

### **Prefatory Note**

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# Report to the FOMC on Economic Conditions and Monetary Policy



## Book A

### Economic and Financial Conditions: Current Situation and Outlook

March 13, 2013

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Prepared for the Federal Open Market Committee  
by the staff of the Board of Governors of the Federal Reserve System

## Revisions to the Staff Projection since the Previous SEP

The FOMC last published its Summary of Economic Projections (SEP) following the December FOMC meeting. The table below summarizes revisions to the staff economic projection since the December Tealbook.

The staff projections for both real GDP growth and inflation through 2015 are essentially unrevised since December and continue to show a gradual strengthening of economic growth with inflation remaining below, but edging toward, the FOMC's long-run objective of 2 percent. The projection for the unemployment rate is revised down throughout the medium term, largely reflecting the downward surprise in the unemployment rate since the December Tealbook, which we have allowed to persist. Nonetheless, significant slack remains even at the end of 2015.

The staff projection for GDP growth over the longer run has been revised a little lower since December to be better aligned with our long-run projections for growth of the population and structural multifactor productivity. This lower expected rate of GDP growth over the long run shows through, essentially one-for-one, to our estimate of the equilibrium federal funds rate.

The baseline path for the federal funds rate in the current projection is set in a manner consistent with the quantitative thresholds described in the Committee's statement following the December meeting; in the December forecast, the path of the federal funds rate was tied to the date-based forward guidance then in force. Nevertheless, the federal funds rate trajectory is essentially unrevised since December and continues to envision the federal funds rate moving above its effective lower bound in the fourth quarter of 2015.

**Staff Economic Projections Compared with the December Tealbook**

| Variable                        | 2012 | 2013 |     | 2013 | 2014 | 2015 | Longer run |
|---------------------------------|------|------|-----|------|------|------|------------|
|                                 |      | H1   | H2  |      |      |      |            |
| Real GDP <sup>1</sup>           | 1.7  | 2.3  | 2.8 | 2.5  | 3.2  | 3.6  | 2.3        |
| December Tealbook               | 1.7  | 2.1  | 2.8 | 2.5  | 3.2  | 3.6  | 2.5        |
| Unemployment rate <sup>2</sup>  | 7.8  | 7.7  | 7.5 | 7.5  | 7.1  | 6.3  | 5.2        |
| December Tealbook               | 8.0  | 7.9  | 7.8 | 7.8  | 7.4  | 6.5  | 5.2        |
| PCE inflation <sup>1</sup>      | 1.6  | 1.1  | 1.5 | 1.3  | 1.5  | 1.6  | 2.0        |
| December Tealbook               | 1.6  | 1.2  | 1.3 | 1.3  | 1.4  | 1.5  | 2.0        |
| Core PCE inflation <sup>1</sup> | 1.5  | 1.5  | 1.7 | 1.6  | 1.7  | 1.7  | n.a.       |
| December Tealbook               | 1.6  | 1.6  | 1.6 | 1.6  | 1.6  | 1.7  | n.a.       |
| Federal funds rate <sup>2</sup> | .16  | .13  | .13 | .13  | .13  | .30  | 4.00       |
| December Tealbook               | .15  | .13  | .13 | .13  | .13  | .38  | 4.25       |
| Memo:                           |      |      |     |      |      |      |            |
| Federal funds rate,             |      |      |     |      |      |      |            |
| end of period                   | .13  | .13  | .13 | .13  | .13  | .50  | 4.00       |
| December Tealbook               | .13  | .13  | .13 | .13  | .13  | .50  | 4.25       |

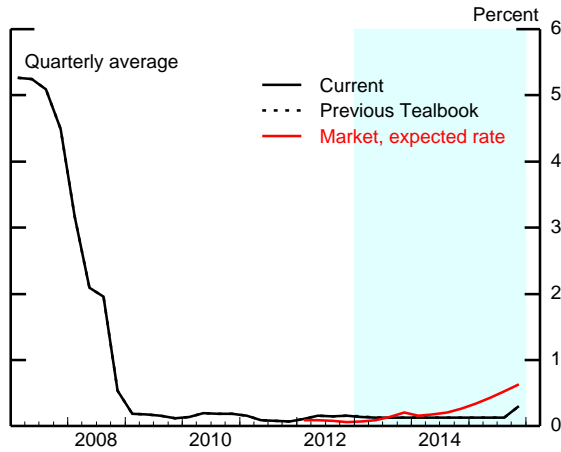
1. Percent change from final quarter of preceding period to final quarter of period indicated.

2. Percent, final quarter of period indicated.

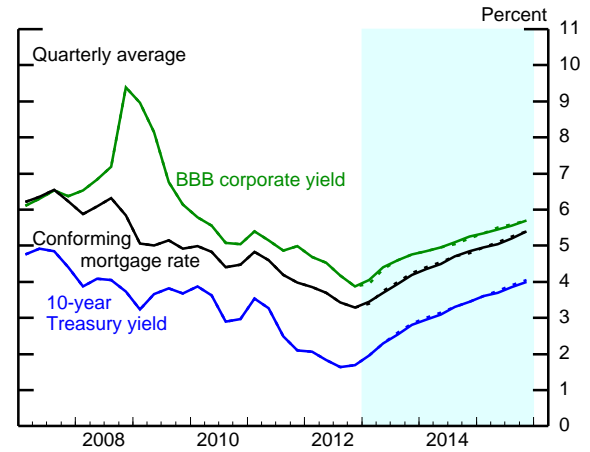
n.a. Not available.

## Key Background Factors underlying the Baseline Staff Projection

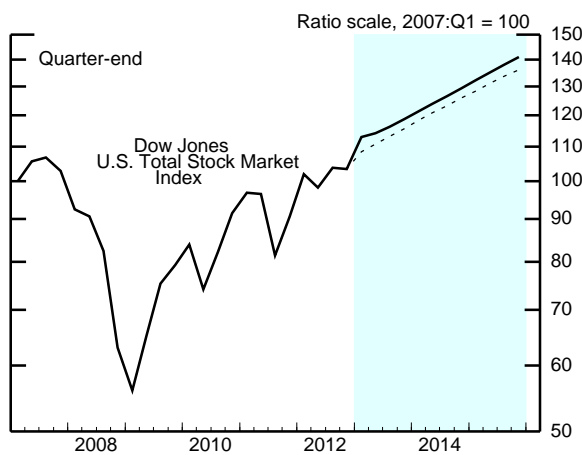
Federal Funds Rate



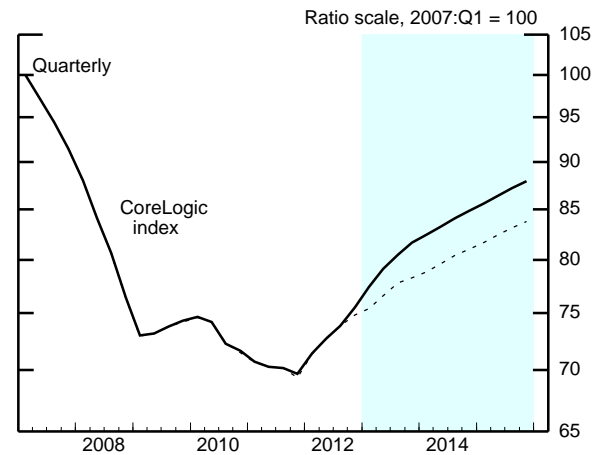
Long-Term Interest Rates



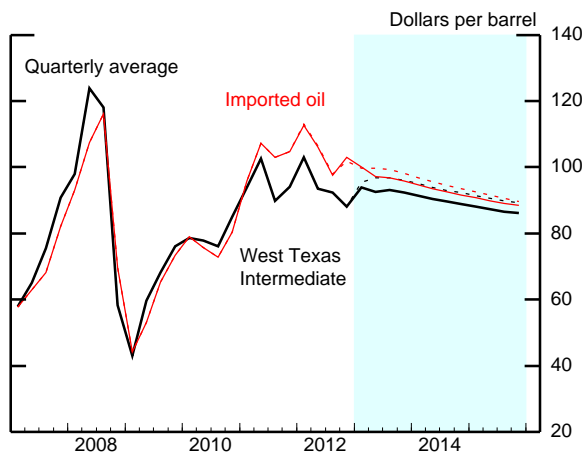
Equity Prices



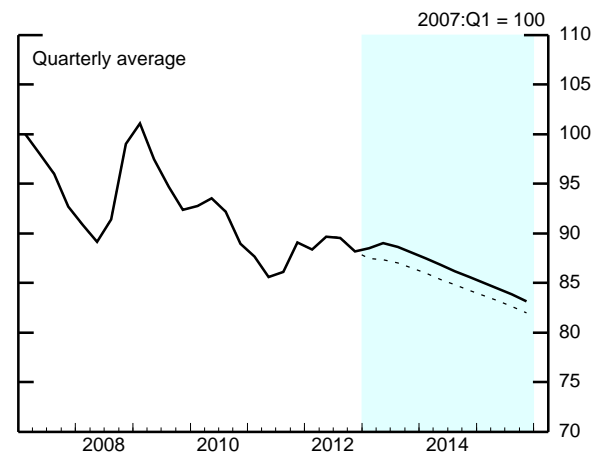
House Prices



Crude Oil Prices



Broad Real Dollar



### Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

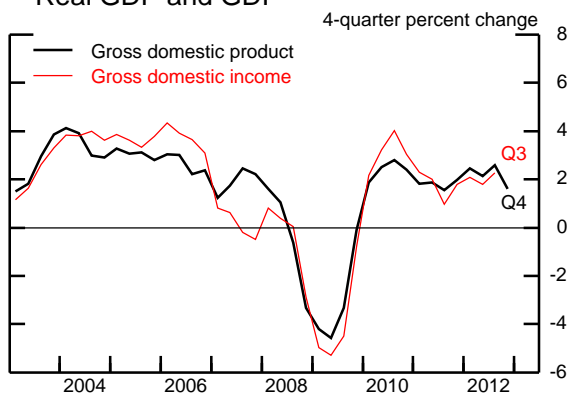
| Measure                                    | 2012:Q4           |                  | 2013:Q1           |                  | 2013:Q2           |                  |
|--|-------------------|------------------|-------------------|------------------|-------------------|------------------|
|  | Previous Tealbook | Current Tealbook | Previous Tealbook | Current Tealbook | Previous Tealbook | Current Tealbook |
| <b>Real GDP</b>                            | <b>.1</b>         | <b>.6</b>        | <b>2.7</b>        | <b>2.8</b>       | <b>2.4</b>        | <b>1.8</b>       |
| Private domestic final purchases           | 3.4               | 3.7              | 2.1               | 2.4              | 3.5               | 3.4              |
| Personal consumption expenditures          | 2.2               | 2.0              | 1.7               | 2.1              | 2.6               | 2.5              |
| Residential investment                     | 13.1              | 17.8             | 15.0              | 17.7             | 25.1              | 22.8             |
| Business fixed investment                  | 9.6               | 12.8             | 2.2               | .6               | 5.0               | 5.0              |
| Government purchases                       | -5.6              | -6.8             | -1.1              | -1.1             | -1.5              | -4.6             |
| <i>Contributions to change in real GDP</i> |                   |                  |                   |                  |                   |                  |
| Inventory investment <sup>1</sup>          | -1.4              | -1.4             | .9                | 1.1              | -.2               | -.5              |
| Net exports <sup>1</sup>                   | -.2               | .3               | .2                | .0               | .0                | .3               |
| <b>Unemployment Rate<sup>2</sup></b>       | <b>7.8</b>        | <b>7.8</b>       | <b>7.8</b>        | <b>7.8</b>       | <b>7.7</b>        | <b>7.7</b>       |
| <b>PCE Chain Price Index</b>               | <b>1.2</b>        | <b>1.5</b>       | <b>.9</b>         | <b>1.1</b>       | <b>1.9</b>        | <b>1.1</b>       |
| Ex. food and energy                        | .8                | .9               | 1.6               | 1.4              | 1.7               | 1.6              |

1. Percentage points.

2. Percent.

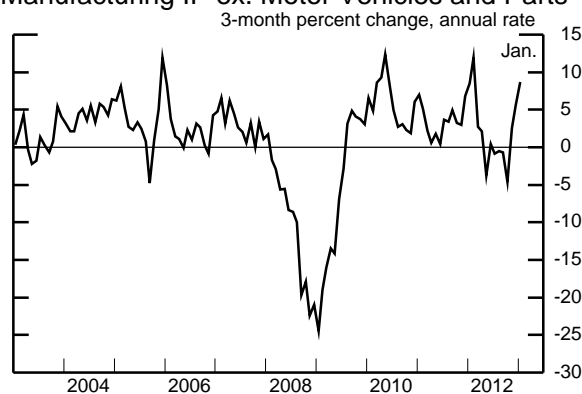
### Recent Nonfinancial Developments (1)

Real GDP and GDI



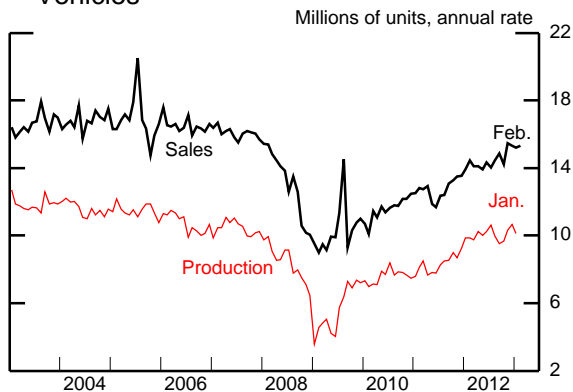
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Manufacturing IP ex. Motor Vehicles and Parts



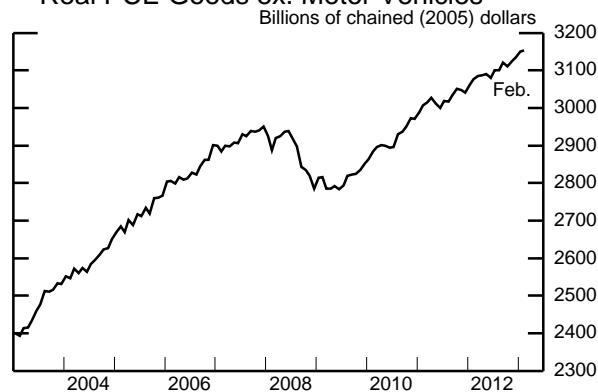
Source: Federal Reserve Board, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

Sales and Production of Light Motor Vehicles



Source: Ward's Auto Infobank.

Real PCE Goods ex. Motor Vehicles



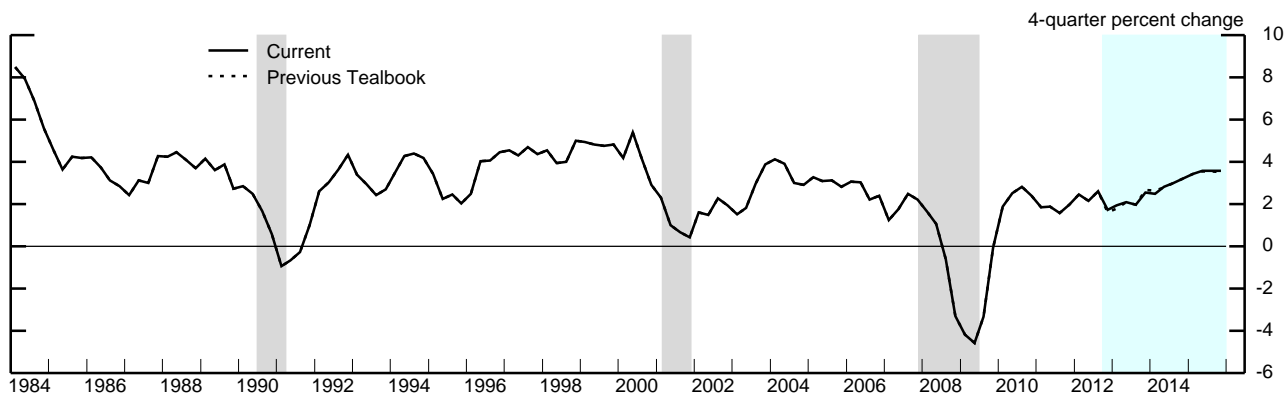
Note: Figures for December, January, and February 2013 are staff estimates based on available source data.

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

**Projections of Real GDP and Related Components**  
(Percent change at annual rate from final quarter  
of preceding period except as noted)

| Measure  | 2011       | 2012       | 2013       |            | 2014       | 2015       |
|--|------------|------------|------------|------------|------------|------------|
|  |            |            | H1         | H2         |            |            |
| <b>Real GDP</b>  | <b>2.0</b> | <b>1.7</b> | <b>2.3</b> | <b>2.8</b> | <b>3.2</b> | <b>3.6</b> |
| Previous Tealbook  | 2.0        | 1.6        | 2.6        | 2.8        | 3.2        | 3.5        |
| Final sales  | 1.7        | 2.1        | 2.0        | 2.6        | 3.0        | 3.7        |
| Previous Tealbook  | 1.7        | 2.0        | 2.2        | 2.7        | 3.0        | 3.5        |
| Personal consumption expenditures                          | 1.9        | 1.9        | 2.3        | 2.6        | 3.3        | 3.7        |
| Previous Tealbook  | 1.9        | 1.9        | 2.1        | 2.6        | 3.3        | 3.5        |
| Residential investment                                     | 3.9        | 15.0       | 20.2       | 17.2       | 13.9       | 14.0       |
| Previous Tealbook  | 3.9        | 13.8       | 19.9       | 16.0       | 12.7       | 13.8       |
| Nonresidential structures                                  | 6.9        | 7.2        | -4.2       | 7.0        | 3.3        | 3.1        |
| Previous Tealbook  | 6.9        | 3.1        | 3.6        | 4.8        | 2.5        | 2.1        |
| Equipment and software                                     | 11.4       | 4.7        | 5.7        | 7.2        | 5.6        | 6.3        |
| Previous Tealbook  | 11.4       | 5.2        | 3.6        | 7.9        | 5.8        | 6.0        |
| Federal purchases  | -4.2       | -2.8       | -6.6       | -4.1       | -5.3       | -3.4       |
| Previous Tealbook  | -4.2       | -2.2       | -3.5       | -4.3       | -4.9       | -3.3       |
| State and local purchases                                  | -2.7       | -1.0       | -.4        | .0         | .3         | 1.1        |
| Previous Tealbook  | -2.7       | -.9        | .2         | .4         | .9         | 1.2        |
| Exports  | 4.3        | 2.1        | 4.9        | 3.7        | 5.4        | 6.9        |
| Previous Tealbook  | 4.3        | 1.7        | 5.2        | 5.3        | 6.1        | 7.1        |
| Imports  | 3.5        | .2         | 3.2        | 4.1        | 4.5        | 5.0        |
| Previous Tealbook  | 3.5        | .7         | 3.7        | 4.1        | 4.8        | 5.3        |
| Contributions to change in real GDP<br>(percentage points) |            |            |            |            |            |            |
| Inventory change   | .3         | -.4        | .3         | .2         | .2         | -.2        |
| Previous Tealbook  | .3         | -.4        | .4         | .0         | .2         | .0         |
| Net exports  | .0         | .3         | .1         | -.2        | .0         | .1         |
| Previous Tealbook  | .0         | .1         | .1         | .0         | .0         | .1         |

