



CENTRAL
to
AMERICA'S
ECONOMY™

U.S. Monetary Policy and the Path to Normalization

James Bullard

President and CEO, FRB-St. Louis

30 March 2011

London, U.K.

The path to normalization.

- The situation last summer.
 - Disinflation and declining inflation expectations.
 - Quantitative easing as classic monetary policy.

- The situation in the first months of 2011.
 - Improved U.S. growth prospects.
 - Increased uncertainty from four sources.

- The path to normalization.
 - The hard work is ahead.

QE2: classic monetary policy

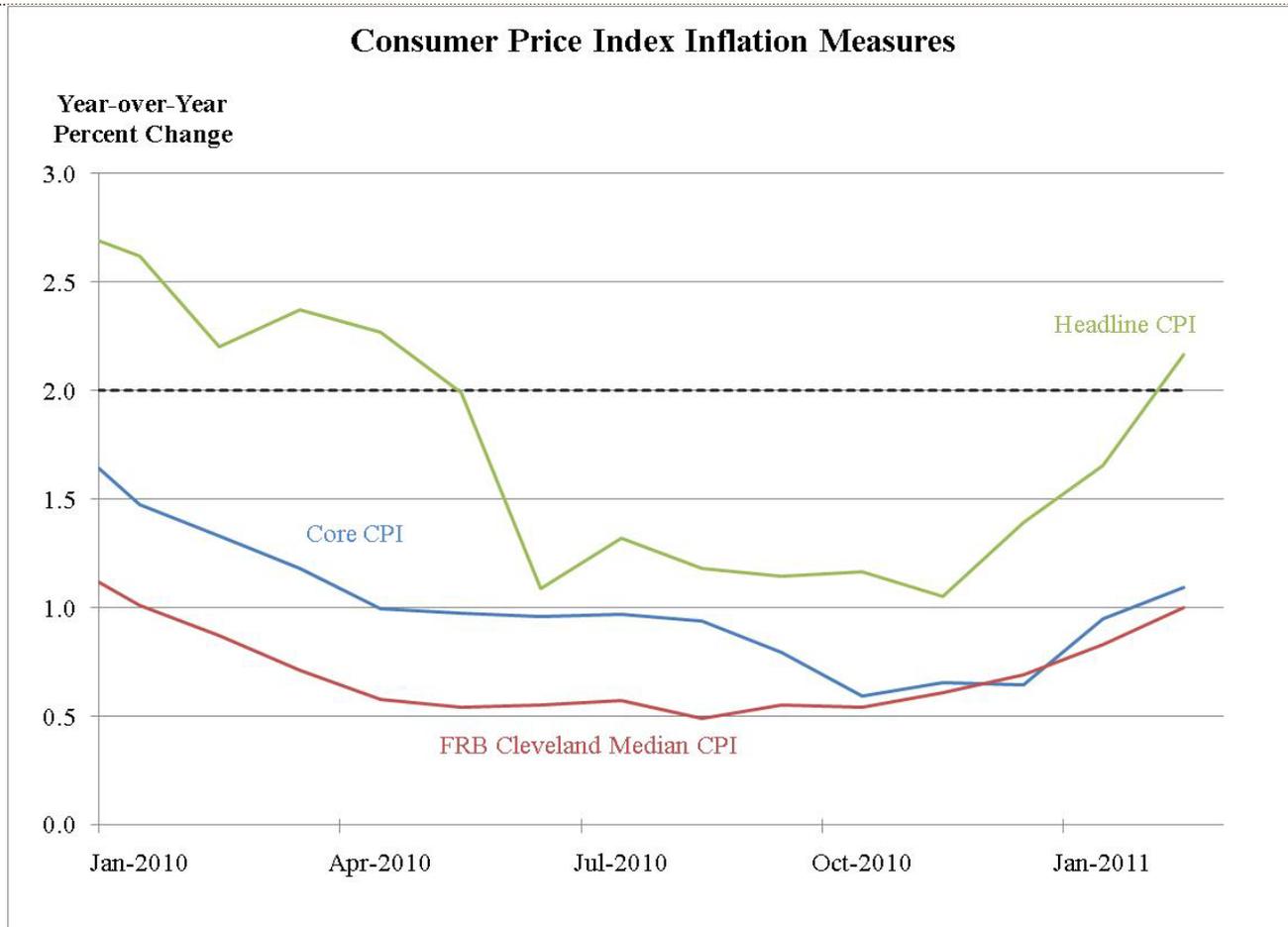
The FOMC decision

- The FOMC voted to pursue “QE2” in November 2010.
- Even before this action, monetary policy was ultra-easy:
 - The policy rate has been near zero for an “extended period.”
 - The Fed’s balance sheet is much larger than it was pre-crisis.
- After the November meeting, the Committee stated that:
 - The Fed will purchase Treasury securities at a pace of about \$75 billion per month through the first half of 2011.
 - The Committee will regularly review the program.
- Minimal changes at the December, January, and March meetings.

