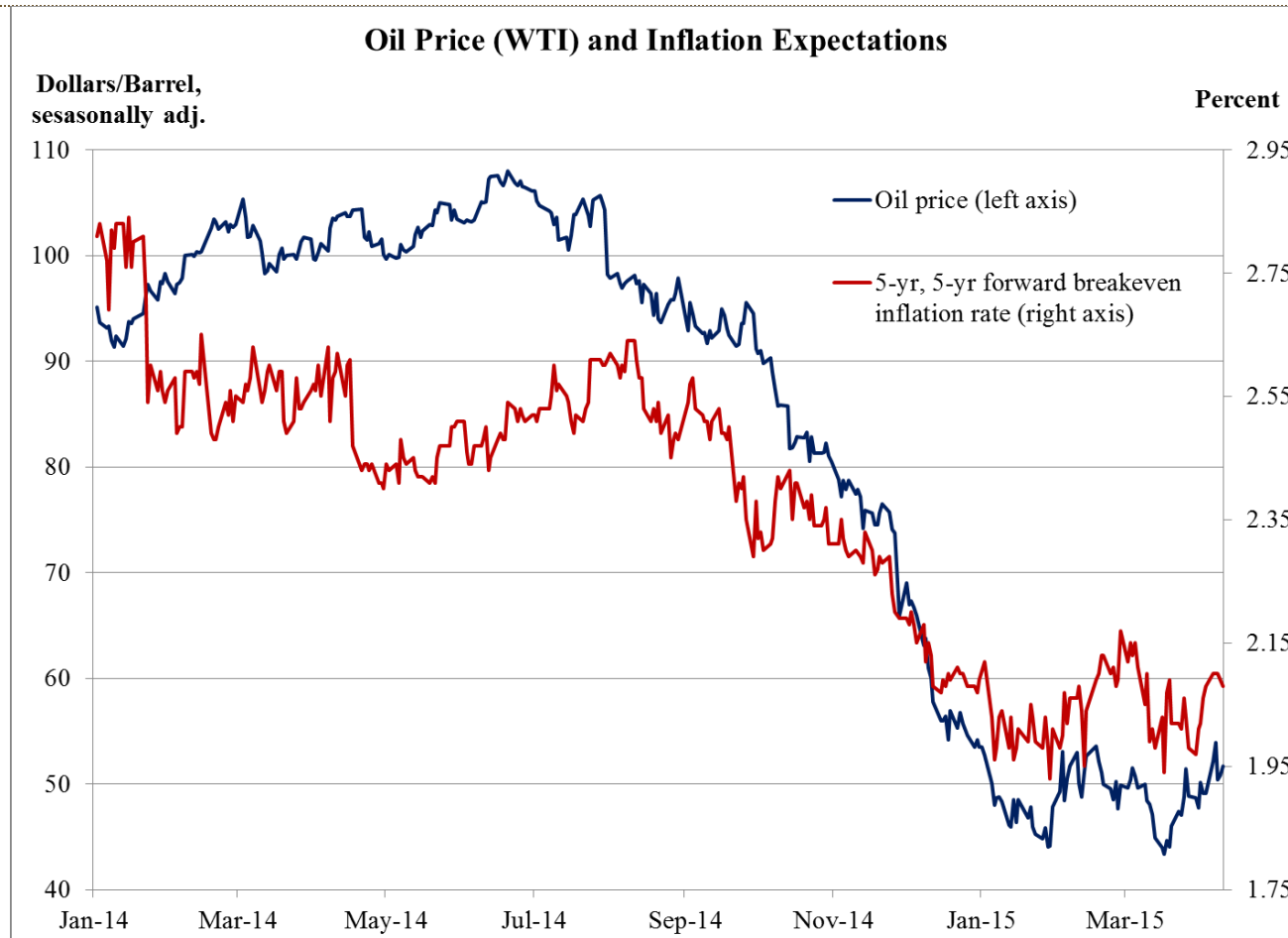
Market-based expected inflation lower



Inflation expectations correlated with oil

- Market-based measures of inflation expectations from five to 10 years in the future should not be significantly impacted by gyrations in global oil markets.
- However, the decline in these inflation expectations does seem to be highly correlated with oil price movements since last summer.
- I am reserving judgment concerning these inflation expectations until oil prices show consistent stabilization.