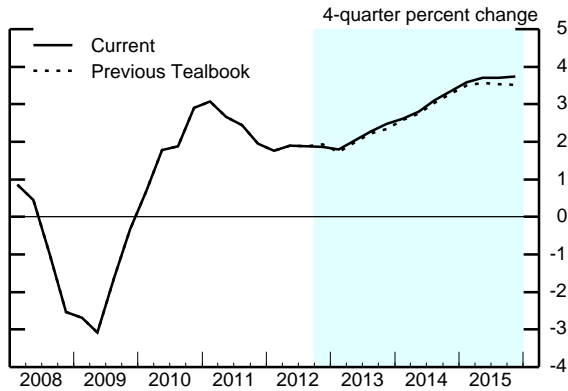
### Real GDP



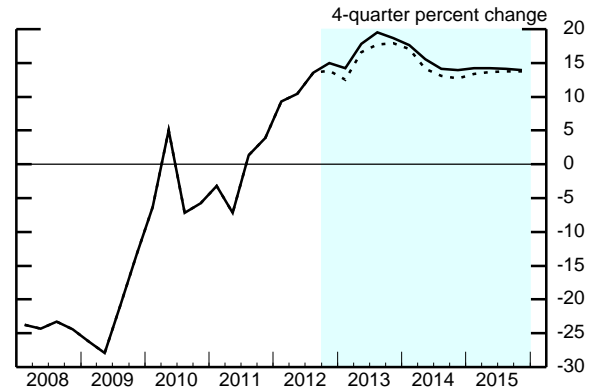
Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research.  
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

## Components of Final Demand

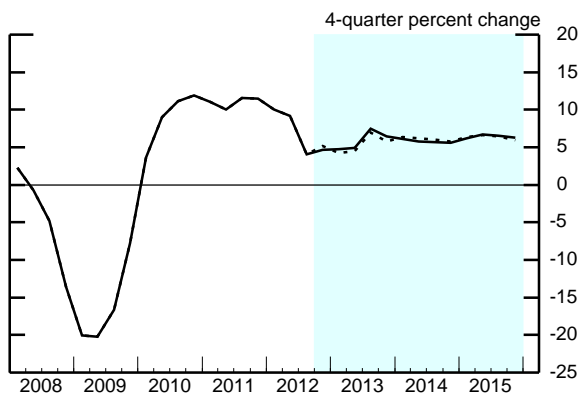
Personal Consumption Expenditures



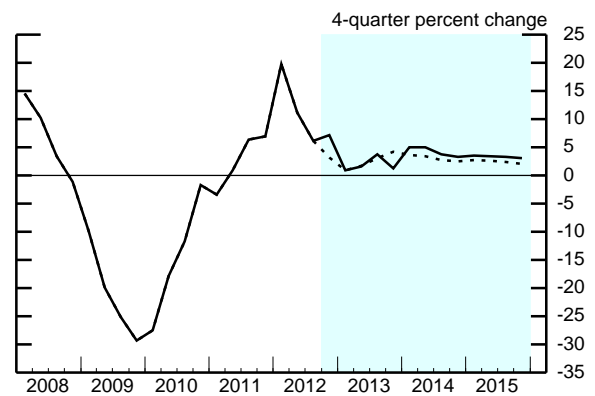
Residential Investment



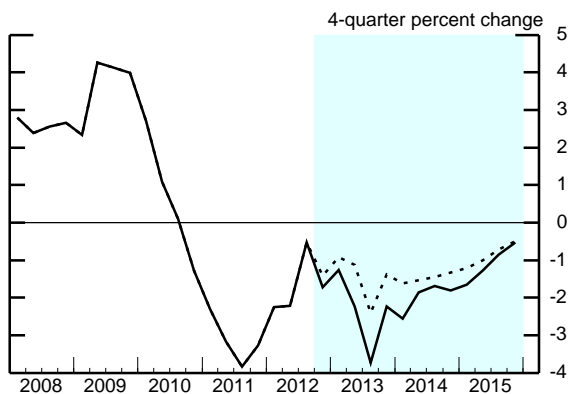
Equipment and Software



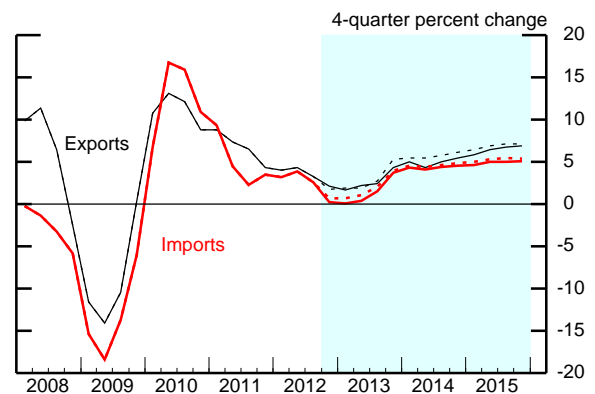
Nonresidential Structures



Government Consumption & Investment

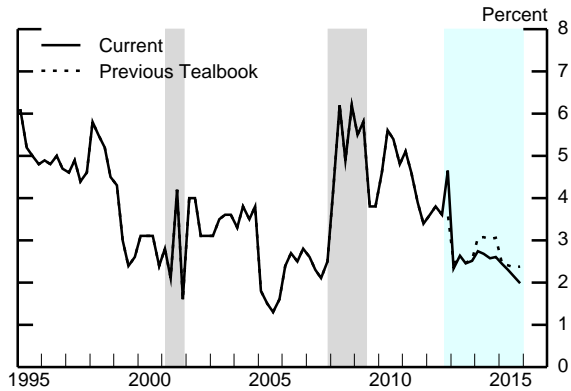


Exports and Imports



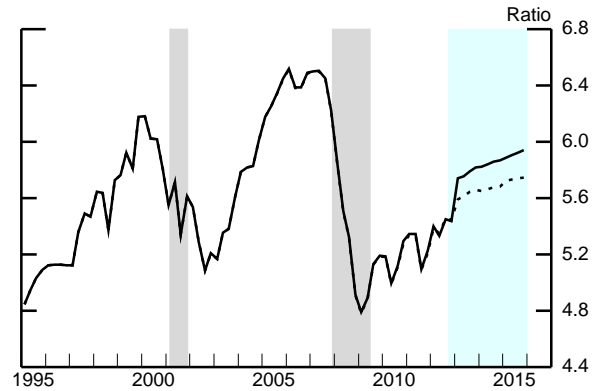
## Aspects of the Medium-Term Projection

Personal Saving Rate



Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

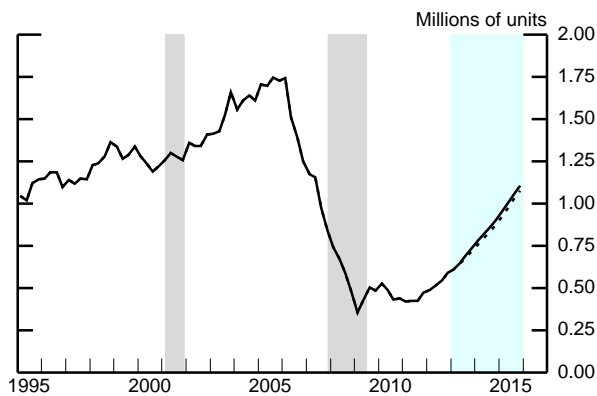
Wealth-to-Income Ratio



Note: Household net worth as a ratio to disposable personal income.

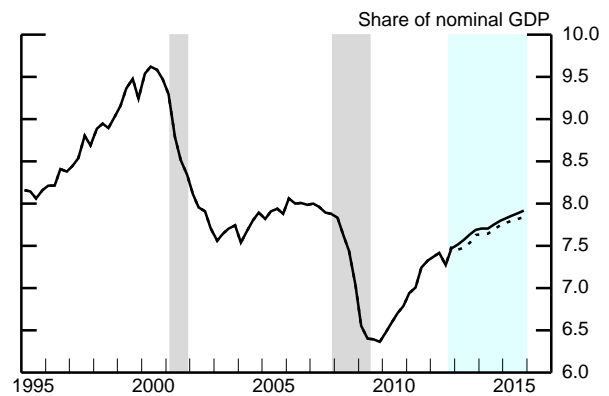
Source: For net worth, Federal Reserve Board, flow of funds data; for income, Dept. of Commerce, Bureau of Economic Analysis.

Single-Family Housing Starts



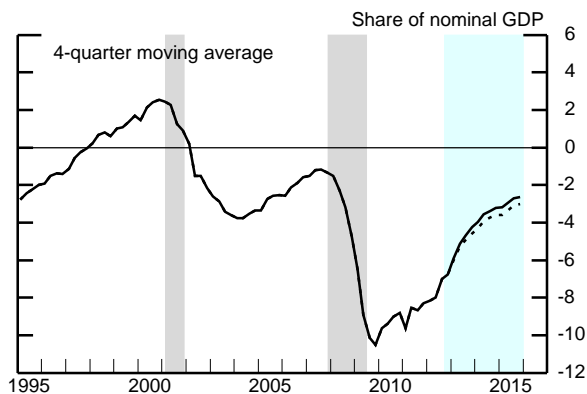
Source: U.S. Census Bureau.

Equipment and Software Spending



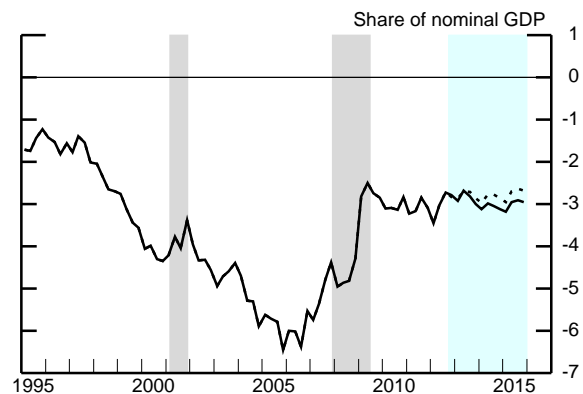
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Federal Surplus/Deficit



Source: *Monthly Treasury Statement*.

Current Account Surplus/Deficit



Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research.



**The Outlook for the Labor Market**  
(Percent change from final quarter of preceding period at annual rate)

| Measure                                     | 2011 | 2012 | 2013 |      | 2014 | 2015 |
|---|------|------|------|------|------|------|
|   |      |      | H1   | H2   |      |      |
| Output per hour, nonfarm business           | .4   | .7   | .4   | 1.4  | 1.8  | 1.7  |
| Previous Tealbook                           | .6   | .4   | .9   | 1.6  | 1.8  | 1.8  |
| Nonfarm private employment <sup>1</sup>     | 202  | 189  | 186  | 180  | 210  | 256  |
| Previous Tealbook                           | 175  | 159  | 159  | 170  | 205  | 253  |
| Labor force participation rate <sup>2</sup> | 64.1 | 63.7 | 63.6 | 63.6 | 63.5 | 63.4 |
| Previous Tealbook                           | 64.1 | 63.7 | 63.6 | 63.6 | 63.5 | 63.4 |
| Civilian unemployment rate <sup>2</sup>     | 8.7  | 7.8  | 7.7  | 7.5  | 7.1  | 6.3  |
| Previous Tealbook                           | 8.7  | 7.8  | 7.7  | 7.6  | 7.1  | 6.3  |

1. Thousands, average monthly changes.

2. Percent, average for the final quarter in the period.

Source: U.S. Department of Labor, Bureau of Labor Statistics; staff assumptions.

**Inflation Projections**  
(Percent change at annual rate from final quarter of preceding period)

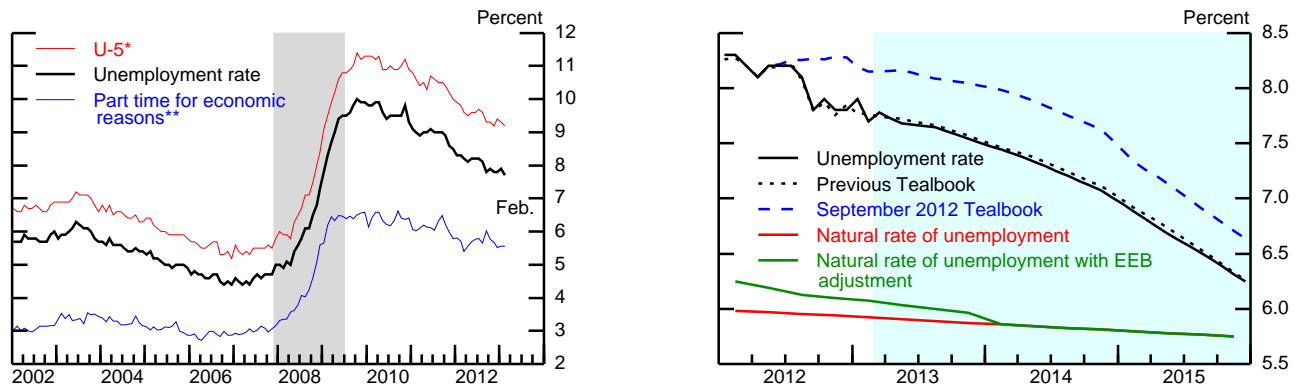
| Measure                                   | 2011 | 2012 | 2013 |      | 2014 | 2015 |
|---|------|------|------|------|------|------|
|   |      |      | H1   | H2   |      |      |
| PCE chain-weighted price index            | 2.5  | 1.6  | 1.1  | 1.5  | 1.5  | 1.6  |
| Previous Tealbook                         | 2.5  | 1.5  | 1.4  | 1.4  | 1.5  | 1.6  |
| Food and beverages                        | 5.1  | 1.1  | 2.3  | 1.4  | 1.1  | 1.5  |
| Previous Tealbook                         | 5.1  | 1.2  | 3.0  | 1.5  | 1.1  | 1.5  |
| Energy                                    | 11.9 | 3.2  | -6.1 | -1.3 | -1.2 | -.8  |
| Previous Tealbook                         | 11.9 | 2.2  | -3.9 | -2.4 | -1.5 | -1.1 |
| Excluding food and energy                 | 1.7  | 1.5  | 1.5  | 1.7  | 1.7  | 1.7  |
| Previous Tealbook                         | 1.7  | 1.5  | 1.7  | 1.6  | 1.7  | 1.7  |
| Prices of core goods imports <sup>1</sup> | 4.3  | .1   | 1.1  | 1.0  | 1.5  | 1.6  |
| Previous Tealbook                         | 4.3  | .0   | 2.0  | 1.3  | 1.5  | 1.5  |

1. Core goods imports exclude computers, semiconductors, oil, and natural gas.

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

## Labor Market Developments and Outlook

### Measures of Labor Underutilization

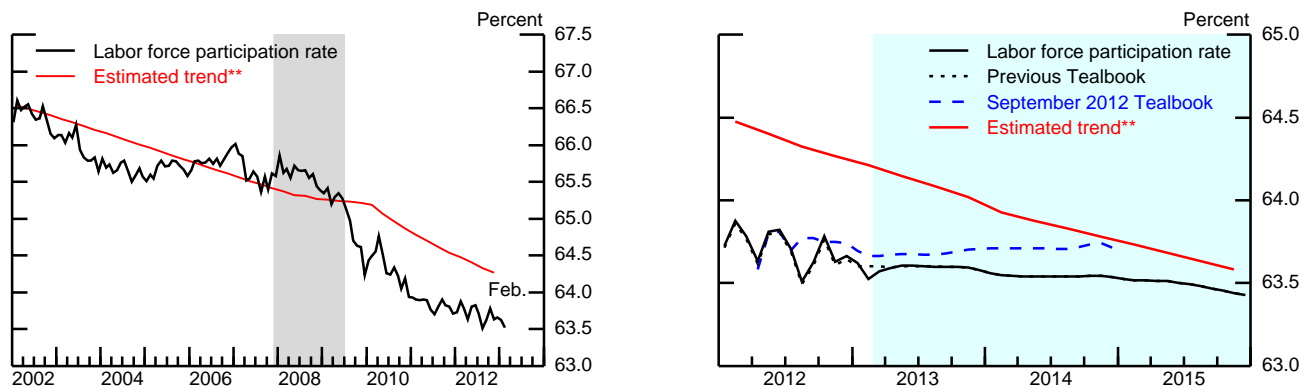


\* U-5 measures total unemployed plus all marginally attached to the labor force, as a percent of the labor force plus persons marginally attached to the labor force.

\*\* Percent of Current Population Survey employment.

EEB Extended and emergency unemployment benefits.

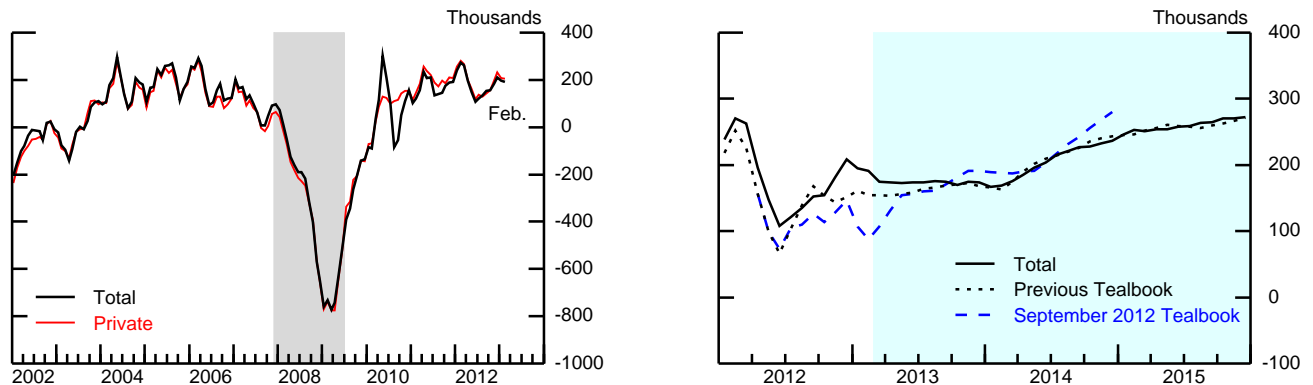
### Labor Force Participation Rate\*



\* Published data adjusted by staff to account for changes in population weights.

\*\* Includes staff estimate of the effect of EEB.

### Change in Payroll Employment\*



\* 3-month moving averages in history; average monthly changes in each quarter during the forecast period.

Note: In September 2012, judgmental projections were prepared through 2015 for the Summary of Economic Projections variables including the unemployment rate, while projections for other variables, including the labor force participation rate and payroll employment, were prepared only through 2014. This exhibit therefore reports a 2015 projection from the September 2012 Tealbook only for the unemployment rate.

