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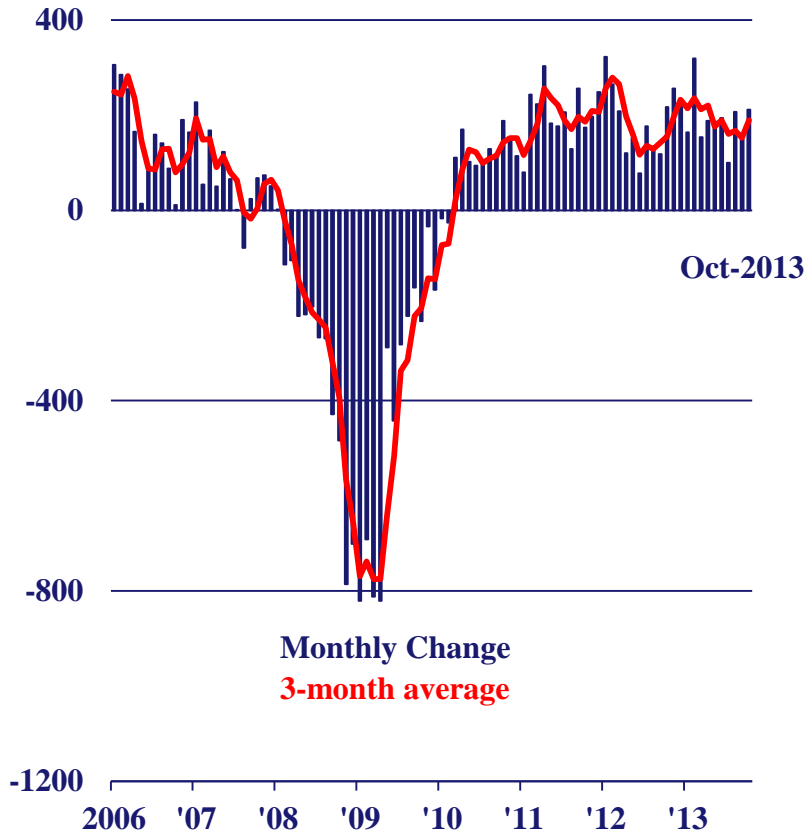
# Academic Advisory Council

November 22, 2013

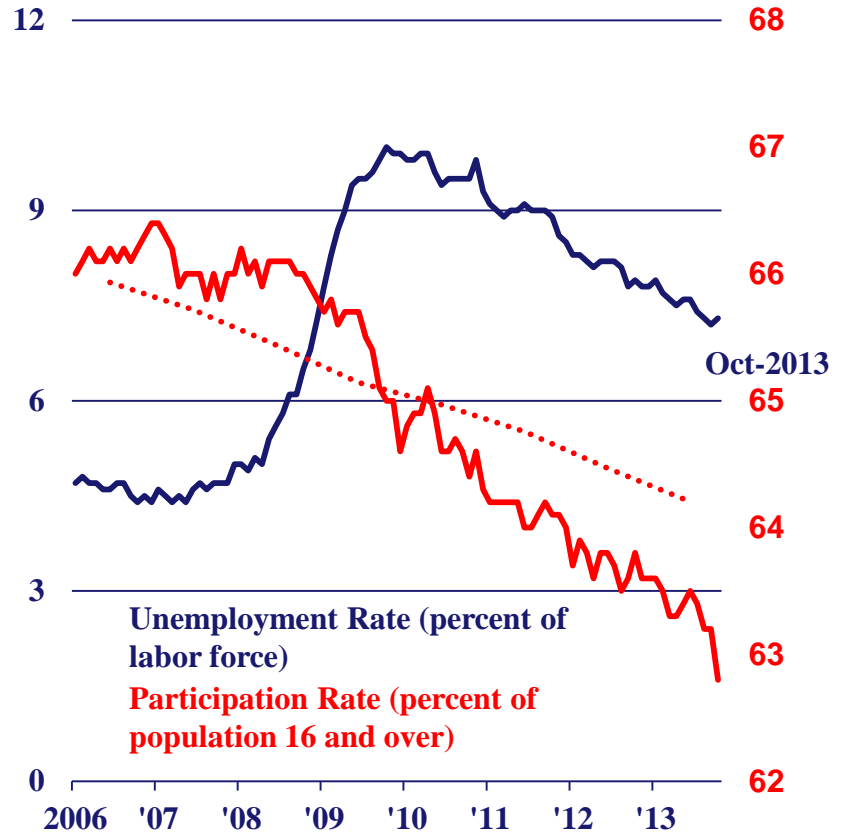
Spencer Krane  
*Senior Vice President*  
Federal Reserve Bank of Chicago