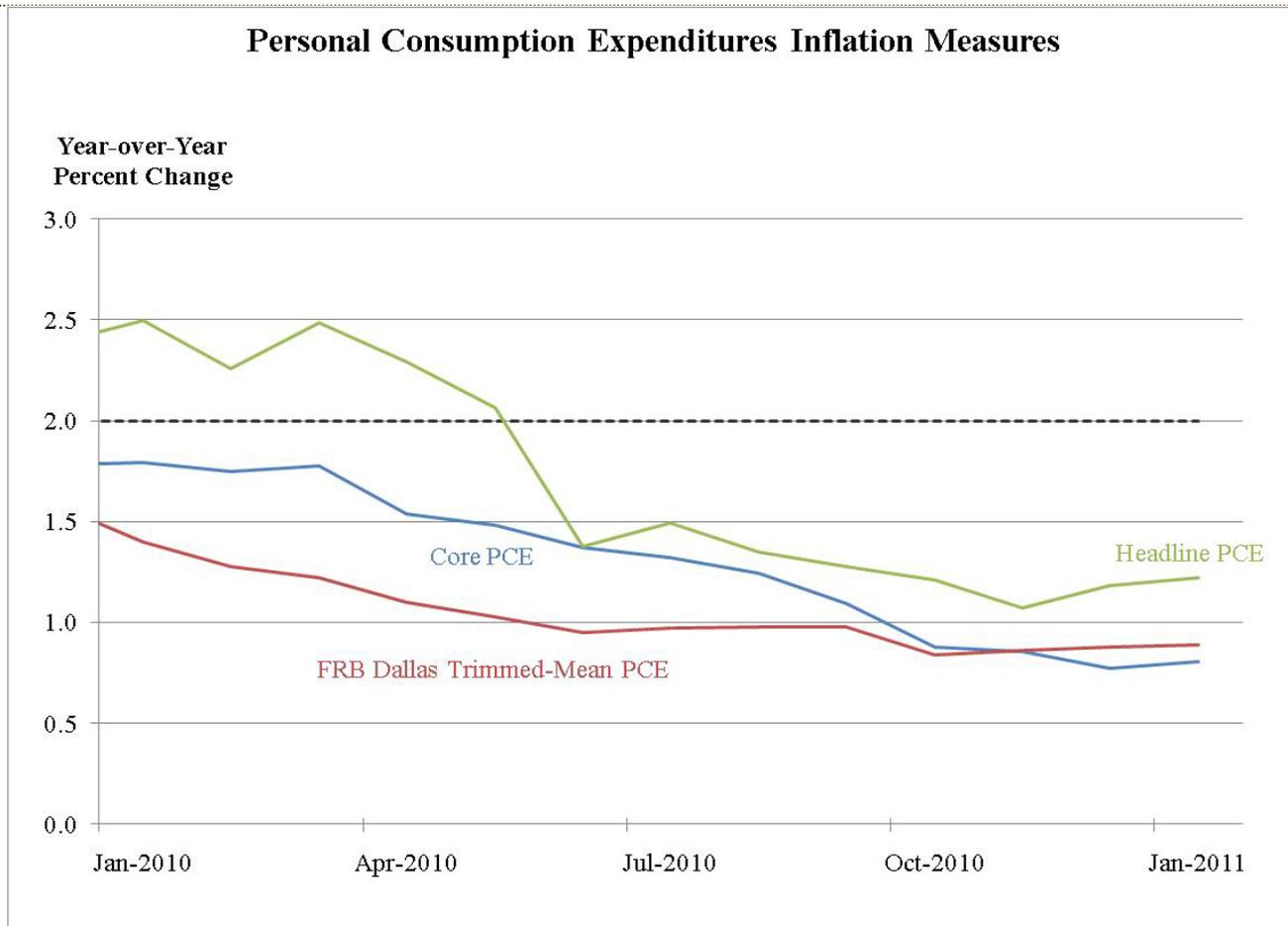
Motivation for QE2

- There was a disinflationary trend during 2010.
- Japanese experience with mild deflation and a near-zero nominal interest rate has been poor.
- Asset purchases can substitute for ordinary (interest rate targeting) monetary policy.