**Decomposition of Potential GDP**  
(Percent change, Q4 to Q4, except as noted)

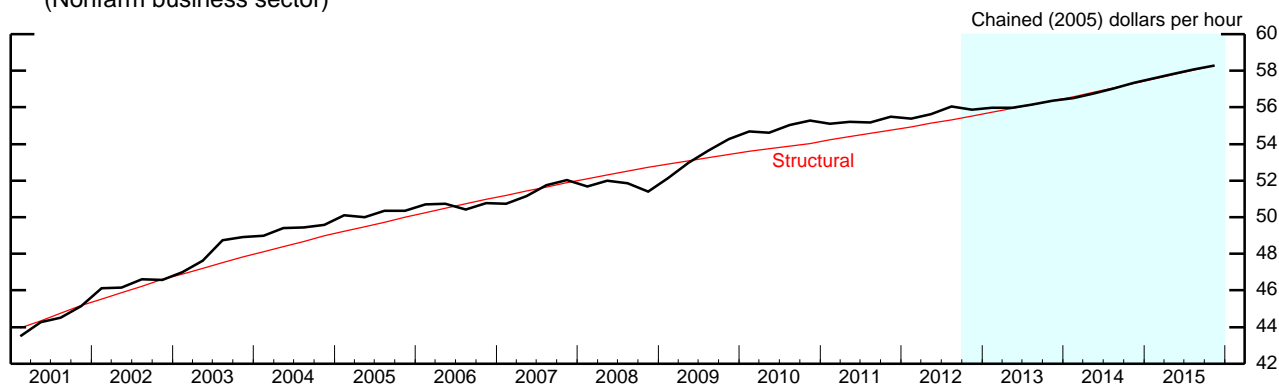
| Measure                                   | 1974-1995 | 1996-2000 | 2001-2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|-----------|-----------|-----------|------|------|------|------|------|
| Potential real GDP                        | 3.0       | 3.4       | 2.2       | 1.5  | 1.8  | 1.9  | 2.1  | 2.1  |
| Previous Tealbook                         | 3.0       | 3.4       | 2.2       | 1.5  | 1.8  | 1.9  | 2.1  | 2.1  |
| <i>Selected contributions<sup>1</sup></i> |           |           |           |      |      |      |      |      |
| Structural labor productivity             | 1.4       | 2.6       | 2.1       | 1.3  | 1.4  | 1.5  | 1.7  | 1.8  |
| Previous Tealbook                         | 1.4       | 2.6       | 2.1       | 1.3  | 1.4  | 1.5  | 1.7  | 1.8  |
| Capital deepening                         | .7        | 1.5       | .7        | .4   | .5   | .6   | .7   | .8   |
| Previous Tealbook                         | .7        | 1.5       | .7        | .4   | .5   | .6   | .7   | .8   |
| Multifactor productivity                  | .5        | .8        | 1.2       | .8   | .8   | .8   | .9   | .9   |
| Previous Tealbook                         | .5        | .8        | 1.2       | .8   | .8   | .8   | .9   | .9   |
| Structural hours                          | 1.5       | 1.0       | .6        | .5   | .6   | .6   | .6   | .6   |
| Previous Tealbook                         | 1.5       | 1.0       | .6        | .5   | .6   | .6   | .6   | .6   |
| Labor force participation                 | .4        | .0        | -.3       | -.4  | -.3  | -.3  | -.3  | -.3  |
| Previous Tealbook                         | .4        | .0        | -.3       | -.4  | -.3  | -.3  | -.3  | -.3  |
| <b>Memo:</b>                              |           |           |           |      |      |      |      |      |
| GDP gap <sup>2</sup>                      | -2.4      | 1.9       | -4.2      | -3.8 | -3.9 | -3.3 | -2.2 | -.8  |
| Previous Tealbook                         | -2.4      | 1.9       | -4.2      | -3.8 | -4.0 | -3.3 | -2.2 | -.9  |

Note: For multiyear periods, the percent change is the annual average from Q4 of the year preceding the first year shown to Q4 of the last year shown.

1. Percentage points.

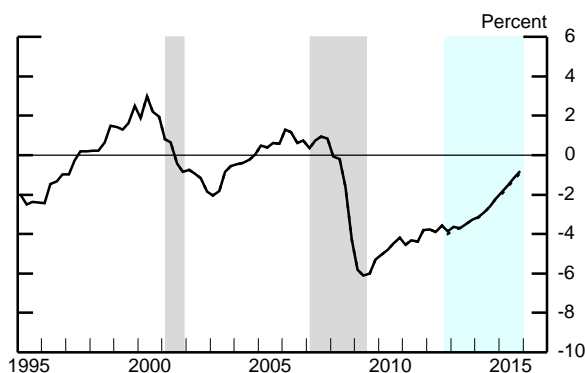
2. Percent difference between actual and potential GDP in the final quarter of the period indicated. A negative number indicates that the economy is operating below potential.

**Structural and Actual Labor Productivity**  
(Nonfarm business sector)



Source: U.S. Department of Labor, Bureau of Labor Statistics; Bureau of Economic Analysis; and staff assumptions.

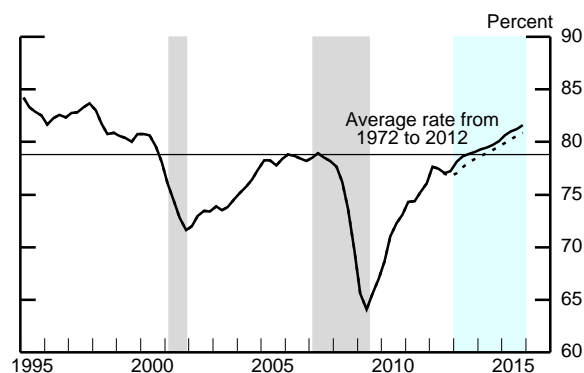
**GDP Gap**



Note: The GDP gap is the percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential.

Source: U.S. Dept. of Commerce, BEA; staff assumptions.

**Manufacturing Capacity Utilization Rate**



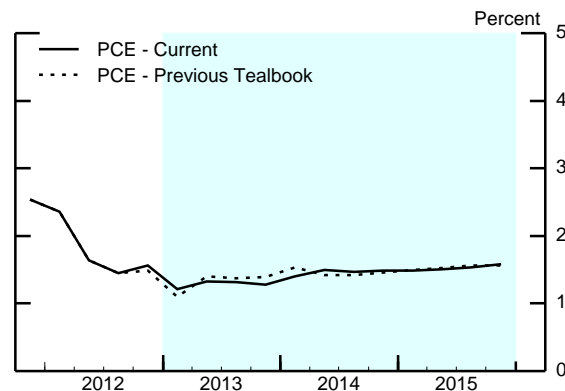
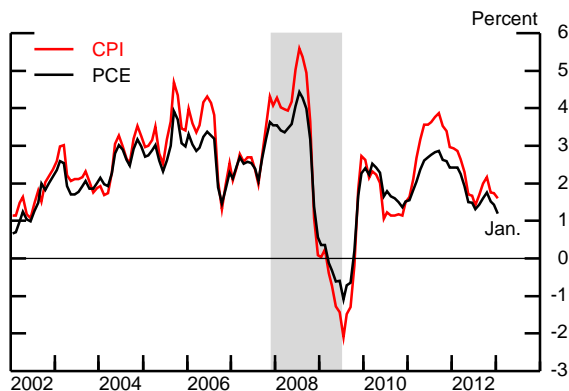
Source: Federal Reserve Board, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research.

## Inflation Developments and Outlook

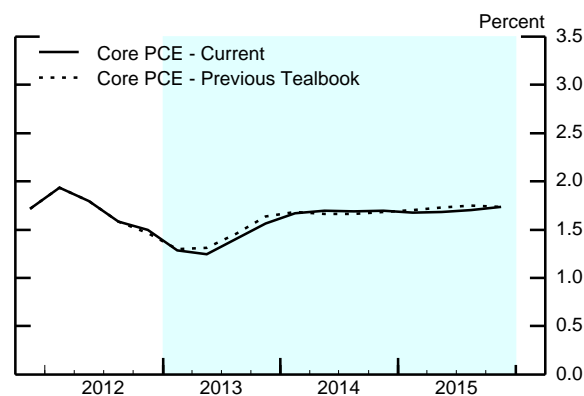
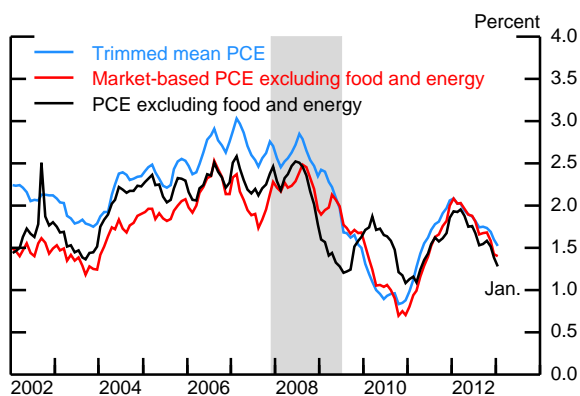
(Percent change from year-earlier period)

### Headline Consumer Price Inflation



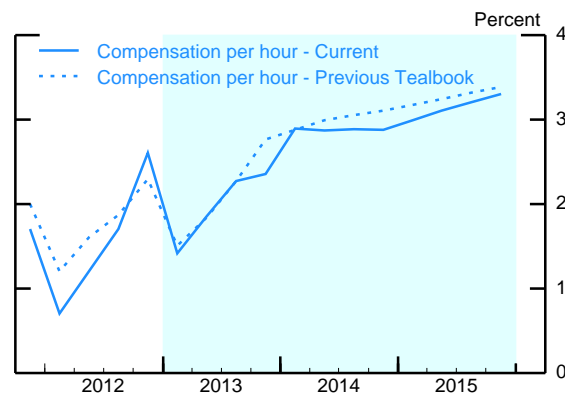
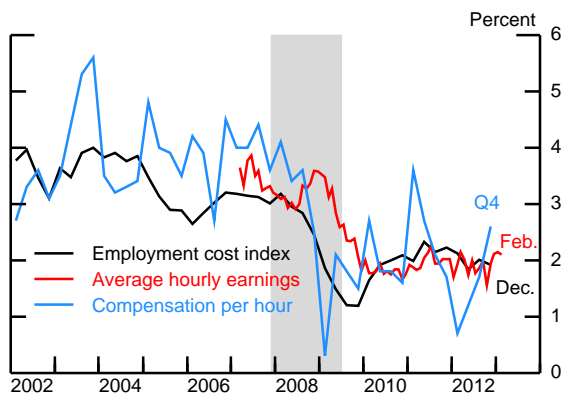
Source: For CPI, U.S. Dept. of Labor, Bureau of Labor Statistics; for PCE, U.S. Dept. of Commerce, Bureau of Economic Analysis.

### Measures of Underlying PCE Price Inflation



Source: For trimmed mean PCE, Federal Reserve Bank of Dallas; otherwise, U.S. Dept. of Commerce, Bureau of Economic Analysis.

### Labor Cost Growth (Private Industry)



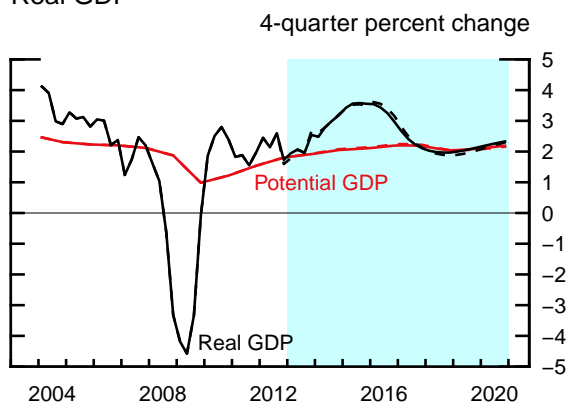
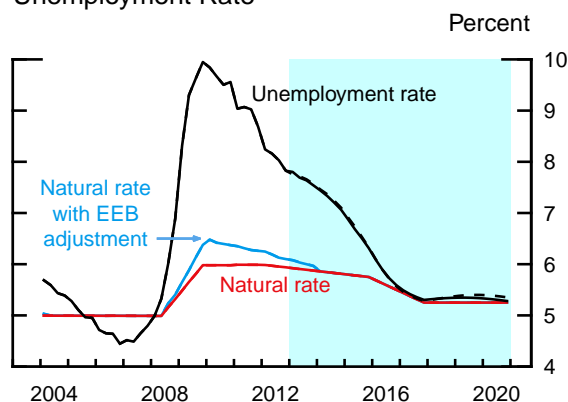
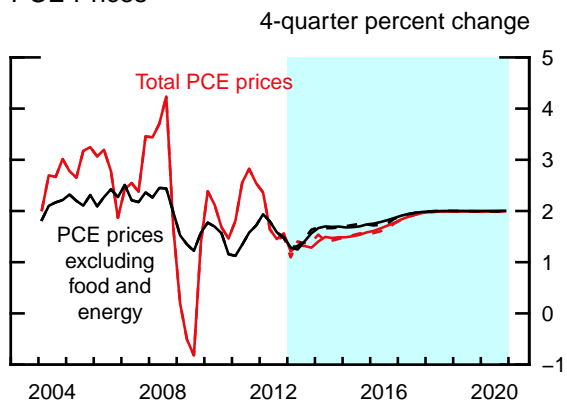
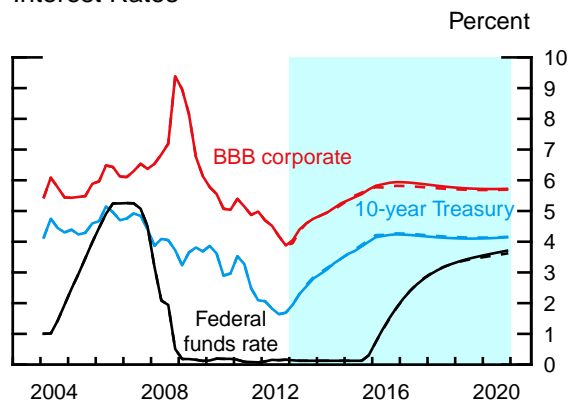
Note: Compensation per hour value for 2012:Q4 is a staff estimate.  
Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

**The Long-Term Outlook**

(Percent change, Q4 to Q4, except as noted)

| Measure                                 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | Longer run |
|---|------|------|------|------|------|------|------------|
| Real GDP                                | 1.7  | 2.5  | 3.2  | 3.6  | 3.0  | 2.1  | 2.3        |
| Previous Tealbook                       | 1.6  | 2.7  | 3.2  | 3.5  | 3.2  | 2.1  | 2.3        |
| Civilian unemployment rate <sup>1</sup> | 7.8  | 7.5  | 7.1  | 6.3  | 5.6  | 5.3  | 5.2        |
| Previous Tealbook                       | 7.8  | 7.6  | 7.1  | 6.3  | 5.6  | 5.3  | 5.2        |
| PCE prices, total                       | 1.6  | 1.3  | 1.5  | 1.6  | 1.8  | 2.0  | 2.0        |
| Previous Tealbook                       | 1.5  | 1.4  | 1.5  | 1.6  | 1.8  | 2.0  | 2.0        |
| Core PCE prices                         | 1.5  | 1.6  | 1.7  | 1.7  | 1.9  | 2.0  | 2.0        |
| Previous Tealbook                       | 1.5  | 1.6  | 1.7  | 1.7  | 1.8  | 2.0  | 2.0        |
| Federal funds rate <sup>1</sup>         | .2   | .1   | .1   | .3   | 1.8  | 2.8  | 4.0        |
| Previous Tealbook                       | .2   | .1   | .1   | .3   | 1.8  | 2.8  | 4.0        |
| 10-year Treasury yield <sup>1</sup>     | 1.7  | 2.8  | 3.5  | 4.0  | 4.2  | 4.2  | 4.8        |
| Previous Tealbook                       | 1.7  | 2.8  | 3.5  | 4.1  | 4.3  | 4.2  | 4.8        |

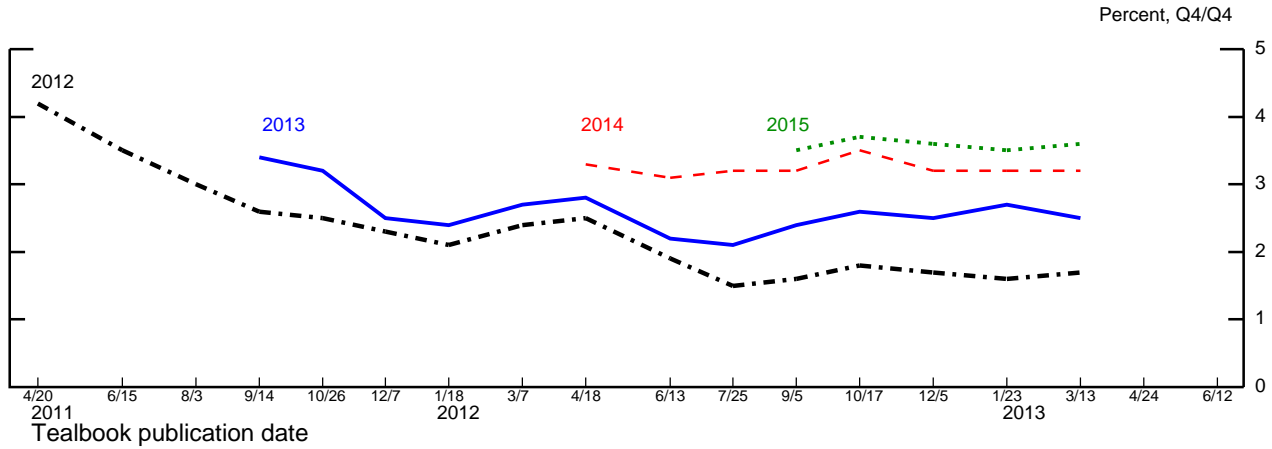
1. Percent, average for the final quarter of the period.

**Real GDP****Unemployment Rate****PCE Prices****Interest Rates**

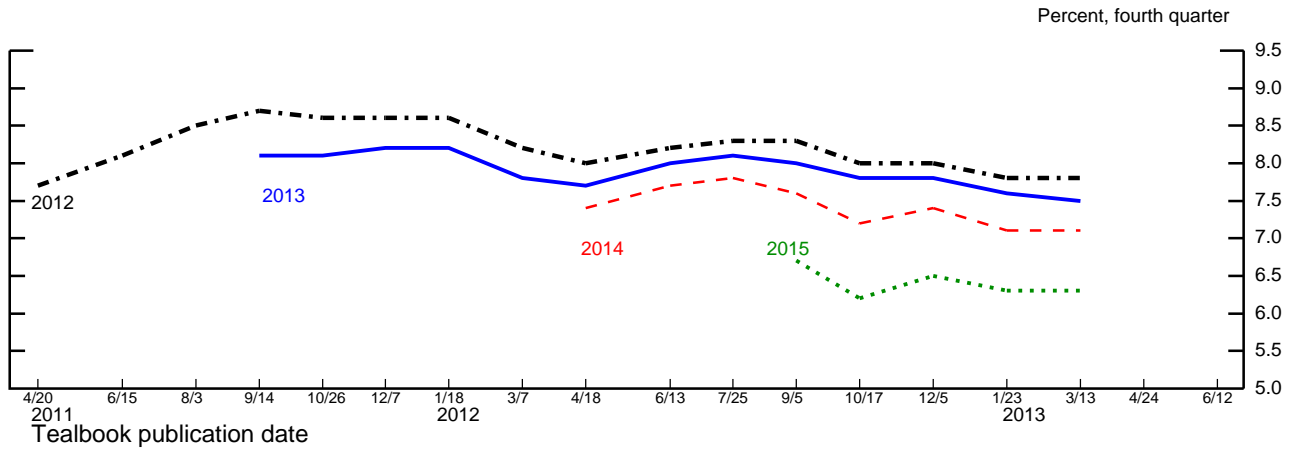
Note: In each panel, shading represents the projection period, and dashed lines are the previous Tealbook.