# Labor Market

**Private Nonfarm Payroll Employment**  
(change, thousands)

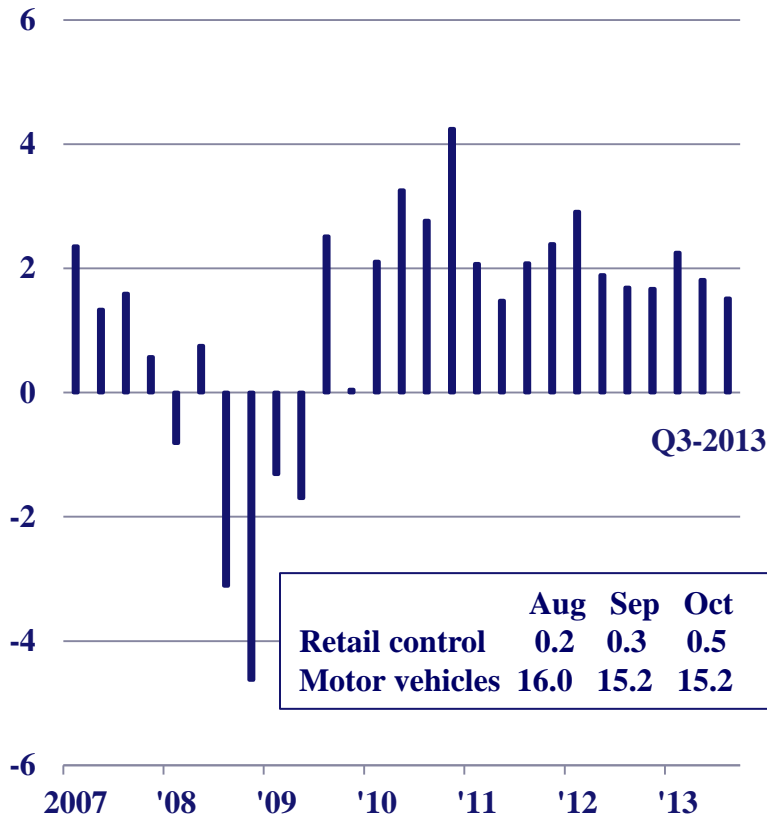


**Unemployment and Participation Rates**  
(percent)

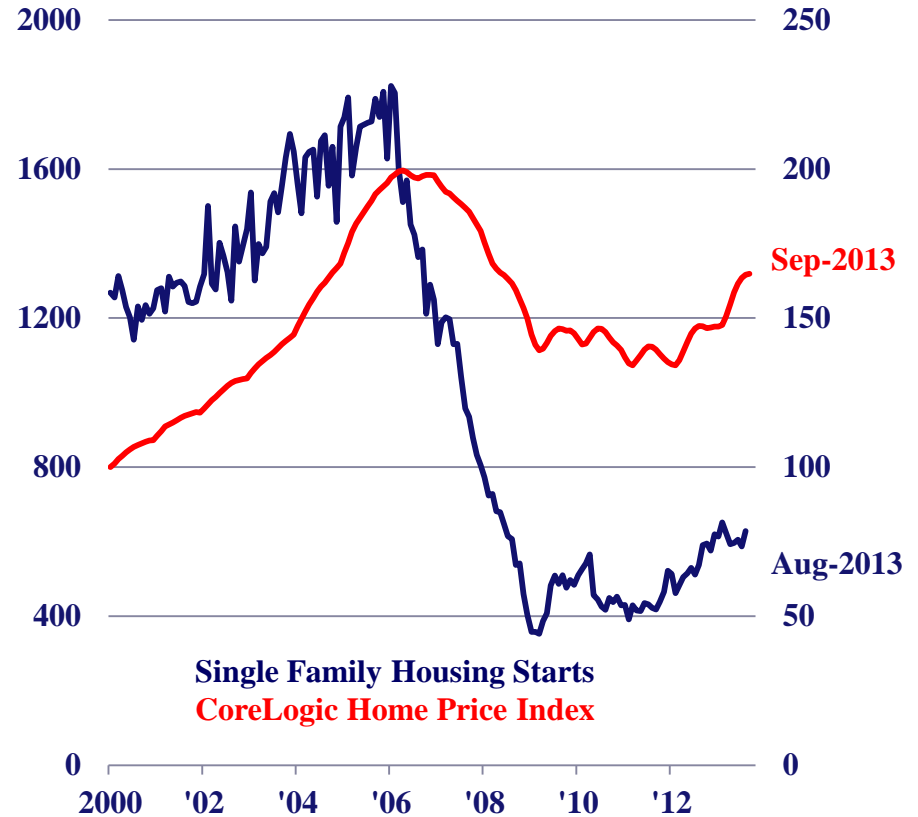


# Retail Sales and Housing

**Personal Consumption Expenditures**  
(percent change, annual rate)



**Housing Starts and Home Price Index**  
(millions of units, annual rate; Q1-2000=100)



# Near-Term Forecasts

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	2013:Q3	2013:Q4	2014
Blue Chip (11/10)			
GDP	2.8 <sup>1</sup>	1.8	2.0
Unemployment	7.3	7.2	7.2
Macroadvisers (11/21)			
GDP	3.3	1.3	2.0

1. BEA Advance estimate

# FOMC Forecasts, September SEP

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	2013	2014	2015	2016
GDP <sup>1</sup>	2.05 (2.0, 2.3)	3.05 (2.9, 3.1)	3.25 (3.0, 3.5)	3.05 (2.5, 3.3)
Unemployment <sup>2</sup>	7.25 (7.1, 7.3)	6.65 (6.4, 6.8)	6.05 (5.9, 6.2)	5.65 (5.4, 5.9)
PCE <sup>1</sup>	1.15 (1.1, 1.2)	1.55 (1.3, 1.8)	1.95 (1.6, 2.0)	1.95 (1.7, 2.0)

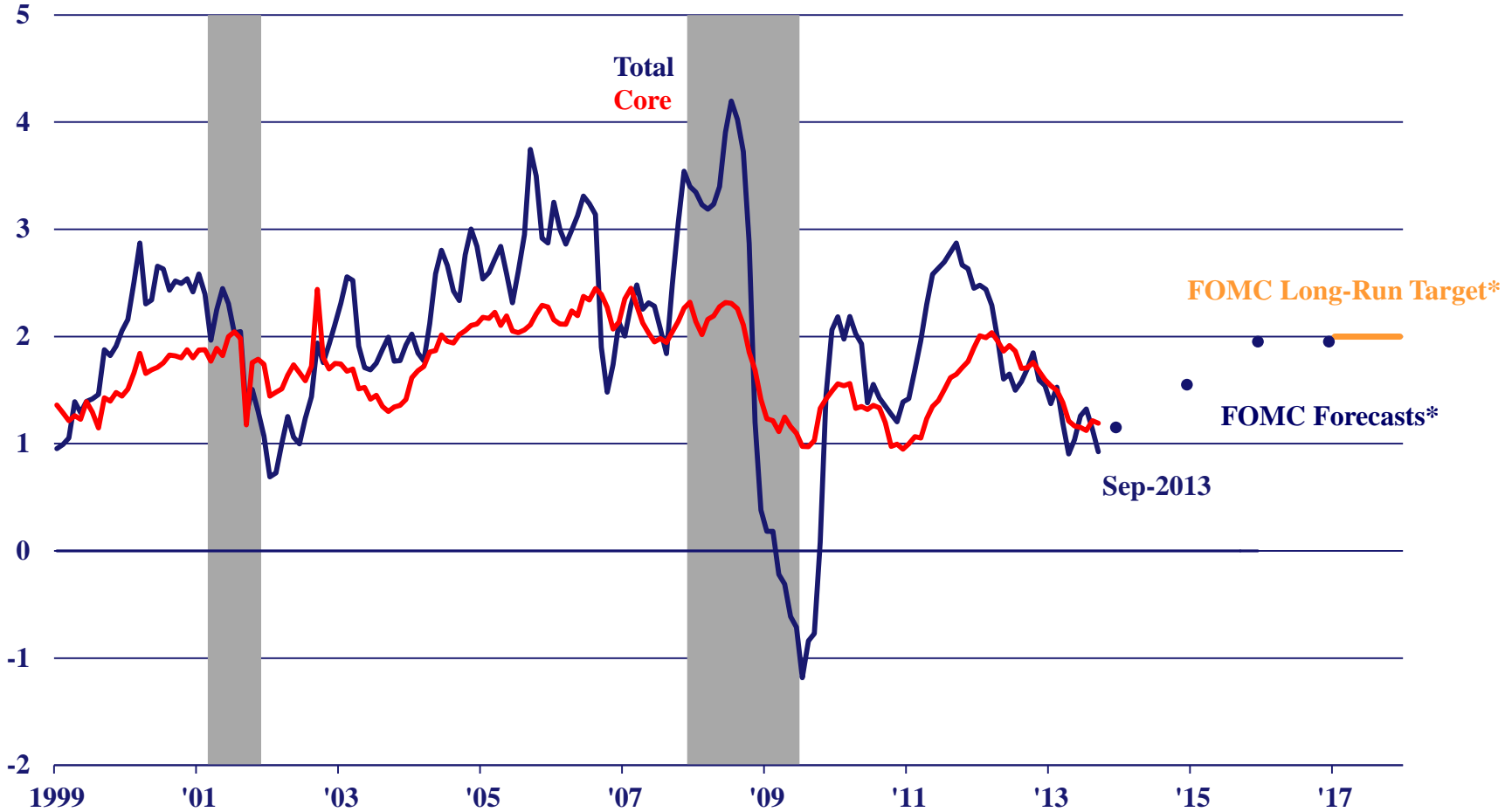
Pseudo medians. Central tendency in parentheses.