Disinflation trend in 2010, CPI



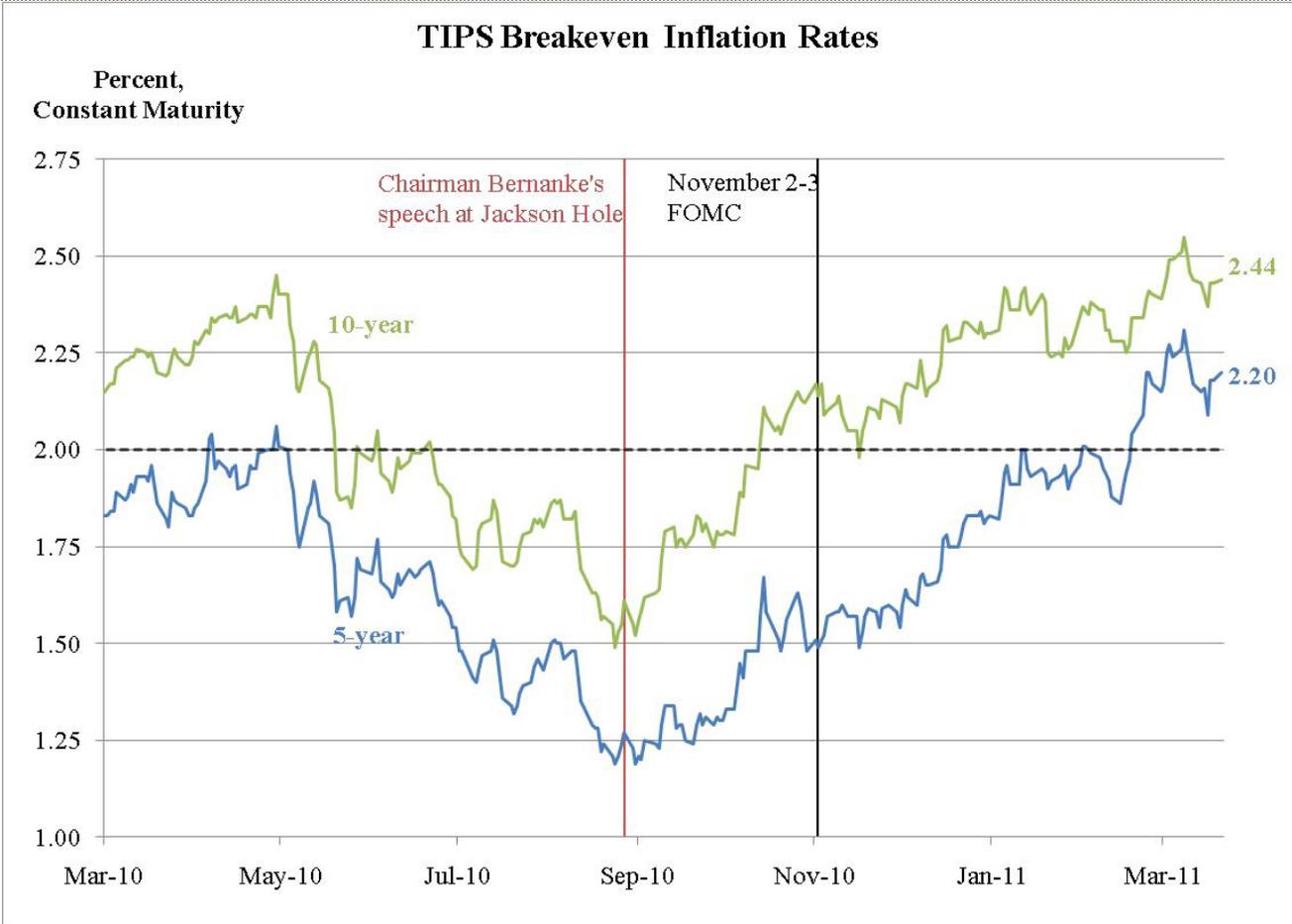
Disinflation trend in 2010, PCE



The effects of asset purchases in financial markets

- The policy change was largely priced into markets ahead of the November FOMC meeting.
- The financial market effects were entirely conventional.
- In particular, real interest rates declined, inflation expectations rose, the dollar depreciated, and equity prices rose.
- These are the “classic” financial market effects one might observe when the Fed eases monetary policy in ordinary times (that is, in an interest rate targeting environment).