## Evolution of the Staff Forecast

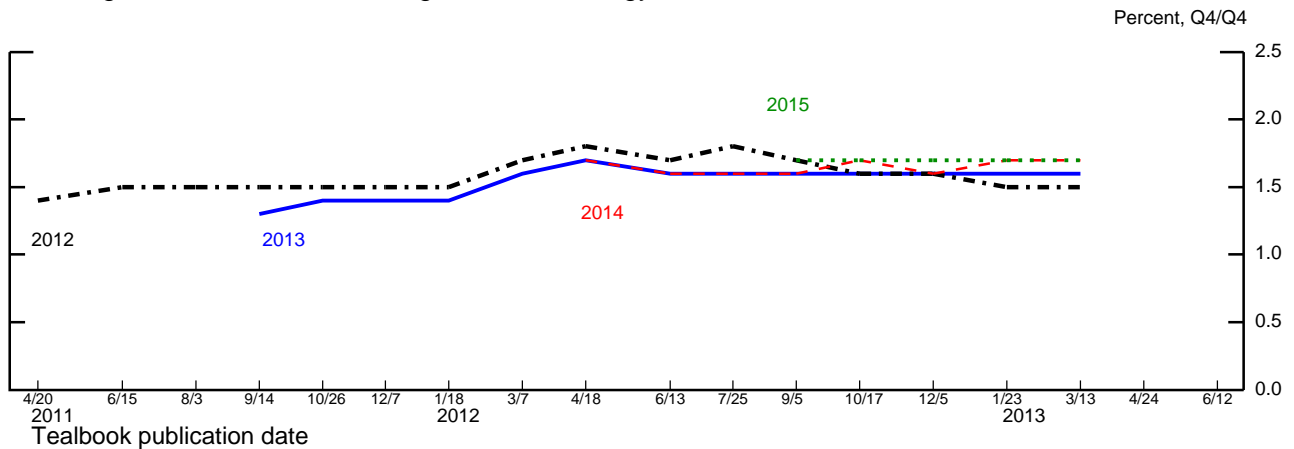
Change in Real GDP



Unemployment Rate



Change in PCE Prices excluding Food and Energy



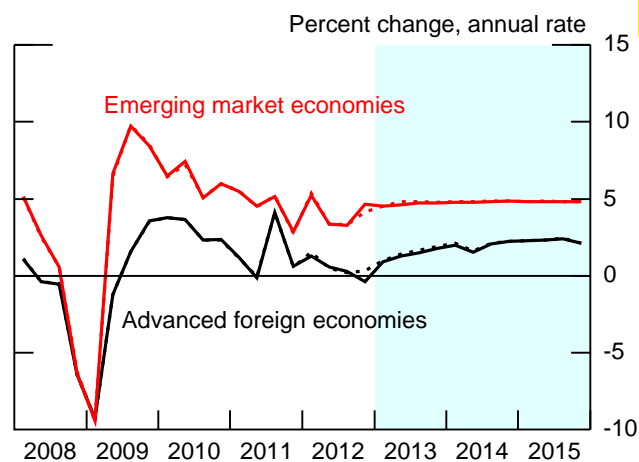
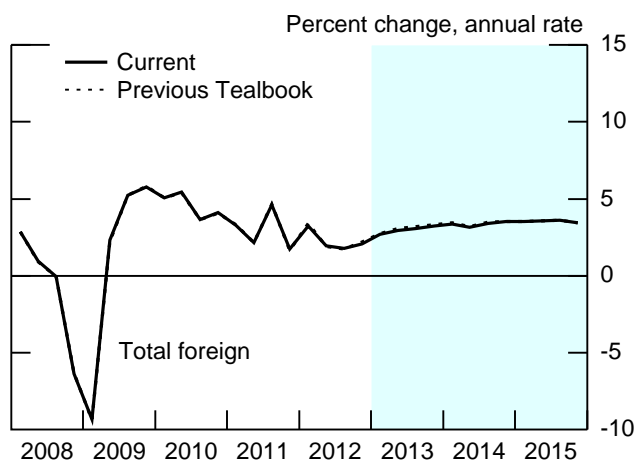
## The Foreign Outlook

(Percent change, annual rate)

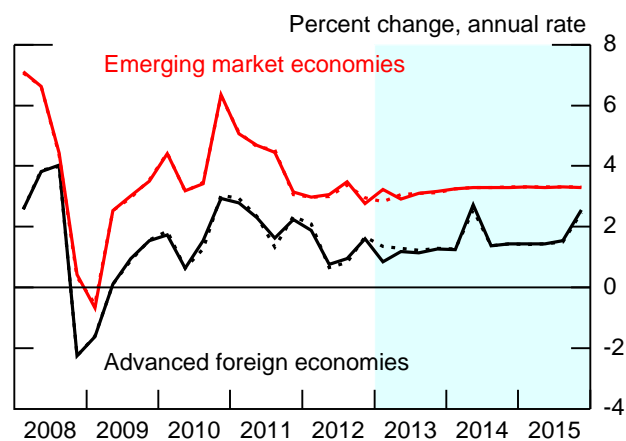
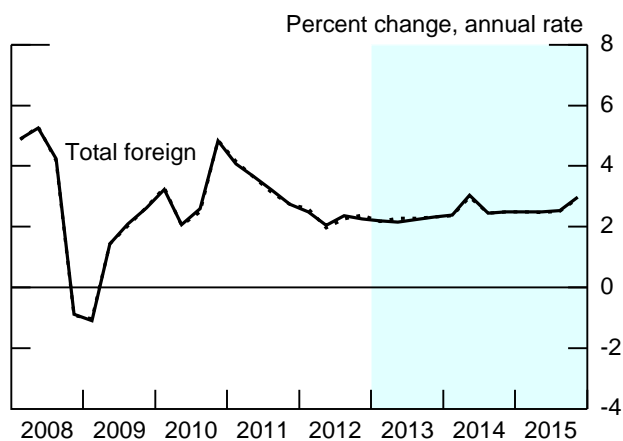
|                            | 2012 |     |     | 2013 |     |     | 2014 | 2015 |
|----------------------------|------|-----|-----|------|-----|-----|------|------|
|                            | H1   | Q3  | Q4  | Q1   | Q2  | H2  |      |      |
| <b>Real GDP</b>            |      |     |     |      |     |     |      |      |
| Total foreign              | 2.6  | 1.8 | 2.1 | 2.7  | 2.9 | 3.2 | 3.4  | 3.5  |
| Previous Tealbook          | 2.7  | 1.8 | 2.2 | 2.7  | 3.1 | 3.3 | 3.4  | 3.5  |
| Advanced foreign economies | .9   | .3  | -.4 | .9   | 1.3 | 1.6 | 2.0  | 2.3  |
| Previous Tealbook          | 1.0  | .2  | .3  | 1.0  | 1.4 | 1.8 | 2.0  | 2.3  |
| Emerging market economies  | 4.3  | 3.3 | 4.6 | 4.5  | 4.6 | 4.7 | 4.8  | 4.8  |
| Previous Tealbook          | 4.4  | 3.3 | 4.1 | 4.5  | 4.8 | 4.8 | 4.8  | 4.8  |
| <b>Consumer Prices</b>     |      |     |     |      |     |     |      |      |
| Total foreign              | 2.3  | 2.4 | 2.3 | 2.2  | 2.2 | 2.3 | 2.6  | 2.6  |
| Previous Tealbook          | 2.3  | 2.3 | 2.4 | 2.2  | 2.3 | 2.3 | 2.6  | 2.6  |
| Advanced foreign economies | 1.3  | .9  | 1.6 | .8   | 1.2 | 1.2 | 1.7  | 1.7  |
| Previous Tealbook          | 1.4  | .8  | 1.7 | 1.3  | 1.3 | 1.3 | 1.7  | 1.7  |
| Emerging market economies  | 3.0  | 3.5 | 2.8 | 3.2  | 2.9 | 3.1 | 3.3  | 3.3  |
| Previous Tealbook          | 3.0  | 3.4 | 3.0 | 2.8  | 3.1 | 3.1 | 3.3  | 3.3  |

Note: Annualized percent change from final quarter of preceding period to final quarter of period indicated.

### Real GDP



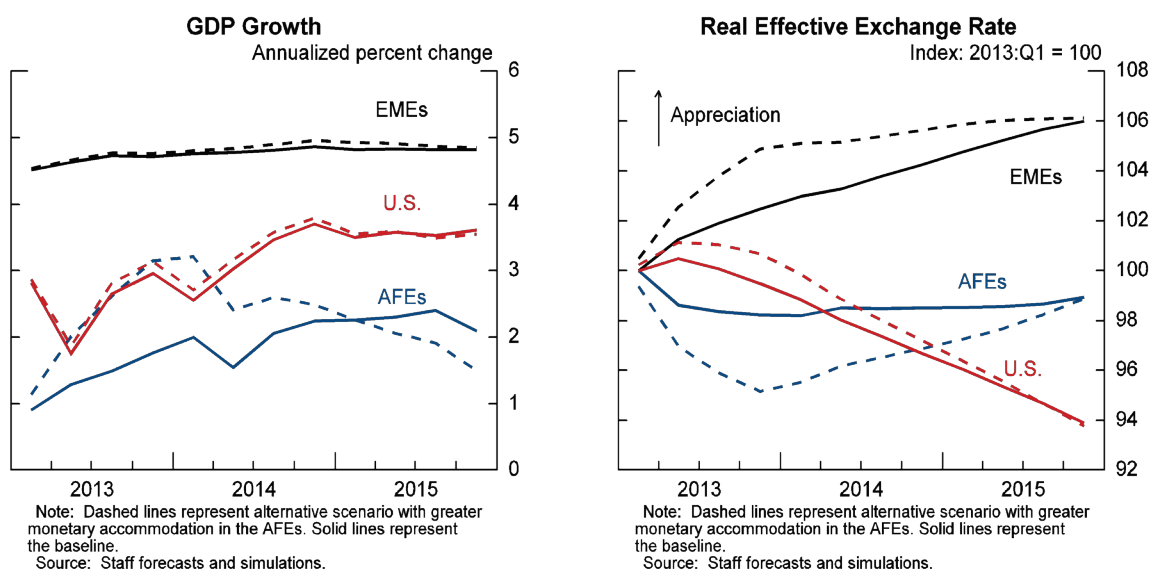
### Consumer Prices



governor of the Reserve Bank of New Zealand (RBNZ) has said that the New Zealand dollar is clearly overvalued and that the RBNZ stands ready to intervene. Most explicitly, in September 2011 the Swiss National Bank (SNB) imposed a ceiling on the Swiss franc in response to safe-haven flows that sharply appreciated the franc during the height of the euro-area crisis. While clearly targeting the exchange rate, that action generally escaped criticism because the SNB had few other tools to combat deflation and the franc was seen as overvalued.

By our reckoning, the accommodative monetary policies pursued by the Federal Reserve, the Bank of England, the Bank of Japan, and the European Central Bank have indeed been focused on easing domestic financial conditions rather than on depreciating their currencies, consistent with the G-7 statement. These policies contribute to the expansion of global demand. At the same time, however, these policies do exert some downward pressure on home currencies, which can have an adverse effect on trading partners. The net result for other countries will depend on the balance of these effects. To evaluate that balance, an alternative simulation discussed in the Risks and Uncertainty section explores the effects on the United States and the EMEs of a simultaneous increase in monetary accommodation among the advanced foreign economies. This accommodation combines (1) balance sheet expansion sufficient to reduce the term premium in long-term interest rates by 50 basis points and (2) an intention, understood by markets, to extend by about two quarters the period during which short-term interest rates stay near the zero bound. As shown in the figure on the lower left, the net effect on GDP in the United States and the EMEs is quite small, as the adverse effect on output of the resulting appreciation of their currencies (lower-right figure) is offset by the stimulative effect of rising incomes and demand in the countries undertaking monetary easing.

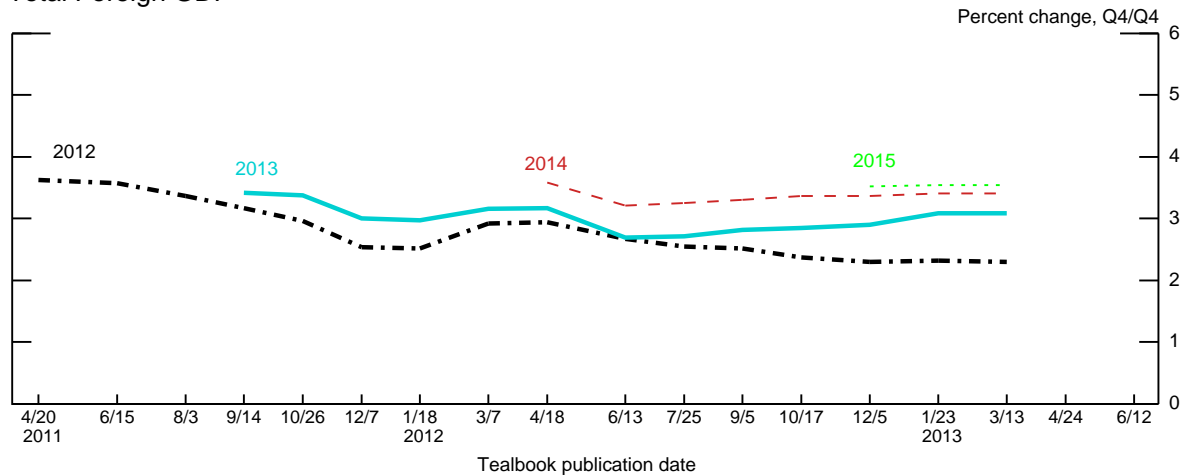
These results suggest that monetary easing is not a beggar-thy-neighbor policy that detracts from economic growth in a country's trading partners. Some observers are concerned that if weakness in the global economy continues, the temptation to resort to policies genuinely focused on exchange rates or trade protectionism might intensify. So far, however, countries have generally resisted such actions.



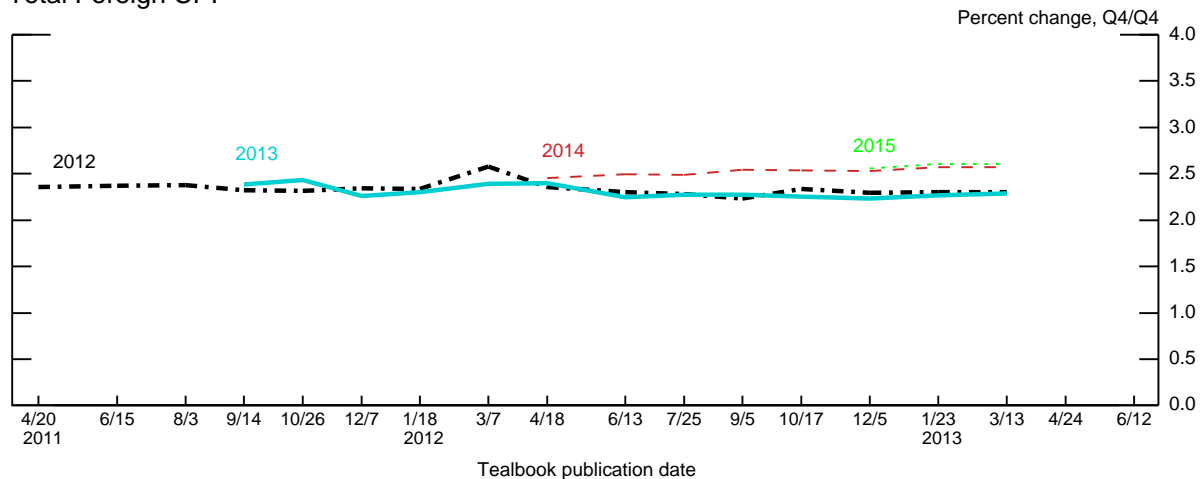


## Evolution of Staff's International Forecast

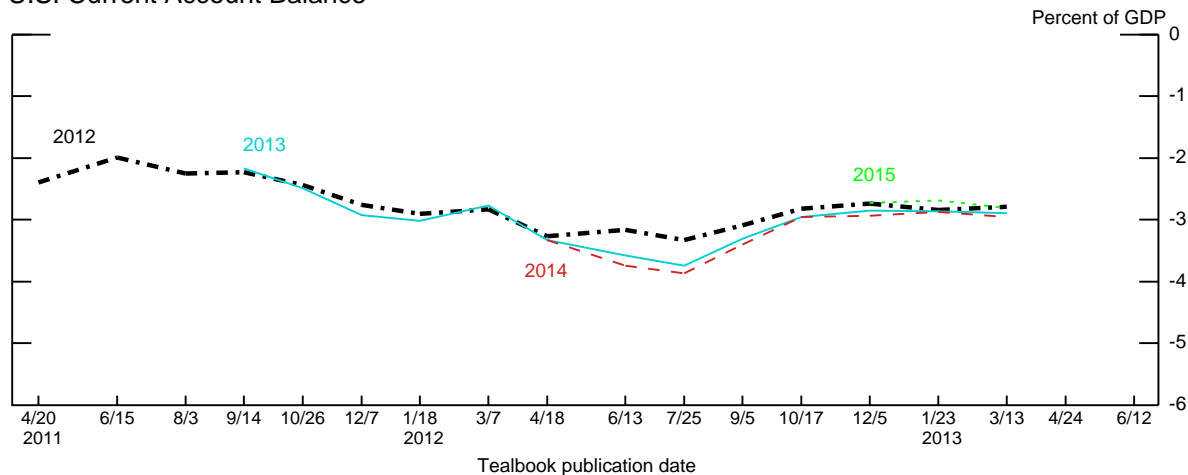
Total Foreign GDP



Total Foreign CPI

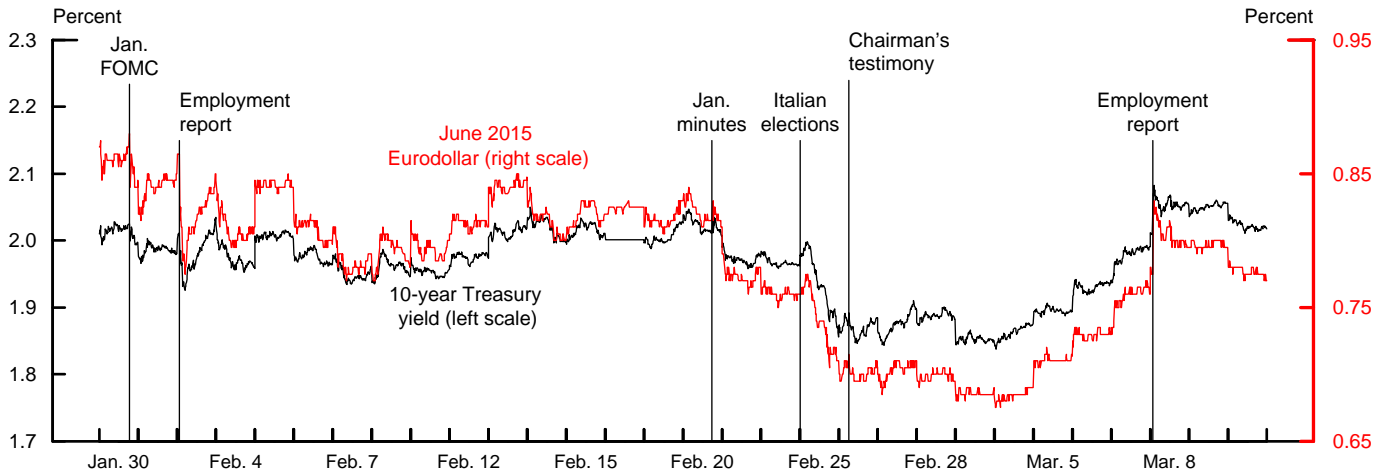


U.S. Current Account Balance



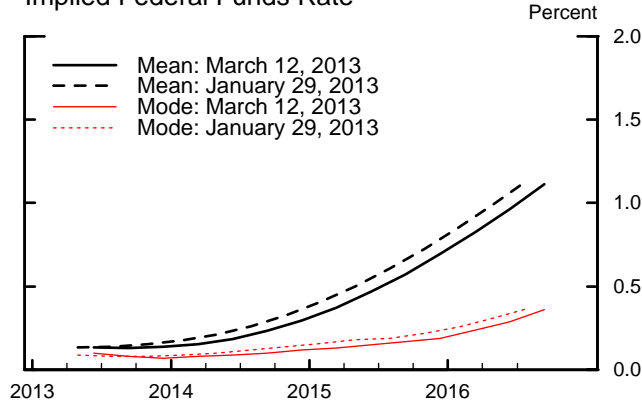
## Policy Expectations and Treasury Yields

### Selected Interest Rates



Note: 5-minute intervals. 8:00 a.m. to 4:00 p.m. No adjustments for term premiums.  
Source: Bloomberg.