1. Percent change, Q4 to Q4

2. Fourth-quarter average

# Inflation

**PCE Price Index**  
(12-month percent change)

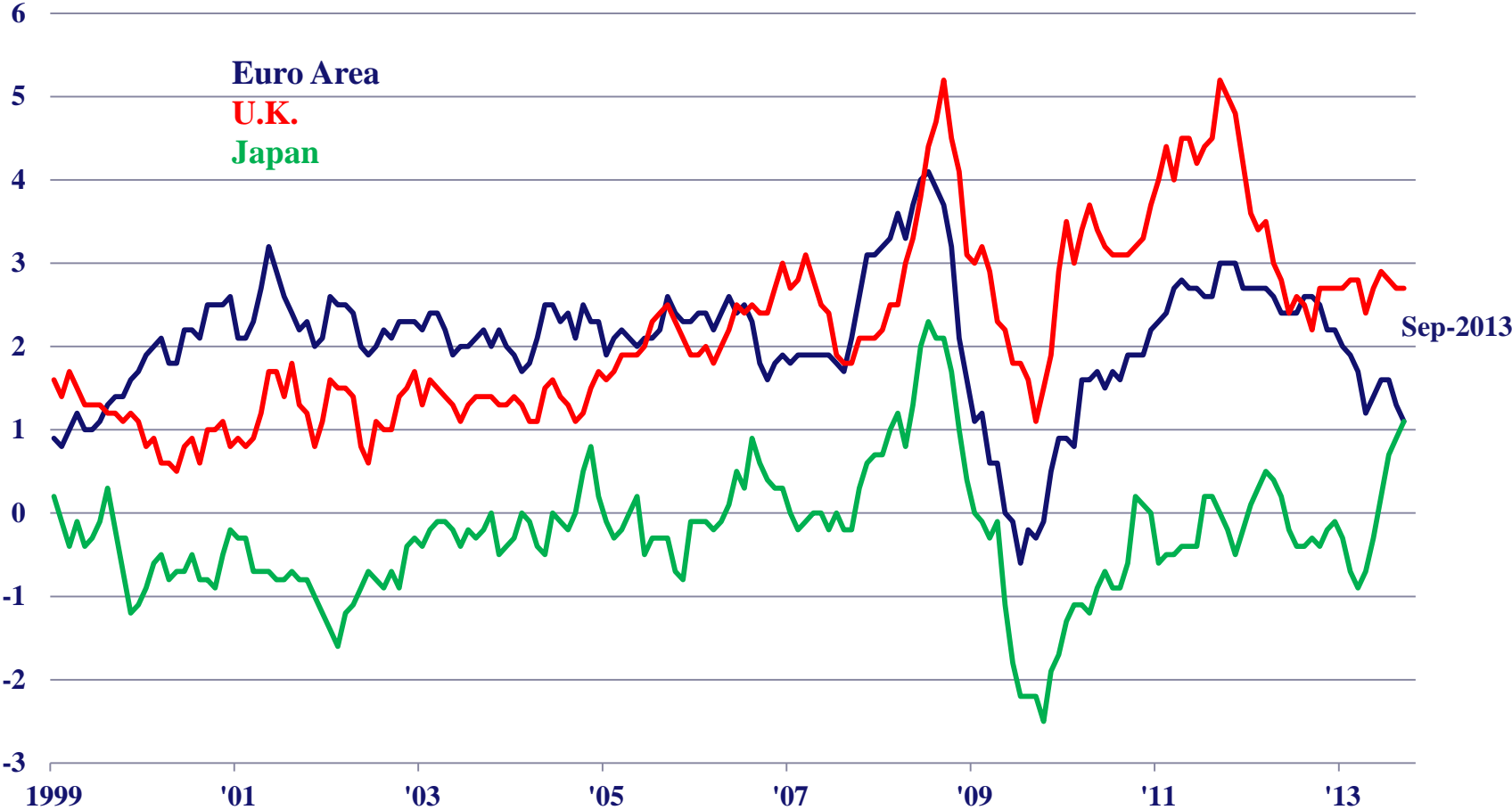


*\*\*"Median" of Q4-toQ4 forecasts made by the FOMC participants, September 2013*

# Inflation in Other Advanced Economies

## Consumer Price Index

(12-month percent change)