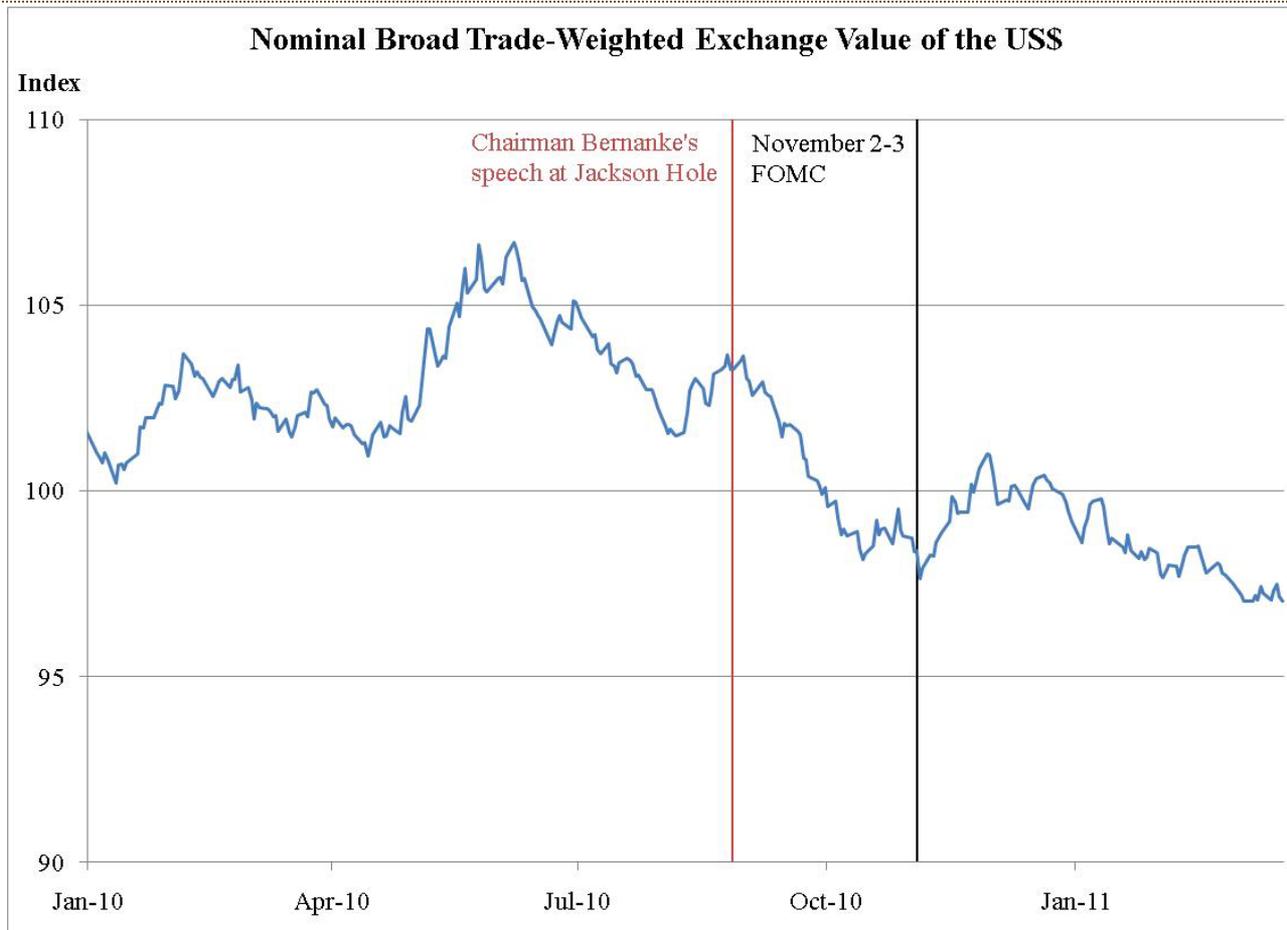
Expected inflation increased



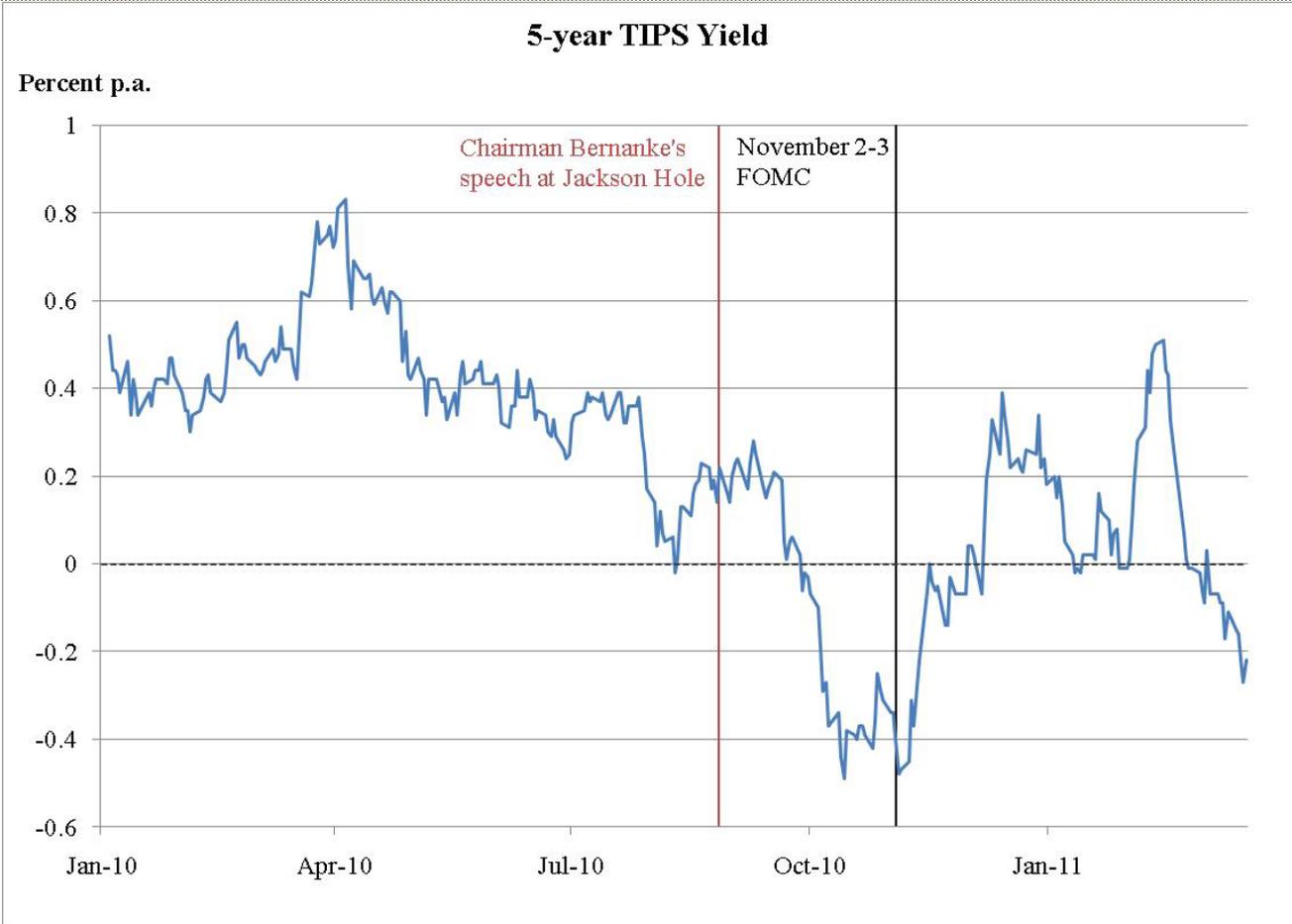
Equity prices increased



The dollar depreciated



Real interest rates declined