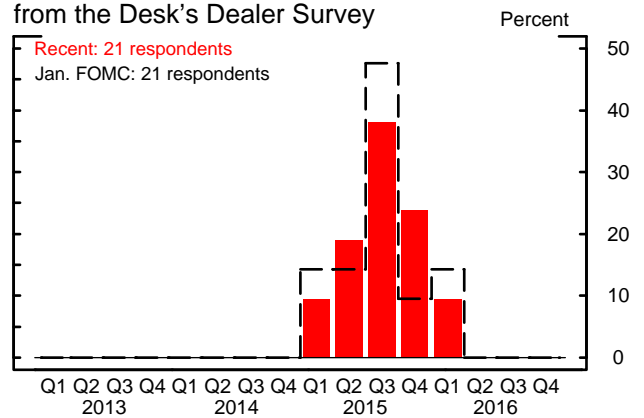
### Implied Federal Funds Rate



Note: Mean is estimated using overnight index swap quotes. Mode is estimated from the distribution of federal funds rate implied by interest rate caps. Both include a term premium of zero basis points per month.

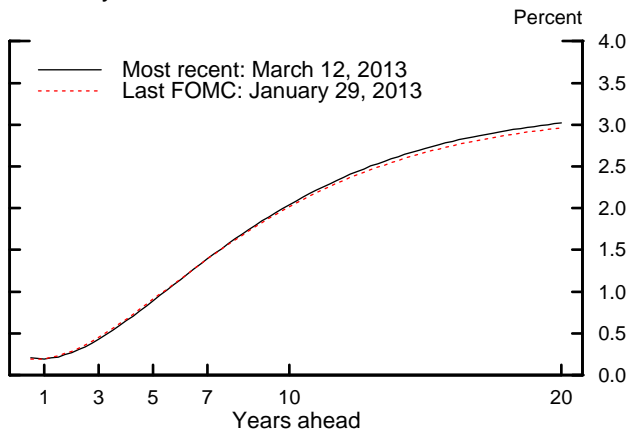
Source: Bloomberg and CME Group.

### Distribution of Modal Timing of First Rate Increase from the Desk's Dealer Survey



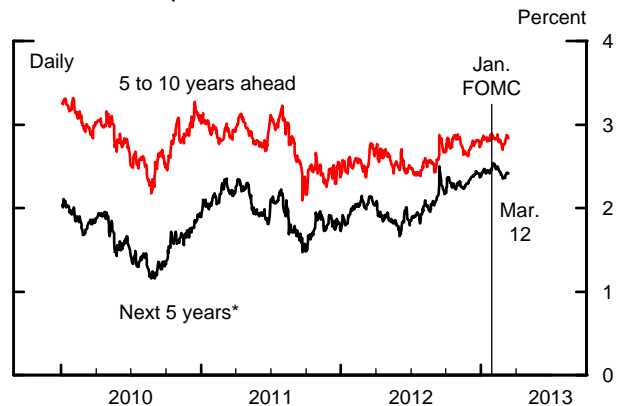
Source: Desk's dealer survey from March 11, 2013.

### Treasury Yield Curve



Note: Smoothed yield curve estimated from off-the-run Treasury coupon securities. Yields shown are those on notional par Treasury securities with semiannual coupons.  
Source: Federal Reserve Board.

### Inflation Compensation



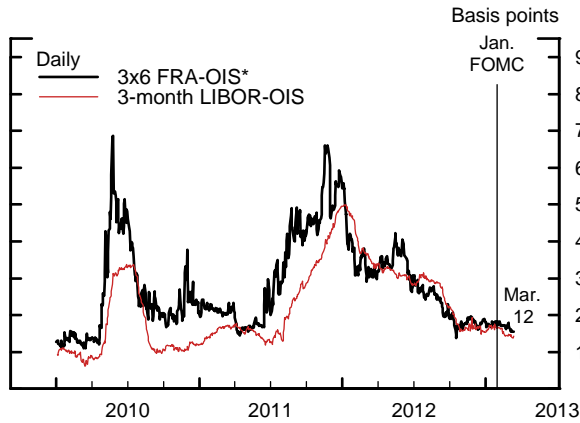
Note: Estimates based on smoothed nominal and inflation-indexed Treasury yield curves.

\* Adjusted for the indexation-lag (carry) effect.

Source: Barclays PLC and staff estimates.

## Financial Institutions and Short-Term Funding Markets

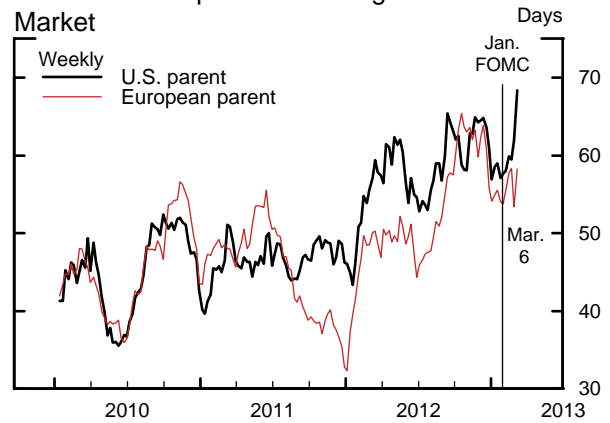
### Funding Spreads



\* Spread is calculated from a LIBOR forward rate agreement (FRA) 3 to 6 months in the future and the forward overnight index swap (OIS) rate for the same period.

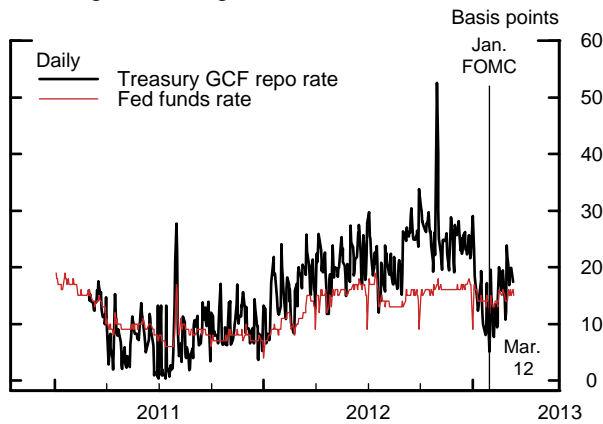
Source: Bloomberg.

### Average Maturity for Unsecured Financial Commercial Paper Outstanding in the U.S. Market



Source: Depository Trust & Clearing Corporation; staff calculations.

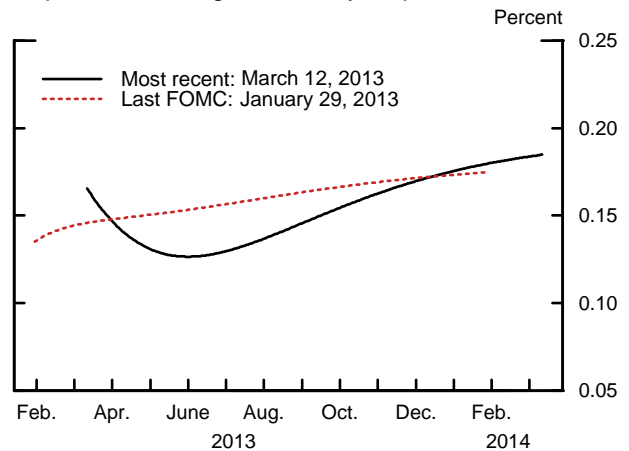
### Overnight Funding Rate



Note: GCF is general collateral finance; repo is repurchase agreement.

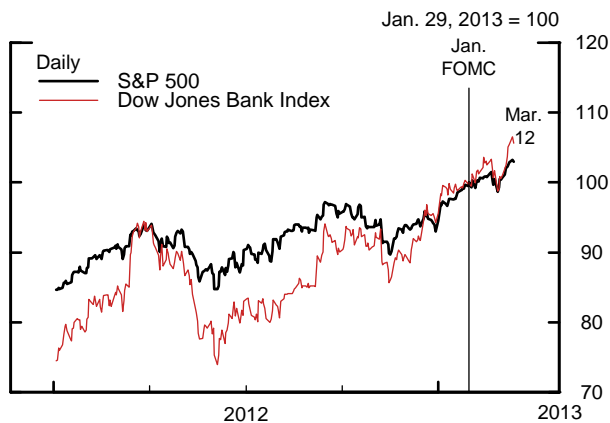
Source: Depository Trust & Clearing Corporation; Federal Reserve.

### Expected Overnight Treasury Repo Rate



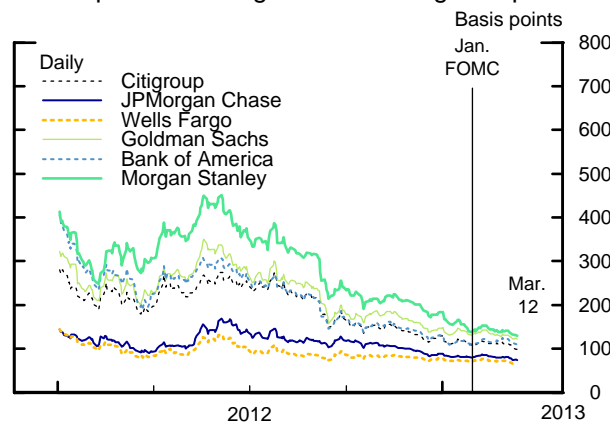
Source: Bloomberg; staff calculations based on GCF Treasury repurchase agreement (repo) futures quotes.

### Stock Prices



Source: Bloomberg.

### CDS Spreads of Large Bank Holding Companies



Source: Markit.

**Alternative Scenarios**

(Percent change, annual rate, from end of preceding period except as noted)

| Measure and scenario                      | 2013 |      | 2014 | 2015 | 2016-17 |
|---|------|------|------|------|---------|
|   | H1   | H2   |      |      |         |
| <i>Real GDP</i>                           |      |      |      |      |         |
| Extended Tealbook baseline                | 2.3  | 2.8  | 3.2  | 3.6  | 2.5     |
| Housing-led recovery                      | 3.9  | 5.0  | 4.7  | 2.9  | .6      |
| Higher long-term interest rates           | 2.3  | 2.5  | 2.4  | 3.1  | 3.3     |
| Lower natural rate                        | 2.2  | 2.6  | 3.1  | 3.6  | 2.3     |
| Supply-side damage                        | 2.2  | 2.6  | 2.9  | 3.0  | 1.5     |
| European crisis with severe spillovers    | .5   | -2.3 | .6   | 3.4  | 3.4     |
| More expansionary monetary policy in AFEs | 2.4  | 3.0  | 3.3  | 3.6  | 2.4     |
| <i>Unemployment rate<sup>1</sup></i>      |      |      |      |      |         |
| Extended Tealbook baseline                | 7.7  | 7.5  | 7.1  | 6.3  | 5.3     |
| Housing-led recovery                      | 7.5  | 6.9  | 5.6  | 4.8  | 6.1     |
| Higher long-term interest rates           | 7.7  | 7.5  | 7.5  | 7.0  | 5.3     |
| Lower natural rate                        | 7.6  | 7.3  | 6.8  | 6.0  | 5.4     |
| Supply-side damage                        | 7.6  | 7.3  | 6.7  | 5.8  | 5.5     |
| European crisis with severe spillovers    | 7.9  | 8.5  | 9.3  | 8.7  | 6.8     |
| More expansionary monetary policy in AFEs | 7.7  | 7.5  | 7.0  | 6.2  | 5.3     |
| <i>Total PCE prices</i>                   |      |      |      |      |         |
| Extended Tealbook baseline                | 1.1  | 1.5  | 1.5  | 1.6  | 1.9     |
| Housing-led recovery                      | 1.1  | 1.6  | 1.7  | 2.0  | 2.2     |
| Higher long-term interest rates           | 1.1  | 1.5  | 1.5  | 1.5  | 1.7     |
| Lower natural rate                        | 1.0  | 1.4  | 1.4  | 1.4  | 1.7     |
| Supply-side damage                        | 1.1  | 1.5  | 1.5  | 1.6  | 1.8     |
| European crisis with severe spillovers    | -.3  | -.6  | .7   | 1.8  | 2.3     |
| More expansionary monetary policy in AFEs | 1.1  | 1.6  | 1.7  | 1.7  | 1.9     |
| <i>Core PCE prices</i>                    |      |      |      |      |         |
| Extended Tealbook baseline                | 1.5  | 1.7  | 1.7  | 1.7  | 1.9     |
| Housing-led recovery                      | 1.5  | 1.8  | 1.9  | 2.1  | 2.2     |
| Higher long-term interest rates           | 1.5  | 1.7  | 1.7  | 1.6  | 1.7     |
| Lower natural rate                        | 1.4  | 1.6  | 1.6  | 1.5  | 1.7     |
| Supply-side damage                        | 1.5  | 1.7  | 1.7  | 1.7  | 1.8     |
| European crisis with severe spillovers    | 1.1  | .7   | 1.1  | 1.7  | 2.1     |
| More expansionary monetary policy in AFEs | 1.5  | 1.7  | 1.8  | 1.8  | 1.9     |
| <i>Federal funds rate<sup>1</sup></i>     |      |      |      |      |         |
| Extended Tealbook baseline                | .1   | .1   | .1   | .3   | 2.8     |
| Housing-led recovery                      | .1   | .1   | 1.8  | 3.5  | 3.4     |
| Higher long-term interest rates           | .1   | .1   | .1   | .1   | 2.0     |
| Lower natural rate                        | .1   | .1   | .1   | .8   | 2.6     |
| Supply-side damage                        | .1   | .1   | .1   | 1.5  | 3.0     |
| European crisis with severe spillovers    | .1   | .1   | .1   | .1   | .1      |
| More expansionary monetary policy in AFEs | .1   | .1   | .1   | .4   | 2.9     |

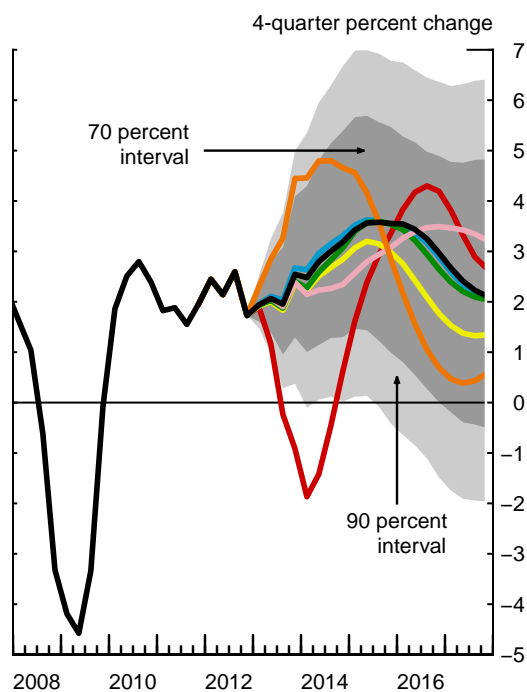
1. Percent, average for the final quarter of the period.