# 10-Year Treasury Rates

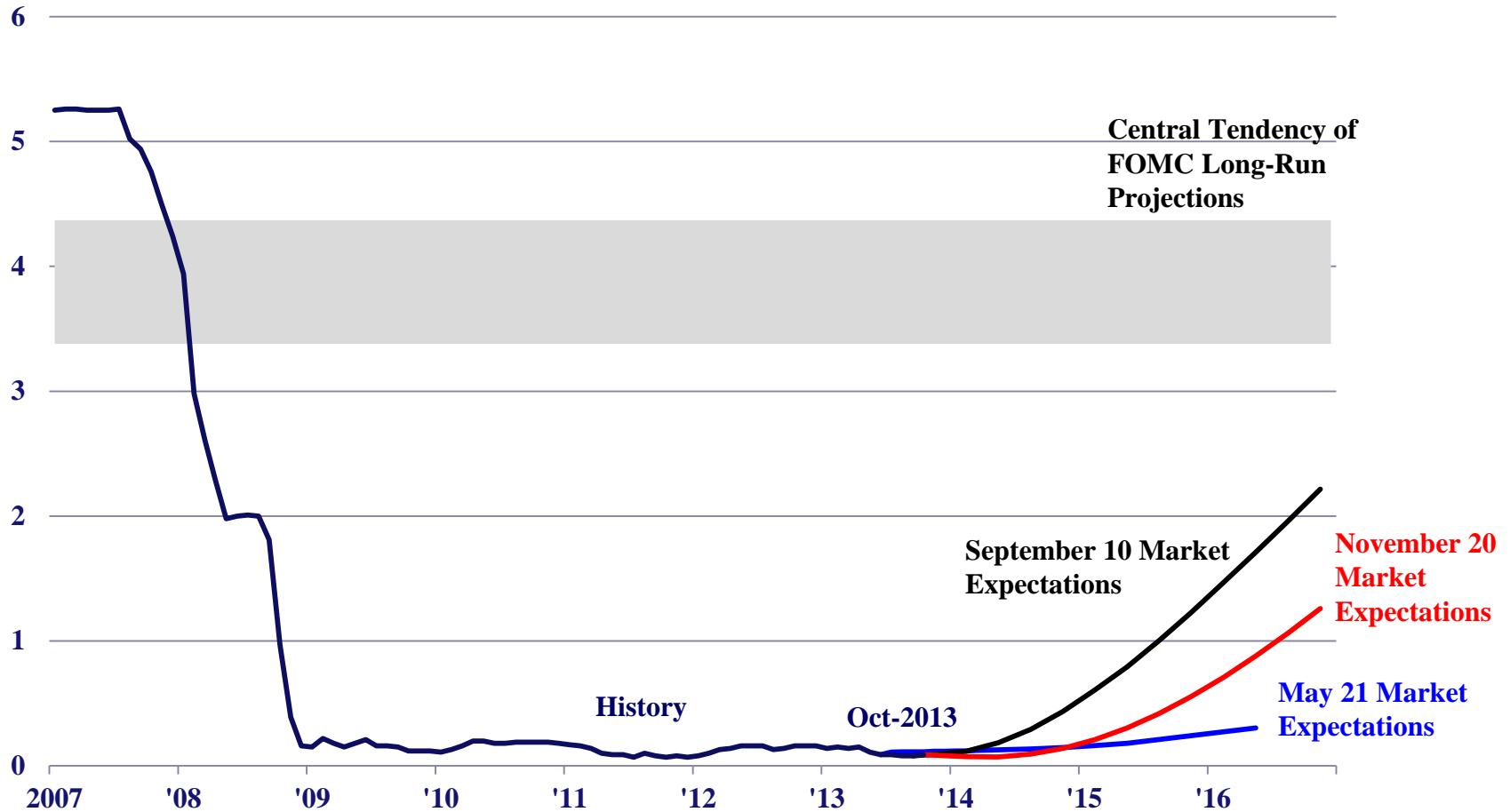




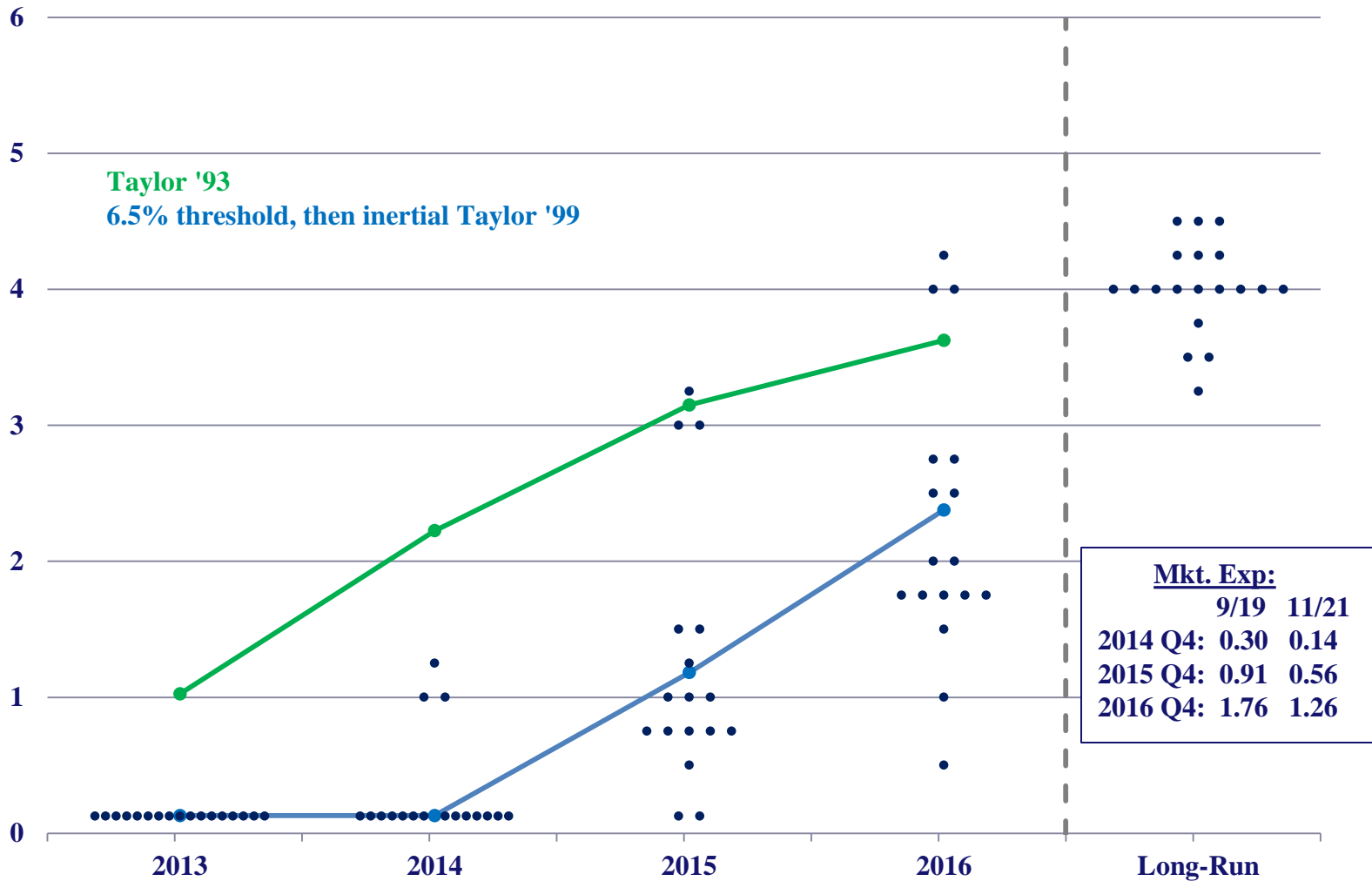
# Fed Funds Expectations

## Fed Funds Rate

(percent)



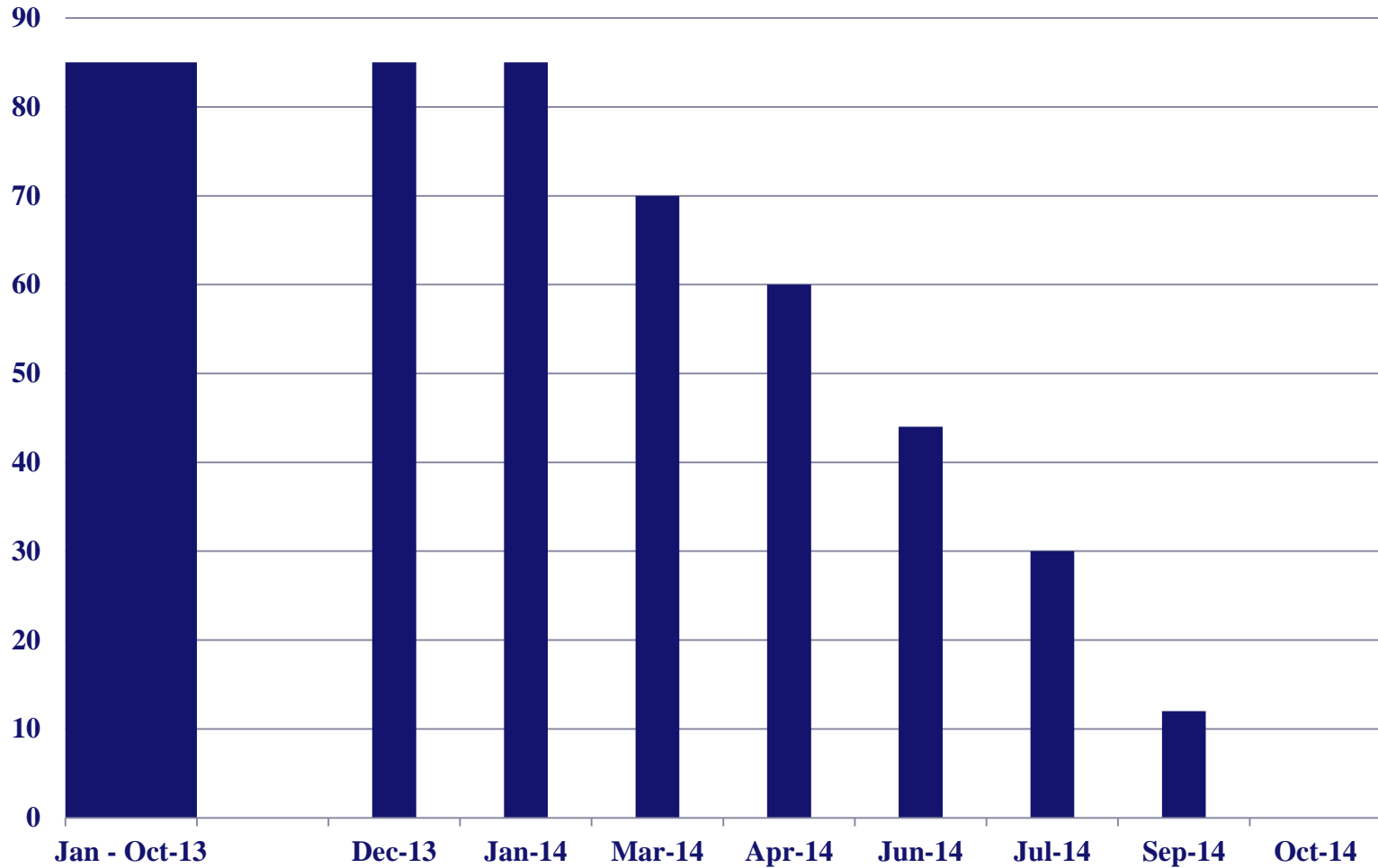
# FG and FOMC “Appropriate” Policy Rates