Classic monetary policy easing

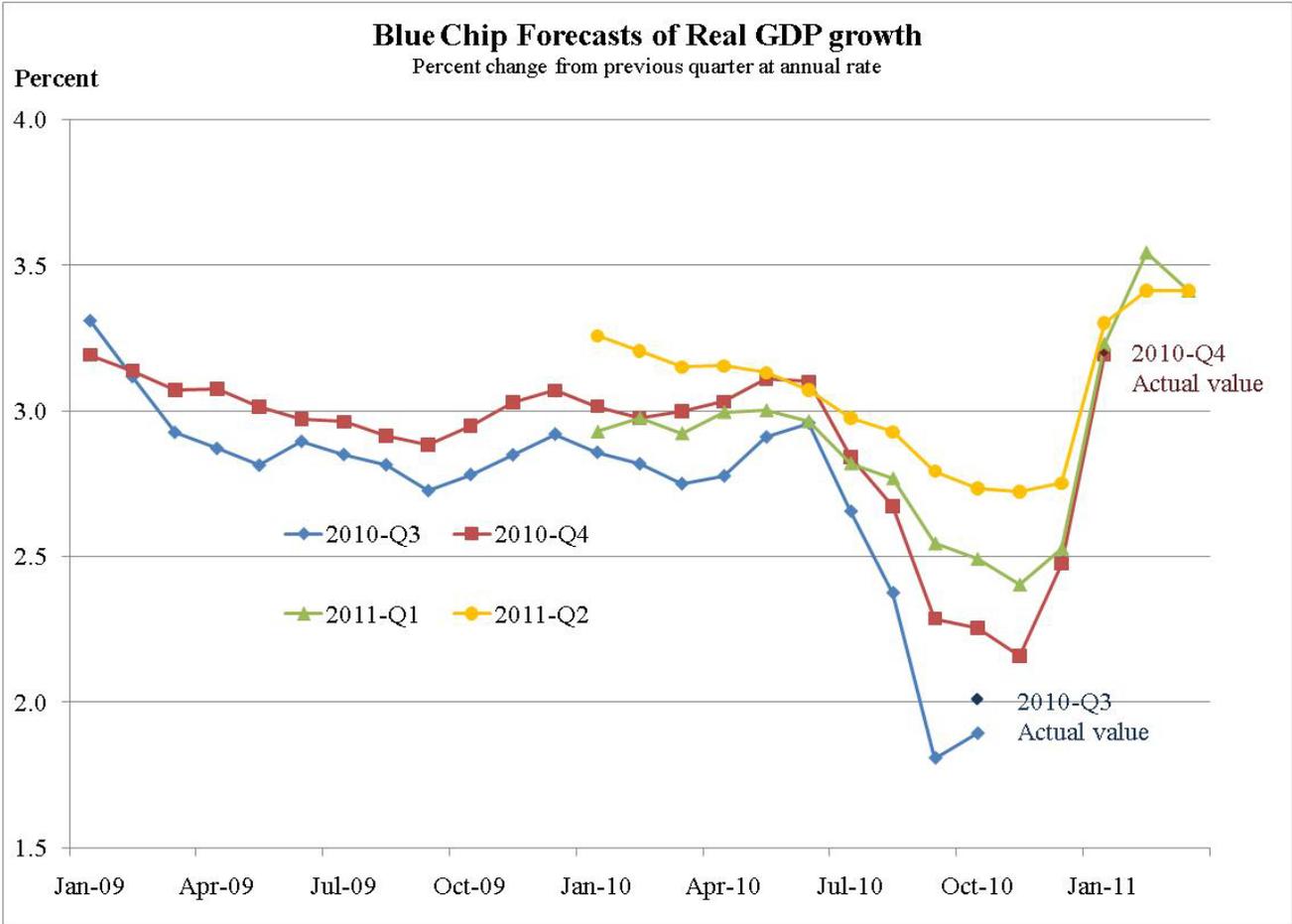
- This experience shows that monetary policy can be eased aggressively even when the policy rate is near zero.
- Effects on the real economy lag from six to twelve months.
- Real effects are difficult to disentangle because other shocks hit the economy in the meantime.
- This is a standard problem in the evaluation of monetary policy.