## Forecast Confidence Intervals and Alternative Scenarios

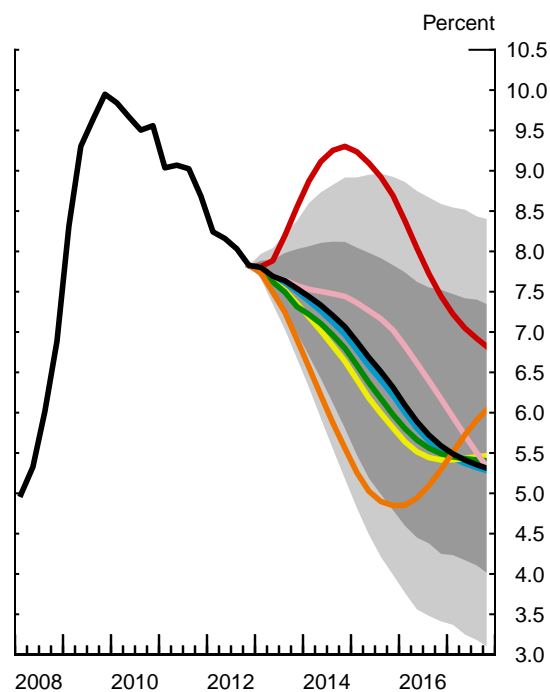
Confidence Intervals Based on FRB/US Stochastic Simulations

- Extended Tealbook baseline
- Lower natural rate
- European crisis with severe spillovers
- Housing-led recovery
- Supply-side damage
- More expansionary monetary policy in AFEs
- Higher long-term interest rates

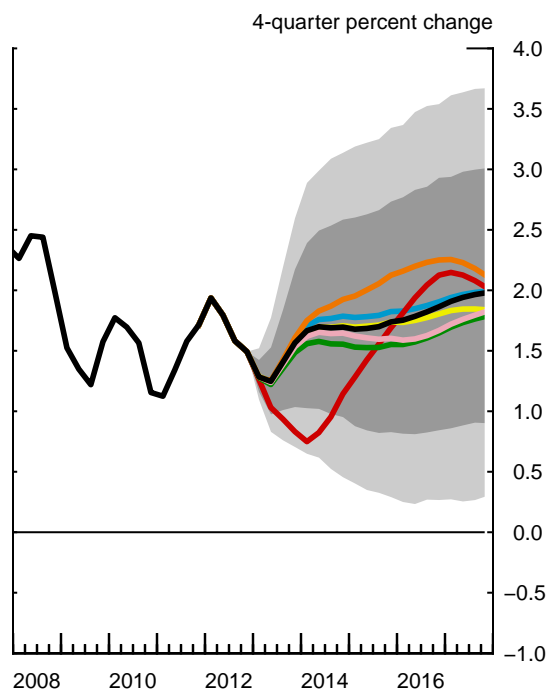
Real GDP



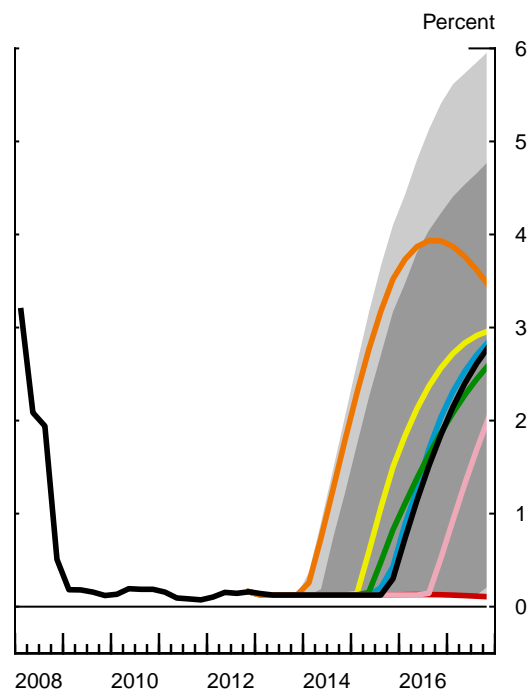
Unemployment Rate



PCE Prices excluding Food and Energy



Federal Funds Rate



**Selected Tealbook Projections and 70 Percent Confidence Intervals Derived  
from Historical Tealbook Forecast Errors and FRB/US Simulations**

| Measure   | 2013    | 2014    | 2015    | 2016    | 2017    |
|---|---------|---------|---------|---------|---------|
| <i>Real GDP</i><br>(percent change, Q4 to Q4)                                 |         |         |         |         |         |
| Projection  | 2.5     | 3.2     | 3.6     | 3.0     | 2.1     |
| Confidence interval   |         |         |         |         |         |
| Tealbook forecast errors  | 1.0–4.1 | 1.4–5.0 | ...     | ...     | ...     |
| FRB/US stochastic simulations   | 1.3–4.1 | 1.3–5.4 | 1.0–5.5 | .0–4.9  | -.5–4.8 |
| <i>Civilian unemployment rate</i><br>(percent, Q4)                            |         |         |         |         |         |
| Projection  | 7.5     | 7.1     | 6.3     | 5.6     | 5.3     |
| Confidence interval   |         |         |         |         |         |
| Tealbook forecast errors  | 6.9–8.1 | 6.2–8.0 | ...     | ...     | ...     |
| FRB/US stochastic simulations   | 7.0–8.0 | 5.8–8.1 | 4.8–7.8 | 4.2–7.5 | 4.0–7.3 |
| <i>PCE prices, total</i><br>(percent change, Q4 to Q4)                        |         |         |         |         |         |
| Projection  | 1.3     | 1.5     | 1.6     | 1.8     | 2.0     |
| Confidence interval   |         |         |         |         |         |
| Tealbook forecast errors  | .3–2.3  | .3–2.7  | ...     | ...     | ...     |
| FRB/US stochastic simulations   | .5–2.2  | .5–2.7  | .4–2.8  | .6–3.0  | .6–3.2  |
| <i>PCE prices excluding<br/>food and energy</i><br>(percent change, Q4 to Q4) |         |         |         |         |         |
| Projection  | 1.6     | 1.7     | 1.7     | 1.9     | 2.0     |
| Confidence interval   |         |         |         |         |         |
| Tealbook forecast errors  | 1.0–2.1 | .9–2.5  | ...     | ...     | ...     |
| FRB/US stochastic simulations   | 1.0–2.2 | 1.0–2.6 | .8–2.7  | .8–2.9  | .9–3.0  |
| <i>Federal funds rate</i><br>(percent, Q4)                                    |         |         |         |         |         |
| Projection  | .1      | .1      | .3      | 1.8     | 2.8     |
| Confidence interval   |         |         |         |         |         |
| FRB/US stochastic simulations   | .1–.1   | .1–1.2  | .1–3.2  | .1–4.2  | .2–4.8  |

Note: Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1969–2011 set of model equation residuals.

Intervals derived from Tealbook forecast errors are based on projections made from 1979–2011, except for PCE prices excluding food and energy, where the sample is 1981–2011.

... Not applicable. The Tealbook forecast horizon has typically extended about 2 years.

**Alternative Projections**  
(Percent change, Q4 to Q4, except as noted)

| Measure and projection                | 2012                 |                     | 2013                 |                     | 2014                 |                     |
|---------------------------------------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|
|                                       | Previous<br>Tealbook | Current<br>Tealbook | Previous<br>Tealbook | Current<br>Tealbook | Previous<br>Tealbook | Current<br>Tealbook |
| <i>Real GDP</i>                       |                      |                     |                      |                     |                      |                     |
| Staff                                 | 1.6                  | 1.7                 | 2.7                  | 2.5                 | 3.2                  | 3.2                 |
| FRB/US                                | 1.6                  | 1.7                 | 2.0                  | 1.8                 | 2.2                  | 2.3                 |
| EDO                                   | 1.6                  | 1.7                 | 3.0                  | 3.0                 | 3.2                  | 3.0                 |
| Blue Chip                             | 1.9                  | 1.6                 | 2.2                  | 2.3                 | 2.8                  | 2.8                 |
| <i>Unemployment rate<sup>1</sup></i>  |                      |                     |                      |                     |                      |                     |
| Staff                                 | 7.8                  | 7.8                 | 7.6                  | 7.5                 | 7.1                  | 7.1                 |
| FRB/US                                | 7.8                  | 7.8                 | 8.0                  | 7.8                 | 8.0                  | 7.7                 |
| EDO                                   | 7.8                  | 7.8                 | 7.6                  | 7.5                 | 7.3                  | 7.3                 |
| Blue Chip                             | 7.8                  | 7.8                 | 7.5                  | 7.6                 | 7.0                  | 7.1                 |
| <i>Total PCE prices</i>               |                      |                     |                      |                     |                      |                     |
| Staff                                 | 1.5                  | 1.6                 | 1.4                  | 1.3                 | 1.5                  | 1.5                 |
| FRB/US                                | 1.5                  | 1.6                 | 1.3                  | 1.1                 | 1.0                  | 1.0                 |
| EDO                                   | 1.5                  | 1.6                 | 1.2                  | 1.3                 | 1.4                  | 1.5                 |
| Blue Chip <sup>2</sup>                | 1.9                  | 1.9                 | 1.9                  | 1.9                 | 2.2                  | 2.2                 |
| <i>Core PCE prices</i>                |                      |                     |                      |                     |                      |                     |
| Staff                                 | 1.5                  | 1.5                 | 1.6                  | 1.6                 | 1.7                  | 1.7                 |
| FRB/US                                | 1.5                  | 1.5                 | 1.5                  | 1.4                 | 1.3                  | 1.2                 |
| EDO                                   | 1.5                  | 1.5                 | 1.2                  | 1.4                 | 1.4                  | 1.5                 |
| Blue Chip                             | ...                  | ...                 | ...                  | ...                 | ...                  | ...                 |
| <i>Federal funds rate<sup>1</sup></i> |                      |                     |                      |                     |                      |                     |
| Staff                                 | .2                   | .2                  | .1                   | .1                  | .1                   | .1                  |
| FRB/US                                | .2                   | .2                  | .1                   | .1                  | .1                   | .1                  |
| EDO                                   | .2                   | .2                  | .9                   | 1.0                 | 1.7                  | 1.9                 |
| Blue Chip <sup>3</sup>                | .1                   | .1                  | .1                   | .1                  | .3                   | .3                  |

Note: Blue Chip forecast completed on March 10, 2013.

1. Percent, average for Q4.

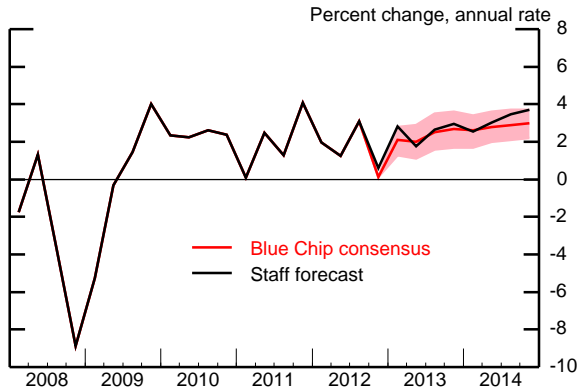
2. Consumer price index.

3. Treasury bill rate.

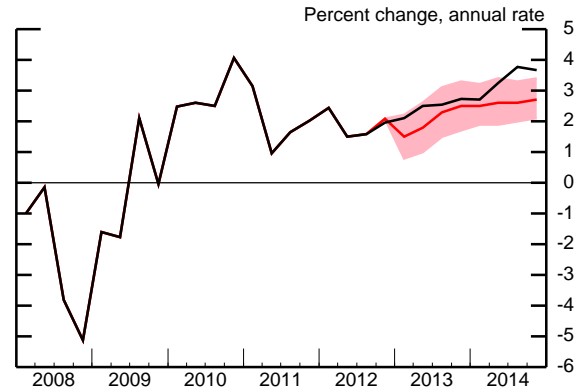
... Not applicable. The Blue Chip forecast typically extends about 2 years.

## Tealbook Forecast Compared with Blue Chip (Blue Chip survey released March 10, 2013)

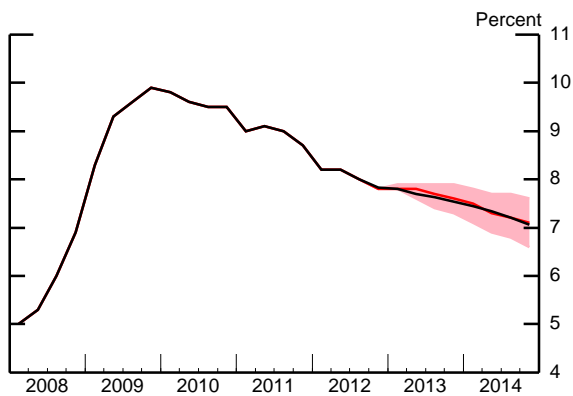
Real GDP



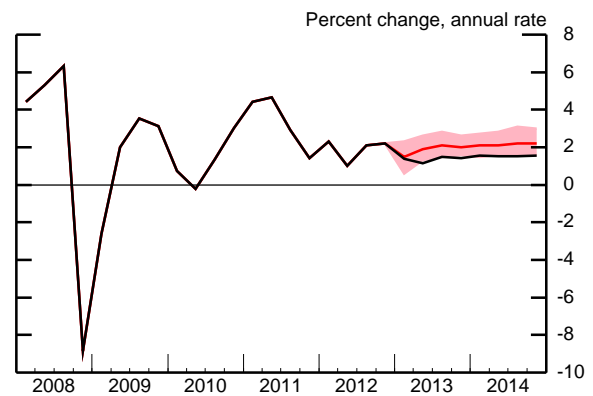
Real PCE



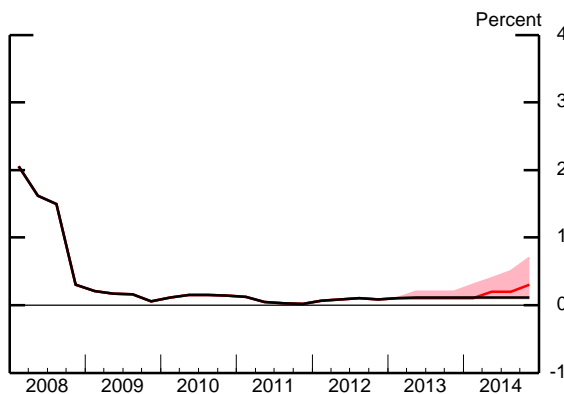
Unemployment Rate



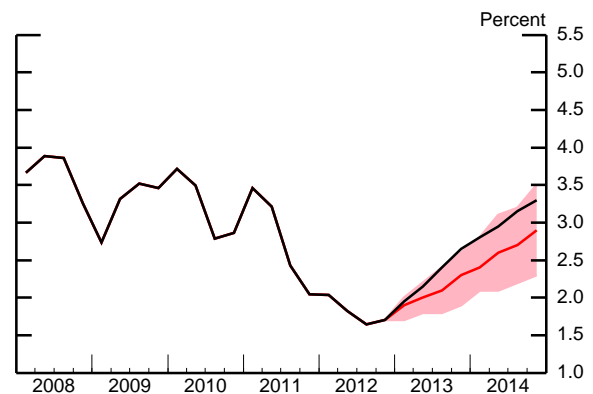
Consumer Price Index



Treasury Bill Rate



10-Year Treasury Yield



Note: The yield is for on-the-run Treasury securities. Over the forecast period, the staff's projected yield is assumed to be 15 basis points below the off-the-run yield.



## Assessment of Key Macroeconomic Risks (1)

### Probability of Inflation Events

(4 quarters ahead—2014:Q1 )

| Probability that the 4-quarter change in total PCE prices will be ... | Staff | FRB/US | EDO | BVAR |
|---|-------|--------|-----|------|
| <i>Greater than 3 percent</i>   |       |        |     |      |
| Current Tealbook  | .05   | .03    | .11 | .06  |
| Previous Tealbook   | .05   | .04    | .09 | .06  |
| <i>Less than 1 percent</i>  |       |        |     |      |
| Current Tealbook  | .30   | .43    | .30 | .17  |
| Previous Tealbook   | .31   | .36    | .33 | .18  |

### Probability of Unemployment Events

(4 quarters ahead—2014:Q1)

| Probability that the unemployment rate will ... | Staff | FRB/US | EDO | BVAR |
|---|-------|--------|-----|------|
| <i>Increase by 1 percentage point</i>           |       |        |     |      |
| Current Tealbook                                | .02   | .06    | .19 | .02  |
| Previous Tealbook                               | .02   | .07    | .16 | .01  |
| <i>Decrease by 1 percentage point</i>           |       |        |     |      |
| Current Tealbook                                | .15   | .04    | .25 | .16  |
| Previous Tealbook                               | .11   | .03    | .28 | .21  |

### Probability of Near-Term Recession

| Probability that real GDP declines in each of 2013:Q2 and 2013:Q3 | Staff | FRB/US | EDO | BVAR | Factor Model |
|---|-------|--------|-----|------|--------------|
| Current Tealbook  | .04   | .06    | .05 | .03  | .11          |
| Previous Tealbook   | .04   | .08    | .04 | .08  | .10          |

Note: "Staff" represents Tealbook forecast errors applied to the Tealbook baseline; baselines for FRB/US, BVAR, EDO, and the factor model are generated by those models themselves, up to the current-quarter estimate. The current quarter is taken as data from the staff estimate for the second Tealbook in each quarter, otherwise the preceding quarter is taken as the latest historical observation.

**Changes in GDP, Prices, and Unemployment**  
(Percent, annual rate except as noted)

| Interval                        | Nominal GDP |          | Real GDP |          | PCE price index |          | Core PCE price index |          | Unemployment rate <sup>1</sup> |          |
|---------------------------------|-------------|----------|----------|----------|-----------------|----------|----------------------|----------|--------------------------------|----------|
|                                 | 01/23/13    | 03/13/13 | 01/23/13 | 03/13/13 | 01/23/13        | 03/13/13 | 01/23/13             | 03/13/13 | 01/23/13                       | 03/13/13 |
| <i>Quarterly</i>                |             |          |          |          |                 |          |                      |          |                                |          |
| 2012:Q1                         | 4.2         | 4.2      | 2.0      | 2.0      | 2.5             | 2.5      | 2.2                  | 2.2      | 8.2                            | 8.2      |
| 2012:Q2                         | 2.8         | 2.8      | 1.3      | 1.3      | .7              | .7       | 1.7                  | 1.7      | 8.2                            | 8.2      |
| 2012:Q3                         | 5.9         | 5.9      | 3.1      | 3.1      | 1.6             | 1.6      | 1.1                  | 1.1      | 8.0                            | 8.0      |
| 2012:Q4                         | 1.3         | 1.5      | .1       | .6       | 1.2             | 1.5      | .8                   | .9       | 7.8                            | 7.8      |
| 2013:Q1                         | 3.7         | 4.2      | 2.7      | 2.8      | .9              | 1.1      | 1.6                  | 1.4      | 7.8                            | 7.8      |
| 2013:Q2                         | 4.2         | 3.3      | 2.4      | 1.8      | 1.9             | 1.1      | 1.7                  | 1.6      | 7.7                            | 7.7      |
| 2013:Q3                         | 4.1         | 4.2      | 2.7      | 2.7      | 1.5             | 1.6      | 1.7                  | 1.7      | 7.7                            | 7.6      |
| 2013:Q4                         | 4.2         | 4.4      | 2.8      | 3.0      | 1.3             | 1.4      | 1.5                  | 1.6      | 7.6                            | 7.5      |
| 2014:Q1                         | 4.1         | 4.2      | 2.5      | 2.6      | 1.5             | 1.6      | 1.7                  | 1.8      | 7.5                            | 7.4      |
| 2014:Q2                         | 4.7         | 4.6      | 3.1      | 3.0      | 1.4             | 1.5      | 1.7                  | 1.7      | 7.4                            | 7.3      |
| 2014:Q3                         | 5.1         | 5.0      | 3.5      | 3.5      | 1.5             | 1.5      | 1.7                  | 1.7      | 7.2                            | 7.2      |
| 2014:Q4                         | 5.3         | 5.2      | 3.7      | 3.7      | 1.4             | 1.4      | 1.6                  | 1.6      | 7.1                            | 7.1      |
| <i>Two-quarter<sup>2</sup></i>  |             |          |          |          |                 |          |                      |          |                                |          |
| 2012:Q2                         | 3.5         | 3.5      | 1.6      | 1.6      | 1.6             | 1.6      | 2.0                  | 2.0      | -5                             | -5       |
| 2012:Q4                         | 3.6         | 3.7      | 1.6      | 1.8      | 1.4             | 1.5      | 1.0                  | 1.0      | -4                             | -4       |
| 2013:Q2                         | 4.0         | 3.8      | 2.6      | 2.3      | 1.4             | 1.1      | 1.7                  | 1.5      | -1                             | -1       |
| 2013:Q4                         | 4.2         | 4.3      | 2.8      | 2.8      | 1.4             | 1.5      | 1.6                  | 1.7      | -1                             | -2       |
| 2014:Q2                         | 4.4         | 4.4      | 2.8      | 2.8      | 1.5             | 1.5      | 1.7                  | 1.7      | -2                             | -2       |
| 2014:Q4                         | 5.2         | 5.1      | 3.6      | 3.6      | 1.4             | 1.5      | 1.7                  | 1.6      | -3                             | -2       |
| <i>Four-quarter<sup>3</sup></i> |             |          |          |          |                 |          |                      |          |                                |          |
| 2011:Q4                         | 4.0         | 4.0      | 2.0      | 2.0      | 2.5             | 2.5      | 1.7                  | 1.7      | -8                             | -8       |
| 2012:Q4                         | 3.5         | 3.6      | 1.6      | 1.7      | 1.5             | 1.6      | 1.5                  | 1.5      | -9                             | -9       |
| 2013:Q4                         | 4.1         | 4.0      | 2.7      | 2.5      | 1.4             | 1.3      | 1.6                  | 1.6      | -2                             | -3       |
| 2014:Q4                         | 4.8         | 4.8      | 3.2      | 3.2      | 1.5             | 1.5      | 1.7                  | 1.7      | -5                             | -4       |
| 2015:Q4                         | 5.1         | 5.2      | 3.5      | 3.6      | 1.6             | 1.6      | 1.7                  | 1.7      | -8                             | -8       |
| <i>Annual</i>                   |             |          |          |          |                 |          |                      |          |                                |          |
| 2011                            | 4.0         | 4.0      | 1.8      | 1.8      | 2.4             | 2.4      | 1.4                  | 1.4      | 8.9                            | 8.9      |
| 2012                            | 4.0         | 4.1      | 2.2      | 2.2      | 1.7             | 1.8      | 1.7                  | 1.7      | 8.1                            | 8.1      |
| 2013                            | 3.7         | 3.7      | 2.1      | 2.1      | 1.3             | 1.3      | 1.4                  | 1.4      | 7.7                            | 7.7      |
| 2014                            | 4.4         | 4.4      | 2.9      | 2.9      | 1.5             | 1.5      | 1.7                  | 1.7      | 7.3                            | 7.3      |
| 2015                            | 5.1         | 5.1      | 3.5      | 3.5      | 1.5             | 1.5      | 1.7                  | 1.7      | 6.6                            | 6.6      |