Source: Interest rate forecasts are from the September 18, 2013 FOMC Summary of Economic Projections; market expectations from OIS futures

# Survey of Primary Dealers: LSAP Expectations

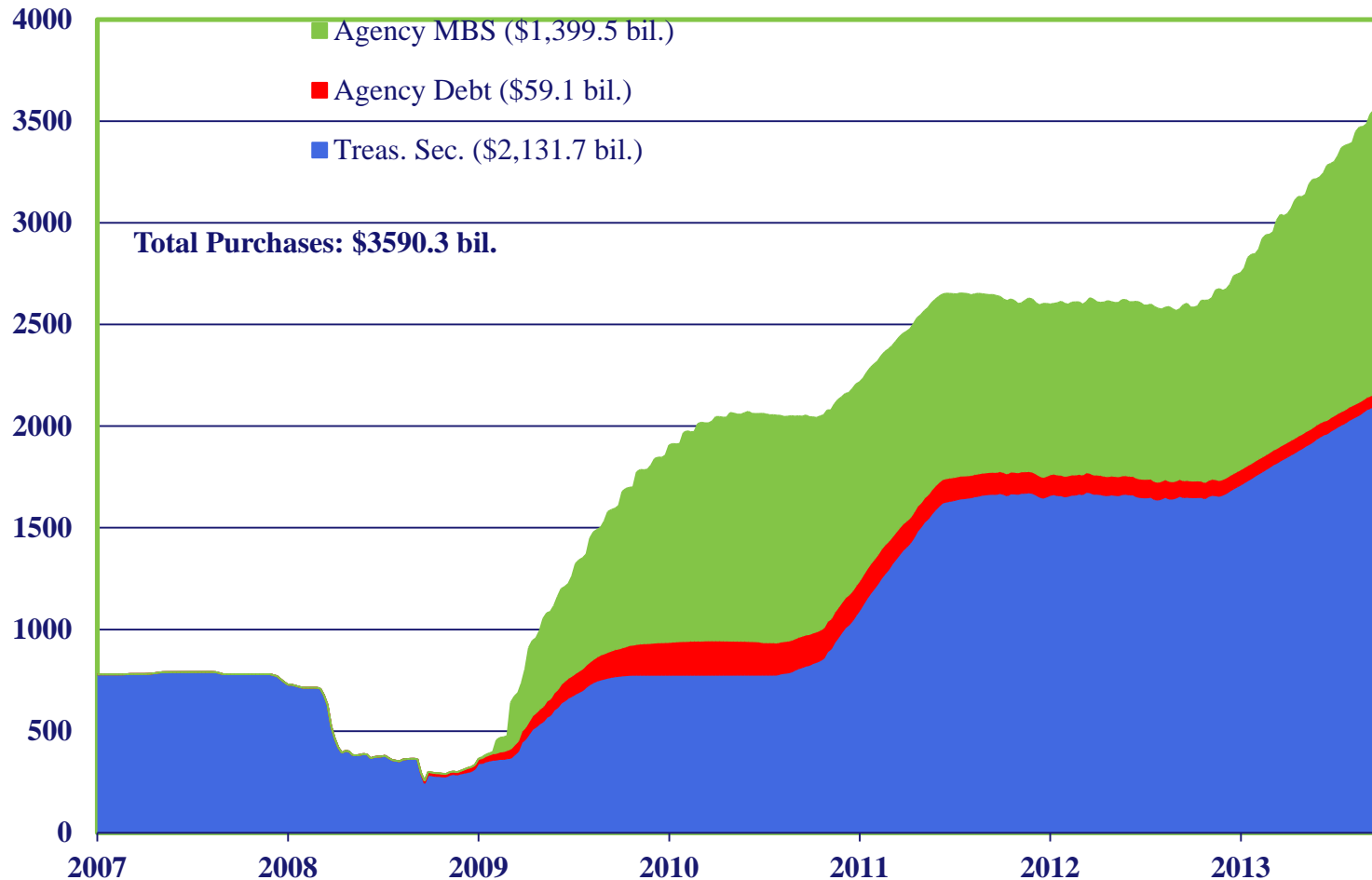
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# Monetary Policy – Asset Purchases

## Federal Reserve Asset Purchases

(Bils. \$)