2011

Better growth prospects in the U.S.

- U.S. growth prospects improved by early 2011, relative to the summer of 2010.
- Private sector forecasters and the FOMC all marked up their forecasts.
- Anecdotal reports were more bullish: Profitable businesses with considerable cash and an improving outlook.
 - Many can tap into the continued boom in emerging Asia.
- An improving economy 18 months post-recession is generally a strong positive.

Better growth prospects in the U.S.



The natural debate

- Quantitative easing has been an effective tool, even while the policy rate is near zero.
- The economic outlook has improved since the program was implemented.
- The natural debate is how and when the exit should begin.
- However ...
 - ... additional uncertainty has clouded this picture.

Uncertainty from four sources

- In recent weeks, macroeconomic uncertainty has been on the rise from four key sources.
- One has been turmoil in the Middle East and North Africa, and the associated uncertainty premium in oil prices.
- Another has been the natural disaster in Japan and the damaged nuclear reactors there.
- A third has been the U.S. fiscal situation and the possibility of a government shutdown.
- And finally, continued uncertainty regarding resolution of the European sovereign debt crisis.

Prospects are for each situation to be contained

- All four situations contain potential for escalation.
- If escalation occurs, all bets are off.
- Still, the most likely prospect is that all four are resolved without becoming global macroeconomic shocks.

A de-escalation scenario

- Further world oil price increases remain limited.
 - Prices would have to continue to increase substantially to derail U.S. growth prospects significantly.
 - This is not a “Hamilton” oil shock so far.
- Japan contains fallout at Fukushima Daiichi.
- The U.S. Congress funds the government through 2011 and makes some progress on deficit reduction.
- European governments approve a plan to address continuing sovereign debt concerns.

Normalization

Normalization

- U.S. monetary policy cannot remain ultra-accommodative indefinitely.
- The process of normalizing policy, even once it begins, will still leave unprecedented policy accommodation on the table.
 - The FOMC may not be willing or able to wait until all global uncertainties are resolved to begin normalizing policy.
- Exit strategy was widely discussed in 2010, and that debate will likely revive during 2011.

More on normalization

- Normal monetary policy has two parts:
 - QE accommodation is removed by returning the balance sheet to an ordinary size over time.
 - The policy rate begins to approach levels associated with moderate expansion.
- This will take time.
- This is the most difficult part of the business cycle for a central bank.

Complications compared to previous tightening cycles

- Reversing QE through balance sheet normalization will put upward pressure on interest rates.
- This was not present in previous tightening cycles.
- The Committee can sell assets as needed to begin tightening, without raising the policy rate.

More comparisons to previous tightening cycles

- The Fed also pays interest on excess reserves (IOER).
 - This also was not present in previous tightening cycles.
- With IOER, the policy rate could be increased without changing the size of the balance sheet.
 - But, why pay interest on all those reserves?
 - Reserves can also be drained via term deposits and reverse repos.

State-contingency in previous tightening cycles

- In 1994, the Fed tightened policy unexpectedly and in uneven amounts.
 - Financial markets considered this disorderly.
 - Policy was normalized and the economy boomed in the 1990s.
- In 2004, the Fed tightened policy in perfectly even amounts.
 - Financial markets considered this orderly.
 - Policy was normalized, but the financial crisis is sometimes blamed in part on this excessively smooth approach.
- This time, it will be just right!

Conclusions

Conclusion

- QE2 was a classic easing of monetary policy.
- U.S. growth prospects remain reasonably good for 2011.
- Recent events present considerable uncertainty.
 - Escalation could occur in many quarters ...
 - ... in which case all bets are off ...
 - ... but the most likely scenario is that these uncertainties are unwound in relatively benign ways.
- Discussion of the normalization of U.S. policy will likely return as the key issue in 2011.



Federal Reserve Bank of St. Louis
stlouisfed.org

CENTRAL
to
AMERICA'S
ECONOMY™

Federal Reserve Economic Data (FRED)
research.stlouisfed.org/fred2/

James Bullard
research.stlouisfed.org/econ/bullard/