1. Level, except for two-quarter and four-quarter intervals.

2. Percent change from two quarters earlier; for unemployment rate, change is in percentage points.

3. Percent change from four quarters earlier; for unemployment rate, change is in percentage points.

# Changes in Real Gross Domestic Product and Related Items

(Percent, annual rate except as noted)

| Item   | 2012 |      |       |  | 2013  |       |      |      | 2014 |      |      |      | 2012 <sup>1</sup> | 2013 <sup>1</sup> | 2014 <sup>1</sup> | 2015 <sup>1</sup> |
|--|------|------|-------|--|-------|-------|------|------|------|------|------|------|-------------------|-------------------|-------------------|-------------------|
|  | Q2   | Q3   | Q4    |  | Q1    | Q2    | Q3   | Q4   | Q1   | Q2   | Q3   | Q4   |                   |                   |                   |                   |
|  |      |      |       |  |       |       |      |      |      |      |      |      |                   |                   |                   |                   |
| Real GDP<br><i>Previous Tealbook</i>   | 1.3  | 3.1  | .6    |  | 2.8   | 1.8   | 2.7  | 3.0  | 2.6  | 3.0  | 3.5  | 3.7  | 1.7               | 2.5               | 3.2               | 3.6               |
| Final sales<br><i>Previous Tealbook</i>  | 1.3  | 3.1  | .1    |  | 2.7   | 2.4   | 2.7  | 2.8  | 2.5  | 3.1  | 3.5  | 3.7  | 1.6               | 2.7               | 3.2               | 3.5               |
| Priv. dom. final purch.<br><i>Previous Tealbook</i>                              | 1.7  | 2.4  | 2.0   |  | 1.7   | 2.3   | 2.4  | 2.8  | 2.1  | 2.9  | 3.4  | 3.5  | 2.1               | 2.3               | 3.0               | 3.7               |
| Personal cons. expend.<br><i>Previous Tealbook</i>                               | 1.7  | 2.4  | 1.5   |  | 1.8   | 2.6   | 2.8  | 2.6  | 2.0  | 3.0  | 3.6  | 3.4  | 2.0               | 2.5               | 3.0               | 3.5               |
| Durables   | 1.9  | 1.5  | 3.7   |  | 2.4   | 3.4   | 3.7  | 3.6  | 3.2  | 3.7  | 4.4  | 4.3  | 2.7               | 3.3               | 3.9               | 4.4               |
| Nondurables  | 1.9  | 1.5  | 3.4   |  | 2.1   | 3.5   | 3.5  | 3.6  | 3.0  | 3.7  | 4.2  | 4.3  | 2.6               | 3.2               | 3.8               | 4.1               |
| Services   | 1.5  | 1.6  | 2.0   |  | 2.1   | 2.5   | 2.5  | 2.7  | 2.7  | 3.2  | 3.8  | 3.7  | 1.9               | 2.5               | 3.3               | 3.7               |
| Durables   | 1.5  | 1.6  | 2.2   |  | 1.7   | 2.6   | 2.5  | 2.7  | 2.6  | 3.2  | 3.6  | 3.6  | 1.9               | 2.3               | 3.3               | 3.5               |
| Durables   | -2   | 8.9  | 13.6  |  | 8.2   | 7.2   | 7.8  | 7.9  | 8.7  | 8.4  | 8.9  | 8.4  | 8.3               | 7.8               | 8.6               | 8.8               |
| Nondurables  | .6   | 1.2  | .0    |  | 1.6   | 1.8   | 1.6  | 1.9  | 1.8  | 2.6  | 3.1  | 2.9  | .8                | 1.7               | 2.6               | 3.0               |
| Services   | 2.1  | .6   | .8    |  | 1.3   | 2.0   | 2.0  | 2.1  | 2.0  | 2.6  | 3.1  | 3.1  | 1.2               | 1.8               | 2.7               | 3.1               |
| Residential investment<br><i>Previous Tealbook</i>                               | 8.5  | 13.5 | 17.8  |  | 17.7  | 22.8  | 20.1 | 14.4 | 13.4 | 14.4 | 14.4 | 13.4 | 15.0              | 18.7              | 13.9              | 14.0              |
| Business fixed invest.<br><i>Previous Tealbook</i>                               | 3.6  | -1.8 | 12.8  |  | .6    | 5.0   | 7.6  | 6.7  | 3.7  | 4.0  | 6.0  | 6.1  | 5.4               | 4.9               | 5.0               | 5.4               |
| Equipment & software<br><i>Previous Tealbook</i>                                 | 3.6  | -1.8 | 9.6   |  | 2.2   | 5.0   | 6.7  | 7.3  | 3.4  | 4.1  | 5.6  | 6.3  | 4.6               | 5.3               | 4.8               | 4.8               |
| Nonres. structures<br><i>Previous Tealbook</i>                                   | 4.8  | -2.6 | 11.4  |  | 5.7   | 5.6   | 7.3  | 7.1  | 4.3  | 4.3  | 6.9  | 7.0  | 4.7               | 6.4               | 5.6               | 6.3               |
| Net exports <sup>2</sup><br><i>Previous Tealbook</i> <sup>2</sup>                | 4.8  | -2.6 | 13.8  |  | 1.7   | 5.5   | 7.1  | 8.6  | 4.2  | 4.7  | 6.7  | 7.5  | 5.2               | 5.7               | 5.8               | 6.0               |
| Exports  | .6   | .0   | 16.3  |  | -11.3 | 3.4   | 8.5  | 5.6  | 2.4  | 3.3  | 3.7  | 3.9  | 7.2               | 1.2               | 3.3               | 3.1               |
| Imports  | .6   | .0   | -.4   |  | 3.6   | 3.7   | 5.5  | 4.0  | 1.4  | 2.6  | 3.0  | 3.1  | 3.1               | 4.2               | 2.5               | 2.1               |
| Gov't. cons. & invest.<br><i>Previous Tealbook</i>                               | -407 | -395 | -385  |  | -387  | -376  | -383 | -387 | -390 | -388 | -389 | -387 | -401              | -383              | -389              | -377              |
| Federal  | -407 | -395 | -403  |  | -396  | -396  | -390 | -394 | -397 | -393 | -387 | -388 | -405              | -394              | -391              | -379              |
| Defense  | 5.3  | 1.9  | -2.9  |  | 2.4   | 7.5   | 2.9  | 4.5  | 4.9  | 4.7  | 5.7  | 6.3  | 2.1               | 4.3               | 5.4               | 6.9               |
| Nondefense   | 2.8  | -6   | -4.2  |  | 2.3   | 4.2   | 3.7  | 4.5  | 4.6  | 3.6  | 4.9  | 4.9  | .2                | 3.7               | 4.5               | 5.0               |
| State & local  | -7   | 3.9  | -6.8  |  | -1.1  | -4.6  | -2.3 | -.8  | -2.4 | -1.8 | -1.7 | -1.3 | -1.7              | -2.2              | -1.8              | -.5               |
| Change in bus. inventories <sup>2</sup><br><i>Previous Tealbook</i> <sup>2</sup> | -7   | 3.9  | -5.6  |  | -1.1  | -1.5  | -1.4 | -1.5 | -2.0 | -1.2 | -1.0 | -1.0 | -1.4              | -1.4              | -1.3              | -.5               |
| Nonfarm <sup>2</sup>   | -2   | 9.5  | -14.8 |  | -1.9  | -11.1 | -5.9 | -2.2 | -6.7 | -5.3 | -4.9 | -4.1 | -2.8              | -5.4              | -5.3              | -3.4              |
| Farm <sup>2</sup>  | -2   | 12.9 | -22.0 |  | -2.2  | -11.3 | -7.1 | -2.2 | -8.6 | -6.0 | -5.4 | -4.6 | -4.9              | -5.8              | -6.2              | -3.6              |
|  | -4   | 3.0  | 1.8   |  | -1.5  | -10.7 | -3.6 | -2.3 | -3.1 | -4.0 | -4.1 | -3.2 | 1.5               | -4.6              | -3.6              | -3.1              |
|  | -1.0 | .3   | -1.2  |  | -.6   | -.1   | -.1  | .0   | .3   | .3   | .3   | .4   | -1.0              | -.2               | .3                | 1.1               |
| Change in bus. inventories <sup>2</sup><br><i>Previous Tealbook</i> <sup>2</sup> | 41   | 60   | 18    |  | 58    | 43    | 48   | 54   | 67   | 73   | 74   | 82   | 44                | 51                | 74                | 73                |
| Nonfarm <sup>2</sup>   | 41   | 60   | 16    |  | 57    | 50    | 46   | 52   | 67   | 71   | 69   | 80   | 44                | 51                | 72                | 84                |
| Farm <sup>2</sup>  | 53   | 88   | 40    |  | 51    | 35    | 41   | 47   | 63   | 68   | 69   | 77   | 61                | 43                | 69                | 72                |
|  | -8   | -19  | -15   |  | 7     | 7     | 7    | 7    | 5    | 5    | 5    | 5    | -11               | 7                 | 5                 | 1                 |

1. Change from fourth quarter of previous year to fourth quarter of year indicated.

2. Billions of chained (2005) dollars.

**Changes in Real Gross Domestic Product and Related Items**  
(Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise noted)

| Item   | 2006           | 2007           | 2008           | 2009           | 2010         | 2011         | 2012         | 2013         | 2014         | 2015         |
|--|----------------|----------------|----------------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Real GDP<br><i>Previous Tealbook</i>   | 2.4<br>2.4     | 2.2<br>2.2     | -3.3<br>-3.3   | -1<br>-1       | 2.4<br>2.4   | 2.0<br>2.0   | 1.7<br>1.6   | 2.5<br>2.7   | 3.2<br>3.2   | 3.6<br>3.5   |
| Final sales<br><i>Previous Tealbook</i>  | 2.8<br>2.8     | 2.4<br>2.4     | -2.6<br>-2.6   | -5<br>-5       | 1.7<br>1.7   | 1.7<br>1.7   | 2.1<br>2.0   | 2.3<br>2.5   | 3.0<br>3.0   | 3.7<br>3.5   |
| Priv. dom. final purch.<br><i>Previous Tealbook</i>                              | 2.4<br>2.4     | 1.2<br>1.2     | -4.5<br>-4.5   | -2.8<br>-2.8   | 3.2<br>3.2   | 2.9<br>2.9   | 2.7<br>2.6   | 3.3<br>3.2   | 3.9<br>3.8   | 4.4<br>4.1   |
| Personal cons. expend.<br><i>Previous Tealbook</i>                               | 3.2<br>3.2     | 1.7<br>1.7     | -2.5<br>-2.5   | -3<br>-3       | 2.9<br>2.9   | 1.9<br>1.9   | 1.9<br>1.9   | 2.5<br>2.3   | 3.3<br>3.3   | 3.7<br>3.5   |
| Durables   | 7.0            | 4.6            | -13.0          | 3.0            | 9.5          | 5.9          | 8.3          | 7.8          | 8.6          | 8.8          |
| Nondurables  | 2.9            | .8             | -3.1           | .4             | 3.0          | 1.4          | .8           | 1.7          | 2.6          | 3.0          |
| Services   | 2.6            | 1.4            | -.5            | -1.1           | 1.9          | 1.5          | 1.2          | 1.8          | 2.7          | 3.1          |
| Residential investment<br><i>Previous Tealbook</i>                               | -15.7<br>-15.7 | -20.7<br>-20.7 | -24.4<br>-24.4 | -13.3<br>-13.3 | -5.7<br>-5.7 | 3.9<br>3.9   | 15.0<br>13.8 | 18.7<br>17.9 | 13.9<br>12.7 | 14.0<br>13.8 |
| Business fixed invest.<br><i>Previous Tealbook</i>                               | 7.8<br>7.8     | 7.9<br>7.9     | -9.4<br>-9.4   | -15.7<br>-15.7 | 7.7<br>7.7   | 10.2<br>10.2 | 5.4<br>4.6   | 4.9<br>5.3   | 5.0<br>4.8   | 5.4<br>4.8   |
| Equipment & software   | 6.0            | 3.9            | -13.6          | -7.8           | 11.9         | 11.4         | 4.7          | 6.4          | 5.6          | 6.3          |
| <i>Previous Tealbook</i>   | 6.0            | 3.9            | -13.6          | -7.8           | 11.9         | 11.4         | 5.2          | 5.7          | 5.8          | 6.0          |
| Nonres. structures   | 13.0           | 17.3           | -1.2           | -29.4          | -1.8         | 6.9          | 7.2          | 1.2          | 3.3          | 3.1          |
| <i>Previous Tealbook</i>   | 13.0           | 17.3           | -1.2           | -29.4          | -1.8         | 6.9          | 3.1          | 4.2          | 2.5          | 2.1          |
| Net exports <sup>1</sup><br><i>Previous Tealbook</i> <sup>1</sup>                | -729<br>-729   | -649<br>-649   | -495<br>-495   | -355<br>-355   | -420<br>-420 | -408<br>-408 | -401<br>-405 | -383<br>-394 | -389<br>-391 | -377<br>-379 |
| Exports  | 10.2           | 10.1           | -2.5           | .3             | 8.8          | 4.3          | 2.1          | 4.3          | 5.4          | 6.9          |
| Imports  | 4.1            | .8             | -5.9           | -6.1           | 10.9         | 3.5          | .2           | 3.7          | 4.5          | 5.0          |
| Gov't. cons. & invest.<br><i>Previous Tealbook</i>                               | 1.5<br>1.5     | 1.9<br>1.9     | 2.7<br>2.7     | 4.0<br>4.0     | -1.3<br>-1.3 | -3.3<br>-3.3 | -1.7<br>-1.4 | -2.2<br>-1.4 | -1.8<br>-1.3 | -5<br>-5     |
| Federal  | 2.2            | 3.1            | 8.8            | 5.1            | 2.3          | -4.2         | -2.8         | -5.4         | -5.3         | -3.4         |
| Defense  | 4.4            | 2.6            | 9.8            | 4.1            | 1.0          | -4.0         | -4.9         | -5.8         | -6.2         | -3.6         |
| Nondefense   | -2.3           | 4.2            | 6.8            | 7.2            | 5.2          | -4.6         | 1.5          | -4.6         | -3.6         | -3.1         |
| State & local  | 1.2            | 1.2            | -.9            | 3.3            | -3.6         | -2.7         | -1.0         | -.2          | .3           | 1.1          |
| Change in bus. inventories <sup>1</sup><br><i>Previous Tealbook</i> <sup>1</sup> | 59<br>59       | 28<br>28       | -36<br>-36     | -139<br>-139   | 51<br>51     | 31<br>31     | 44<br>44     | 51<br>51     | 74<br>72     | 73<br>84     |
| Nonfarm <sup>1</sup>   | 63             | 29             | -38            | -138           | 58           | 36           | 61           | 43           | 69           | 72           |
| Farm <sup>1</sup>  | -4             | -1             | 1              | -1             | -6           | -4           | -11          | 7            | 5            | 1            |