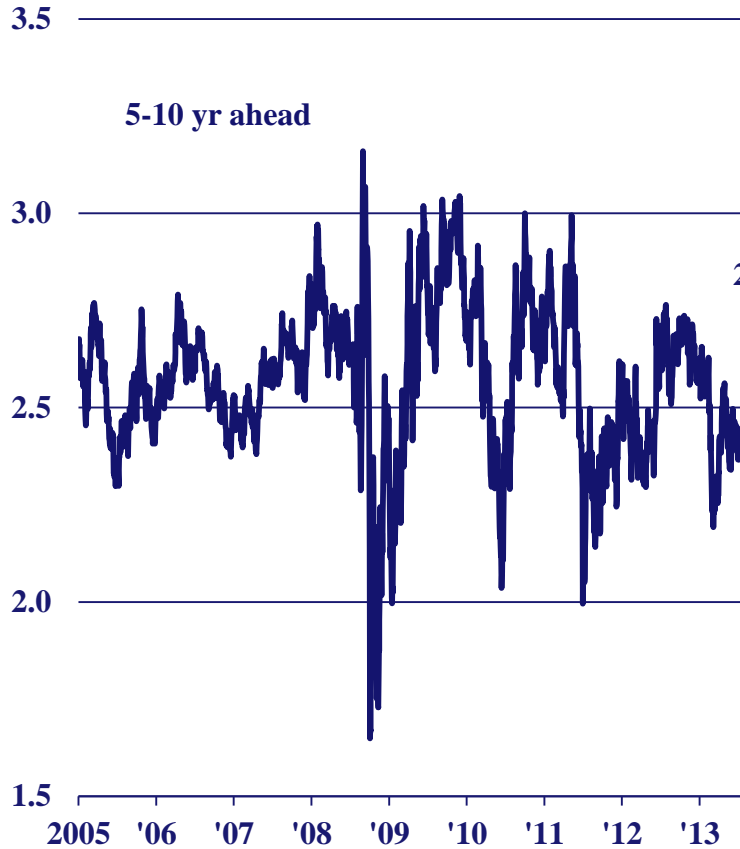
# Appendix

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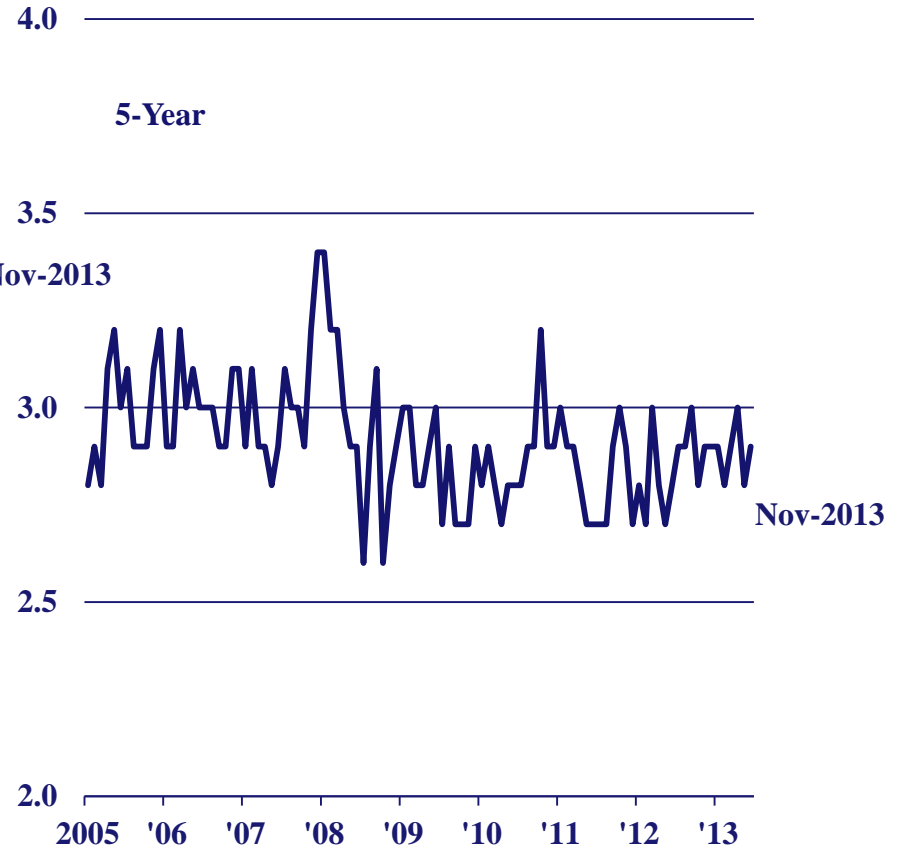
# 5 -10 Year Inflation Expectations

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**TIPS Inflation Compensation**  
(percent)



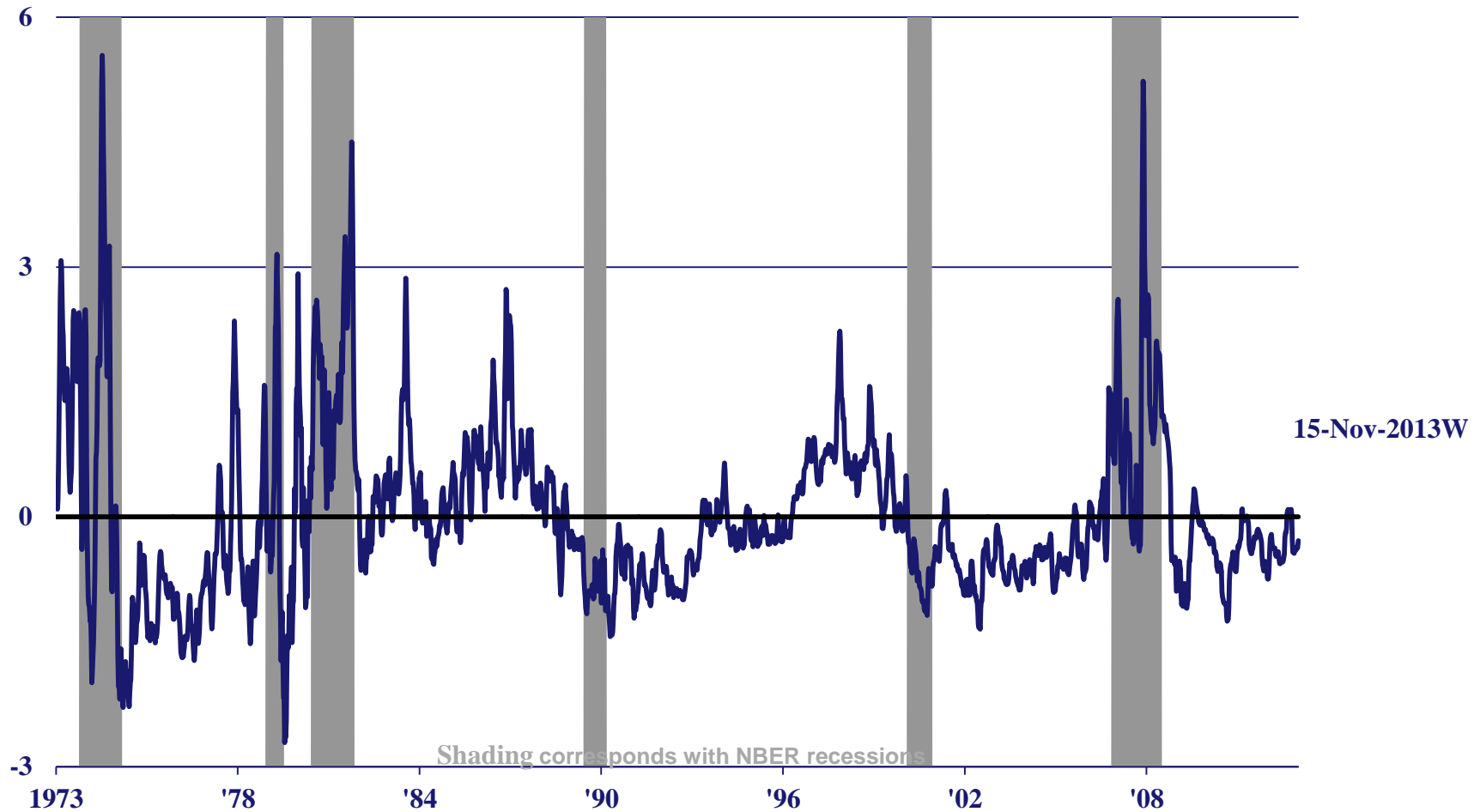
**University of Michigan Median Inflation**  
(percent)



# Financial Conditions

## Financial Conditions Index Adjusted for Economic Conditions

(deviation from trend; percent of banks tightening standards on C&I loans)