Nominal oil price and inflation expectations correlated



Nominal wage growth

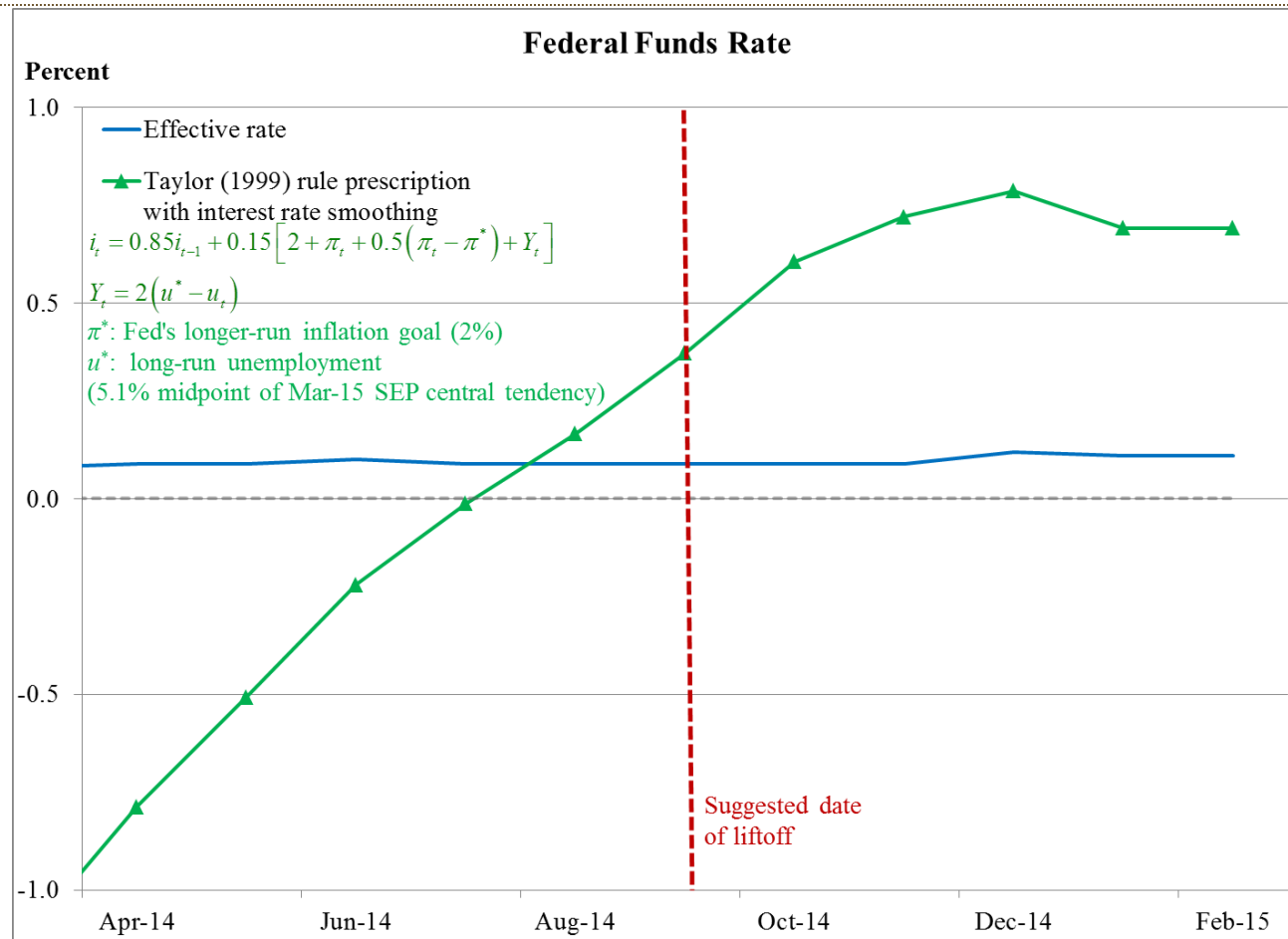
- Nominal wage growth is sometimes cited as a factor that may influence inflation going forward.
- However, nominal wages tend to lag inflation outcomes.
- In addition, nominal wages have a component related to productivity growth, a variable that is difficult to measure and predict.

Taylor-type Rules

Reintroducing Taylor rules

- As monetary policy approaches normalization, it is interesting to examine the prescriptions of Taylor-type policy rules.
- According to a Taylor-type rule, the short-term nominal interest rate should respond to deviations of inflation from target and of actual unemployment from its long-run level.
- The particular rule plotted in the next chart also has an inertial component, which keeps interest rate movements smoother.
- The rule suggests liftoff should already have occurred.

Policy rate path suggested by the Taylor (1999) rule with interest rate smoothing



Source: Federal Reserve Board, Bureau of Labor Statistics, Bureau of Economic Analysis and author's calculations.
Last observation: February 2015.

The message from policy rules

- The Committee has not moved off of the zero interest rate policy so far, despite standard policy rule recommendations.
- In this sense, the Committee is already exhibiting considerable patience.
- Some recent Taylor rules feature “time-varying r^* .” †
- However, this is not how Taylor-type rules have been implemented in the past.
 - The empirical properties of time-varying r^* are largely unknown.

Financial Stability Risks Are Asymmetric Toward Remaining Too Long at Zero

Asset market performance

- A risk of remaining at the zero lower bound too long is that a significant asset market bubble will develop.
- The U.S. has been plagued by such bubbles in the 1990s (tech/NASDAQ) and the 2000s (housing prices).
- Each of these asset-price bubbles eventually burst, and the aftermath included a recession.
- Might something similar develop over the next several years as the U.S. economy continues to improve while monetary policy remains exceptionally accommodative?

Risk of remaining at the zero bound

- Such an outcome would certainly be unwelcome and constitutes a significant risk for U.S. monetary policy, much larger than the risks associated with the zero lower bound.
- If a bubble in a key asset market develops, history has shown that we have little ability to contain it.
- A gradual normalization would help to mitigate this risk while still providing significant monetary policy accommodation for the U.S. economy.
- Such an approach may extend the expected length of the current economic expansion.

Is zero interest-rate policy the worst policy?

- The New Keynesian (NK) literature on which much of modern monetary policy is based has a “worst” policy.
 - The worst policy is the “interest rate peg,” under which the policy rate never moves despite changing economic circumstances.
 - In the theory, a key consequence of an interest rate peg is that many different equilibria are possible, including some that may have wide asset-price swings that look like bubbles.
- The FOMC has not altered the policy rate in 6 ½ years.
- Is the Fed unwittingly following the interest rate peg policy and therefore risking asset-price bubbles?

Summary

Summary

- I considered five factors weighing on the decision to begin normalizing monetary policy:
 - Labor markets are likely to continue to improve.
 - Real GDP growth will likely continue apace despite a first-quarter slowdown.
 - Current low inflation in the U.S. is likely temporary.
 - A standard Taylor-type rule suggests liftoff should already have occurred.
 - The risks of remaining at zero too long may be substantial.



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