# Fewer Underwater Homeowners

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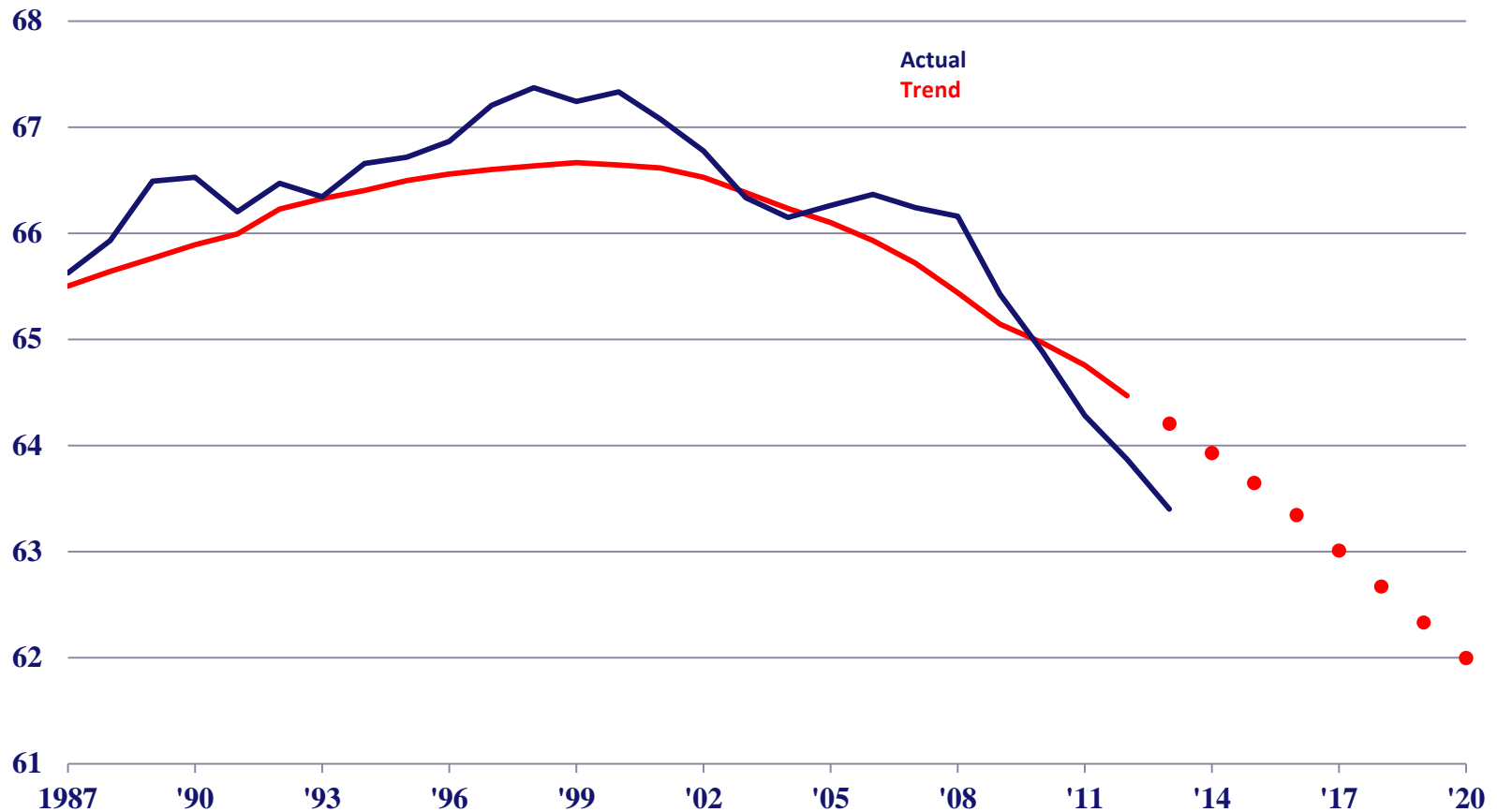
## Single Family Homes with Mortgages in Negative Equity (millions of units)





# Labor Force Participation Is Trending Down

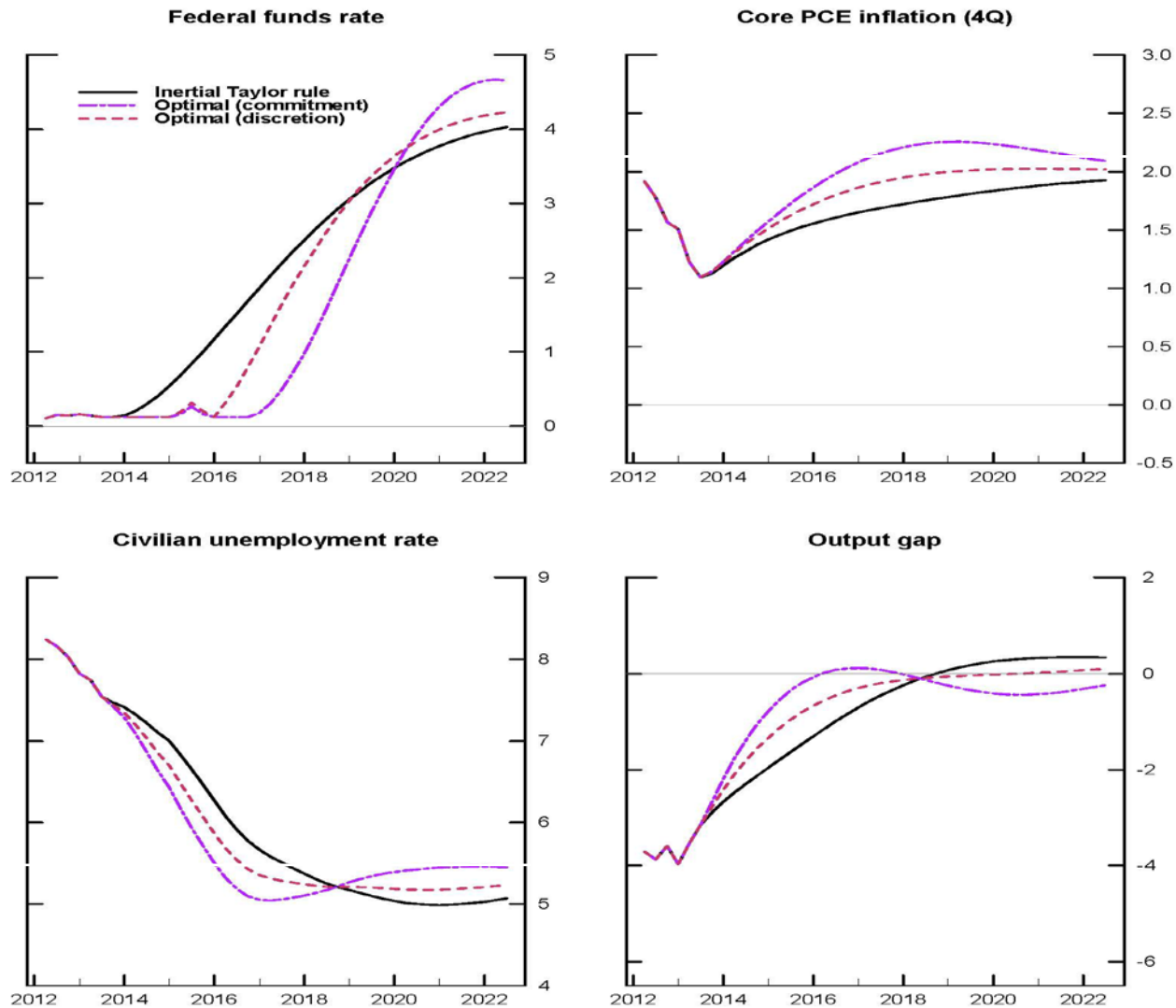
**Labor Force Participation Rate**  
(percent)



# Some Optimal Control Monetary Policies

Source: English, Lopez-Salido, and Tetlow (2013)

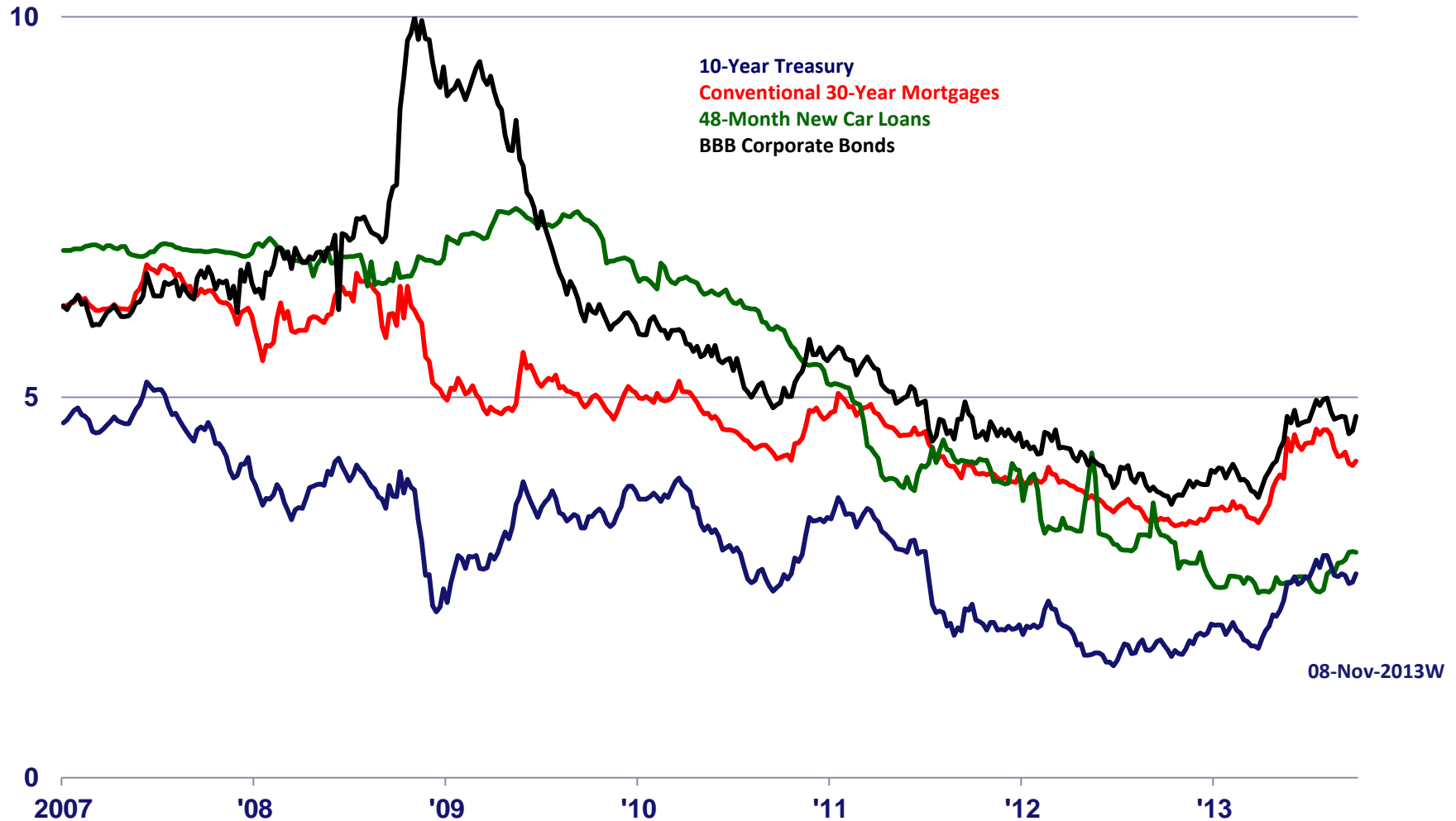
**Figure 4**  
**Optimal policies versus the inertial Taylor (1999) rule**  
**(Baseline conditions)**



## Option 2: Large Scale Asset Purchases (LSAP)

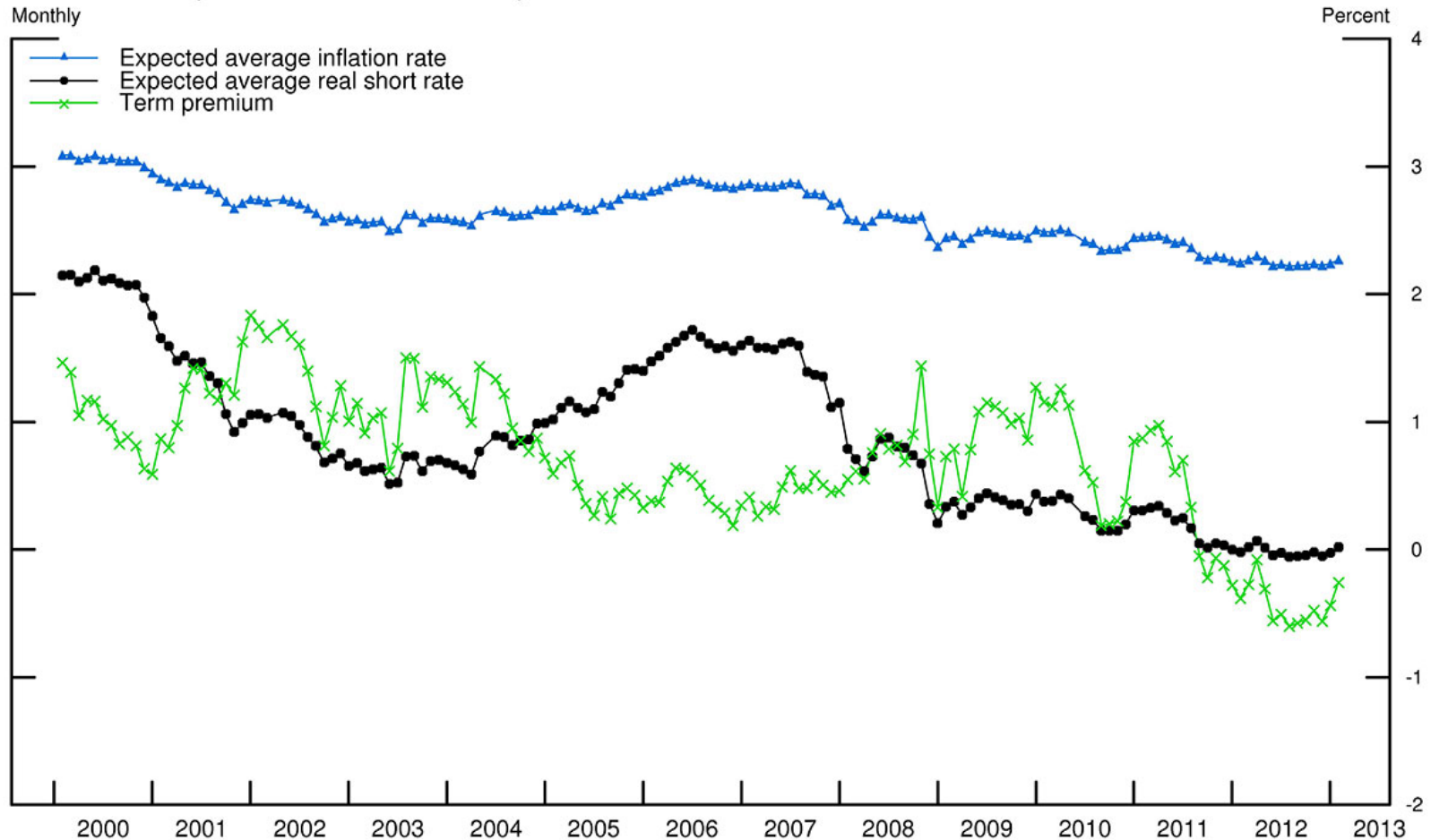
- **LSAP I (11/08): \$600 bill agency debt/MBS**
- **LSAP Ia (3/09): \$850 bill agency debt/MBS; \$300 bill Treas.**
- **LSAP II (11/10): \$600 bill Treas.**
- **MEP (9/11): Exchange \$400 bill short-term for \$400 bill long-term Treas.**
- **MEP extension (6/12): Extend MEP through end of 2012**
- **LSAP III (9/12): \$40 bill per month MBS, no fixed end date -- “until labor market outlook improved substantially”**
- **LSAP IIIa (12/12): \$40 bill per month MBS and \$45 bill per month long-term Treas; no fixed end date**

# Long-Term Rates Down Significantly



# Empirical Facts about Term Premia

Chart 2. Decomposition of 10-Year Treasury Yield



Note: Decomposition of 10-year zero-coupon Treasury yield based on the term structure model of D'Amico, Kim, and Wei (2010).

Source: Federal Reserve Board; Barclays PLC; staff calculations.

Source: Ben Bernanke, "Long-Term Interest Rates," San Francisco, March 1, 2013

# Inflation in Other Advanced Economies

## Consumer Price Index Excluding Food and Energy

(12-month percent change)