1. Billions of chained (2005) dollars.

**Contributions to Changes in Real Gross Domestic Product**  
(Percentage points, annual rate except as noted)

| Item   | 2012              |                   |                   | 2013              |                   |                   |                   | 2014              |                   |                   |                   | 2012 <sup>1</sup> | 2013 <sup>1</sup> | 2014 <sup>1</sup> | 2015 <sup>1</sup> |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|  | Q2                | Q3                | Q4                | Q1                | Q2                | Q3                | Q4                | Q1                | Q2                | Q3                | Q4                |                   |                   |                   |                   |
| Real GDP<br><i>Previous Tealbook</i>                   | 1.3<br>1.3        | 3.1<br>3.1        | .6<br>.1          | 2.8<br>2.7        | 1.8<br>2.4        | 2.7<br>2.7        | 3.0<br>2.8        | 2.6<br>2.5        | 3.0<br>3.1        | 3.5<br>3.5        | 3.7<br>3.7        | 1.7<br>1.6        | 2.5<br>2.7        | 3.2<br>3.2        | 3.6<br>3.5        |
| Final sales<br><i>Previous Tealbook</i>                | 1.7               | 2.4               | 2.0               | 1.7               | 2.2               | 2.4               | 2.8               | 2.1               | 2.9               | 3.4               | 3.5               | 2.1               | 2.3               | 3.0               | 3.7               |
| Priv. dom. final purch.<br><i>Previous Tealbook</i>    | 1.7<br>1.6<br>1.6 | 2.4<br>1.3<br>1.3 | 1.4<br>3.0<br>2.8 | 1.8<br>2.0<br>1.8 | 2.6<br>2.8<br>2.9 | 2.8<br>3.1<br>2.9 | 2.6<br>3.0<br>3.0 | 2.0<br>2.7<br>2.5 | 3.0<br>3.1<br>3.1 | 3.6<br>3.7<br>3.6 | 3.4<br>3.7<br>3.6 | 2.0<br>2.2<br>2.1 | 2.5<br>2.8<br>2.7 | 3.0<br>3.3<br>3.2 | 3.5<br>3.7<br>3.5 |
| Personal cons. expend.<br><i>Previous Tealbook</i>     | 1.1<br>1.1        | 1.1<br>1.1        | 1.4<br>1.5        | 1.5<br>1.2        | 1.8<br>1.8        | 1.8<br>1.9        | 1.9<br>1.9        | 1.9<br>1.8        | 2.3<br>2.3        | 2.7<br>2.6        | 2.6<br>2.6        | 1.3<br>1.4        | 1.8<br>1.7        | 2.4<br>2.3        | 2.6<br>2.5        |
| Durables   | .0                | .7                | 1.0               | .6                | .6                | .6                | .6                | .7                | .7                | .7                | .7                | .6                | .6                | .7                | .7                |
| Nondurables  | .1                | .2                | .0                | .3                | .3                | .3                | .3                | .3                | .4                | .5                | .5                | .1                | .3                | .4                | .5                |
| Services   | 1.0               | .3                | .4                | .6                | .9                | .9                | 1.0               | .9                | 1.2               | 1.5               | 1.5               | .6                | .9                | 1.3               | 1.5               |
| Residential investment<br><i>Previous Tealbook</i>     | .2<br>.2          | .3<br>.3          | .4<br>.3          | .4<br>.4          | .6<br>.6          | .5<br>.5          | .4<br>.4          | .4<br>.3          | .4<br>.4          | .4<br>.4          | .4<br>.4          | .3<br>.3          | .5<br>.5          | .4<br>.4          | .5<br>.4          |
| Business fixed invest.<br><i>Previous Tealbook</i>     | .4<br>.4          | -.2<br>-.2        | 1.2<br>.9         | .1<br>.2          | .5<br>.5          | .8<br>.7          | .7<br>.8          | .4<br>.4          | .4<br>.4          | .6<br>.6          | .6<br>.7          | .5<br>.5          | .5<br>.5          | .5<br>.5          | .6<br>.5          |
| Equipment & software<br><i>Previous Tealbook</i>       | .4<br>.4          | -.2<br>-.2        | .8<br>1.0         | .4<br>.1          | .4<br>.4          | .5<br>.5          | .5<br>.6          | .3<br>.3          | .3<br>.4          | .5<br>.5          | .5<br>.6          | .3<br>.4          | .5<br>.4          | .4<br>.4          | .5<br>.5          |
| Nonres. structures<br><i>Previous Tealbook</i>         | .0<br>.0          | .0<br>.0          | .4<br>.0          | -.4<br>.1         | .1<br>.1          | .2<br>.2          | .2<br>.1          | .1<br>.0          | .1<br>.1          | .1<br>.1          | .1<br>.1          | .2<br>.1          | .0<br>.1          | .1<br>.1          | .1<br>.1          |
| Net exports<br><i>Previous Tealbook</i>                | .2<br>.2          | .4<br>.4          | .3<br>-.2         | .0<br>.2          | .3<br>.0          | -.2<br>.2         | -.1<br>-.1        | -.1<br>-.1        | .0<br>.1          | .0<br>.2          | .0<br>-.1         | .3<br>.1          | .0<br>.1          | .0<br>.0          | .1<br>.1          |
| Exports  | .7                | .3                | -.4               | .3                | 1.0               | .4                | .6                | .7                | .6                | .8                | .9                | .3                | .6                | .7                | 1.0               |
| Imports  | -.5               | .1                | .7                | -.4               | -.7               | -.6               | -.7               | -.8               | -.6               | -.8               | -.8               | .0                | -.6               | -.8               | -.9               |
| Gov't. cons. & invest.<br><i>Previous Tealbook</i>     | -.1<br>-.1        | .8<br>.8          | -.14<br>-.11      | -.2<br>-.2        | -.9<br>-.3        | -.4<br>-.3        | -.1<br>-.3        | -.4<br>-.4        | -.3<br>-.2        | -.3<br>-.2        | -.2<br>-.2        | -.3<br>-.3        | -.4<br>-.3        | -.3<br>-.2        | -.1<br>-.1        |
| Federal  | .0                | .7                | -.12              | -.1               | -.9               | -.4               | -.2               | -.5               | -.4               | -.3               | -.3               | -.2               | -.4               | -.4               | -.2               |
| Defense  | .0                | .6                | -.13              | -.1               | -.6               | -.3               | -.1               | -.4               | -.3               | -.2               | -.2               | -.3               | -.3               | -.3               | -.1               |
| Nondefense   | .0                | .1                | .0                | .0                | -.3               | -.1               | -.1               | -.1               | -.1               | -.1               | -.1               | .0                | -.1               | -.1               | -.1               |
| State & local  | -.1               | .0                | -.1               | -.1               | .0                | .0                | .0                | .0                | .0                | .0                | .0                | -.1               | .0                | .0                | .1                |
| Change in bus. inventories<br><i>Previous Tealbook</i> | -.5<br>-.5        | .7<br>.7          | -.14<br>-.14      | 1.1<br>.9         | -.5<br>-.2        | .2<br>-.1         | .2<br>.2          | .4<br>.5          | .2<br>.1          | .1<br>.0          | .2<br>.3          | -.4<br>-.4        | .3<br>.2          | .2<br>.2          | -.2<br>.0         |
| Nonfarm  | -.3               | 1.1               | -.15              | .4                | -.5               | .2                | .2                | .5                | .2                | .0                | .2                | -.3               | .1                | .2                | -.1               |
| Farm   | -.2               | -.4               | .2                | .7                | .0                | .0                | .0                | -.1               | .0                | .0                | .0                | -.1               | .2                | .0                | .0                |

1. Change from fourth quarter of previous year to fourth quarter of year indicated.

**Changes in Prices and Costs**  
(Percent, annual rate except as noted)

| Item   | 2012           |              |              | 2013          |             |              |              | 2014         |              |              |              | 2012 <sup>1</sup> | 2013 <sup>1</sup> | 2014 <sup>1</sup> | 2015 <sup>1</sup> |
|--|----------------|--------------|--------------|---------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------------|-------------------|-------------------|-------------------|
|  | Q2             | Q3           | Q4           | Q1            | Q2          | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           |                   |                   |                   |                   |
|  |                |              |              |               |             |              |              |              |              |              |              |                   |                   |                   |                   |
| GDP chain-wt. price index<br><i>Previous Tealbook</i>  | 1.6<br>1.6     | 2.7<br>2.7   | .9<br>1.2    | 1.4<br>1.0    | 1.5<br>1.8  | 1.5<br>1.4   | 1.4<br>1.3   | 1.6<br>1.5   | 1.5<br>1.5   | 1.5<br>1.5   | 1.5<br>1.5   | 1.8<br>1.9        | 1.5<br>1.4        | 1.5<br>1.5        | 1.6<br>1.6        |
| PCE chain-wt. price index<br><i>Previous Tealbook</i>  | .7<br>.7       | 1.6<br>1.6   | 1.5<br>1.2   | 1.1<br>.9     | 1.1<br>1.9  | 1.6<br>1.5   | 1.4<br>1.3   | 1.6<br>1.5   | 1.5<br>1.4   | 1.5<br>1.5   | 1.4<br>1.4   | 1.6<br>1.5        | 1.3<br>1.4        | 1.5<br>1.5        | 1.6<br>1.6        |
| Energy<br><i>Previous Tealbook</i>   | -13.6<br>-13.6 | 10.5<br>10.5 | 9.9<br>5.6   | -4.7<br>-11.0 | -7.5<br>3.6 | -1.2<br>-2.7 | -1.4<br>-2.2 | -1.3<br>-1.6 | -1.3<br>-1.5 | -1.2<br>-1.6 | -1.0<br>-1.3 | 3.2<br>2.2        | -3.7<br>-3.2      | -1.2<br>-1.5      | -8<br>-1.1        |
| Food<br><i>Previous Tealbook</i>   | .7<br>.7       | .6<br>.6     | 1.8<br>2.1   | 2.0<br>3.1    | 2.6<br>2.8  | 1.9<br>2.0   | 1.0<br>1.0   | .9<br>.9     | 1.0<br>1.0   | 1.1<br>1.1   | 1.2<br>1.2   | 1.1<br>1.2        | 1.9<br>2.2        | 1.1<br>1.1        | 1.5<br>1.5        |
| Ex. food & energy<br><i>Previous Tealbook</i>  | 1.7<br>1.7     | 1.1<br>1.1   | .9<br>.8     | 1.4<br>1.6    | 1.6<br>1.7  | 1.7<br>1.7   | 1.6<br>1.5   | 1.8<br>1.7   | 1.7<br>1.7   | 1.7<br>1.7   | 1.6<br>1.6   | 1.5<br>1.5        | 1.6<br>1.6        | 1.7<br>1.7        | 1.7<br>1.7        |
| Ex. food & energy, market based<br><i>Previous Tealbook</i>                                    | 1.8<br>1.8     | 1.3<br>1.3   | .9<br>.8     | 1.6<br>1.4    | 1.4<br>1.6  | 1.6<br>1.6   | 1.4<br>1.4   | 1.7<br>1.6   | 1.6<br>1.6   | 1.6<br>1.6   | 1.5<br>1.5   | 1.6<br>1.6        | 1.5<br>1.5        | 1.6<br>1.6        | 1.6<br>1.6        |
| CPI<br><i>Previous Tealbook</i>  | 1.0<br>.8      | 2.1<br>2.3   | 2.2<br>2.1   | 1.4<br>.8     | 1.1<br>2.1  | 1.5<br>1.3   | 1.4<br>1.3   | 1.6<br>1.4   | 1.5<br>1.4   | 1.5<br>1.4   | 1.5<br>1.4   | 1.9<br>1.9        | 1.4<br>1.4        | 1.5<br>1.4        | 1.6<br>1.6        |
| Ex. food & energy<br><i>Previous Tealbook</i>  | 2.4<br>2.6     | 1.6<br>1.5   | 1.7<br>1.6   | 2.1<br>1.9    | 1.8<br>1.8  | 1.7<br>1.7   | 1.7<br>1.6   | 1.9<br>1.8   | 1.9<br>1.8   | 1.9<br>1.8   | 1.8<br>1.7   | 1.9<br>1.9        | 1.8<br>1.7        | 1.9<br>1.8        | 1.9<br>1.8        |
| ECL, hourly compensation <sup>2</sup><br><i>Previous Tealbook</i> <sup>2</sup>                 | 2.1<br>2.1     | 1.7<br>1.7   | 2.1<br>2.1   | 2.2<br>2.3    | 2.4<br>2.6  | 2.5<br>2.7   | 2.5<br>2.7   | 2.7<br>2.9   | 2.7<br>3.0   | 2.7<br>3.0   | 2.7<br>3.0   | 1.9<br>1.9        | 2.4<br>2.6        | 2.7<br>2.9        | 2.9<br>3.1        |
| Nonfarm business sector<br>Output per hour<br><i>Previous Tealbook</i>                         | 1.7<br>1.9     | 3.1<br>3.3   | -1.4<br>-3.0 | .9<br>.5      | -1<br>1.2   | 1.4<br>1.6   | 1.4<br>1.6   | 1.2<br>1.3   | 1.7<br>1.8   | 2.0<br>2.1   | 2.1<br>2.3   | .7<br>.4          | .9<br>1.2         | 1.8<br>1.8        | 1.7<br>1.8        |
| Compensation per hour<br><i>Previous Tealbook</i>  | 1.2<br>1.3     | 1.2<br>1.1   | 2.6<br>1.0   | .7<br>2.6     | 2.9<br>2.7  | 2.8<br>2.9   | 2.9<br>3.0   | 2.9<br>3.1   | 2.9<br>3.1   | 2.9<br>3.1   | 2.9<br>3.2   | 2.6<br>2.3        | 2.4<br>2.8        | 2.9<br>3.1        | 3.3<br>3.4        |
| Unit labor costs<br><i>Previous Tealbook</i>   | -5<br>-5       | -1.9<br>-2.1 | 4.6<br>4.1   | -2<br>2.1     | 3.1<br>1.4  | 1.4<br>1.3   | 1.5<br>1.4   | 1.6<br>1.7   | 1.1<br>1.3   | .9<br>1.0    | .8<br>.9     | 2.1<br>1.9        | 1.5<br>1.5        | 1.1<br>1.2        | 1.6<br>1.6        |
| Core goods imports chain-wt. price index <sup>3</sup><br><i>Previous Tealbook</i> <sup>3</sup> | 1.2<br>1.2     | -2.3<br>-2.3 | 1.7<br>1.3   | 1.8<br>2.5    | .4<br>1.6   | .7<br>1.4    | 1.2<br>1.3   | 1.3<br>1.3   | 1.5<br>1.4   | 1.8<br>1.7   | 1.5<br>1.5   | .1<br>.0          | 1.0<br>1.7        | 1.5<br>1.5        | 1.6<br>1.5        |

1. Change from fourth quarter of previous year to fourth quarter of year indicated.

2. Private-industry workers.

3. Core goods imports exclude computers, semiconductors, oil, and natural gas.

## Greensheets

## Changes in Prices and Costs

(Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise noted)

| Item   | 2006         | 2007         | 2008         | 2009         | 2010       | 2011         | 2012       | 2013         | 2014         | 2015       |
|--|--------------|--------------|--------------|--------------|------------|--------------|------------|--------------|--------------|------------|
| GDP chain-wt. price index<br><i>Previous Tealbook</i>  | 2.9<br>2.9   | 2.6<br>2.6   | 2.1<br>2.1   | .5<br>.5     | 1.8<br>1.8 | 2.0<br>2.0   | 1.8<br>1.9 | 1.5<br>1.4   | 1.5<br>1.5   | 1.6<br>1.6 |
| PCE chain-wt. price index<br><i>Previous Tealbook</i>  | 1.9<br>1.9   | 3.5<br>3.5   | 1.7<br>1.7   | 1.4<br>1.4   | 1.5<br>1.5 | 2.5<br>2.5   | 1.6<br>1.5 | 1.3<br>1.4   | 1.5<br>1.5   | 1.6<br>1.6 |
| Energy<br><i>Previous Tealbook</i>   | -3.7<br>-3.7 | 19.3<br>19.3 | -8.8<br>-8.8 | 2.7<br>2.7   | 6.5<br>6.5 | 11.9<br>11.9 | 3.2<br>2.2 | -3.7<br>-3.2 | -1.2<br>-1.5 | -8<br>-1.1 |
| Food<br><i>Previous Tealbook</i>   | 1.7<br>1.7   | 4.7<br>4.7   | 7.0<br>7.0   | -1.7<br>-1.7 | 1.3<br>1.3 | 5.1<br>5.1   | 1.1<br>1.2 | 1.9<br>2.2   | 1.1<br>1.1   | 1.5<br>1.5 |
| Ex. food & energy<br><i>Previous Tealbook</i>  | 2.3<br>2.3   | 2.4<br>2.4   | 2.0<br>2.0   | 1.6<br>1.6   | 1.2<br>1.2 | 1.7<br>1.7   | 1.5<br>1.5 | 1.6<br>1.6   | 1.7<br>1.7   | 1.7<br>1.7 |
| Ex. food & energy, market based<br><i>Previous Tealbook</i>                                    | 2.2<br>2.2   | 2.1<br>2.1   | 2.2<br>2.2   | 1.7<br>1.7   | .7<br>.7   | 1.9<br>1.9   | 1.6<br>1.6 | 1.5<br>1.5   | 1.6<br>1.6   | 1.6<br>1.6 |
| CPI<br><i>Previous Tealbook</i>  | 2.0<br>2.0   | 4.0<br>4.0   | 1.6<br>1.6   | 1.5<br>1.5   | 1.2<br>1.2 | 3.3<br>3.3   | 1.9<br>1.9 | 1.4<br>1.4   | 1.5<br>1.4   | 1.6<br>1.6 |
| Ex. food & energy<br><i>Previous Tealbook</i>  | 2.7<br>2.7   | 2.3<br>2.3   | 2.0<br>2.0   | 1.7<br>1.7   | .6<br>.6   | 2.2<br>2.2   | 1.9<br>1.9 | 1.8<br>1.7   | 1.9<br>1.8   | 1.9<br>1.8 |
| ECL, hourly compensation <sup>1</sup><br><i>Previous Tealbook</i> <sup>1</sup>                 | 3.2<br>3.2   | 3.0<br>3.0   | 2.4<br>2.4   | 1.2<br>1.2   | 2.1<br>2.1 | 2.2<br>2.2   | 1.9<br>1.9 | 2.4<br>2.6   | 2.7<br>2.9   | 2.9<br>3.1 |
| Nonfarm business sector<br>Output per hour<br><i>Previous Tealbook</i>                         | .8<br>.8     | 2.4<br>2.5   | -1.2<br>-1.1 | 5.6<br>5.6   | 1.9<br>1.8 | .4<br>.6     | .7<br>.4   | .9<br>1.2    | 1.8<br>1.8   | 1.7<br>1.8 |
| Compensation per hour<br><i>Previous Tealbook</i>  | 4.5<br>4.5   | 3.6<br>3.6   | 2.5<br>2.5   | 1.5<br>1.5   | 1.6<br>1.6 | 1.7<br>2.0   | 2.6<br>2.3 | 2.4<br>2.8   | 2.9<br>3.1   | 3.3<br>3.4 |
| Unit labor costs<br><i>Previous Tealbook</i>   | 3.6<br>3.6   | 1.1<br>1.1   | 3.7<br>3.7   | -3.9<br>-3.9 | -2<br>-2   | 1.3<br>1.4   | 2.1<br>1.9 | 1.5<br>1.5   | 1.1<br>1.2   | 1.6<br>1.6 |
| Core goods imports chain-wt. price index <sup>2</sup><br><i>Previous Tealbook</i> <sup>2</sup> | 2.5<br>2.5   | 2.9<br>2.9   | 3.7<br>3.7   | -1.7<br>-1.7 | 2.7<br>2.7 | 4.3<br>4.3   | .1<br>.0   | 1.0<br>1.7   | 1.5<br>1.5   | 1.6<br>1.5 |

1. Private-industry workers.

2. Core goods imports exclude computers, semiconductors, oil, and natural gas.

## Other Macroeconomic Indicators

| Item  | 2012   |        |        |      | 2013 |      |      |      | 2014 |      |      |        | 2012 <sup>1</sup> | 2013 <sup>1</sup> | 2014 <sup>1</sup> | 2015 <sup>1</sup> |
|---|--------|--------|--------|------|------|------|------|------|------|------|------|--------|-------------------|-------------------|-------------------|-------------------|
|   | Q2     | Q3     | Q4     | Q1   | Q2   | Q3   | Q4   | Q1   | Q2   | Q3   | Q4   |        |                   |                   |                   |                   |
|   |        |        |        |      |      |      |      |      |      |      |      |        |                   |                   |                   |                   |
| <i>Employment and production</i>              |        |        |        |      |      |      |      |      |      |      |      |        |                   |                   |                   |                   |
| Nonfarm payroll employment <sup>2</sup>       | .5     | .4     | .5     | .6   | .5   | .5   | .5   | .5   | .6   | .6   | .7   | 2.2    | 2.2               | 2.4               | 3.1               |                   |
| Unemployment rate <sup>3</sup>                | 8.2    | 8.0    | 7.8    | 7.8  | 7.7  | 7.6  | 7.5  | 7.4  | 7.3  | 7.2  | 7.1  | 7.8    | 7.5               | 7.1               | 6.3               |                   |
| <i>Previous Tealbook<sup>3</sup></i>          | 8.2    | 8.0    | 7.8    | 7.8  | 7.7  | 7.7  | 7.6  | 7.5  | 7.4  | 7.2  | 7.1  | 7.8    | 7.6               | 7.1               | 6.3               |                   |
| Natural rate of unemployment <sup>3</sup>     | 6.0    | 6.0    | 5.9    | 5.9  | 5.9  | 5.9  | 5.9  | 5.9  | 5.8  | 5.8  | 5.8  | 5.9    | 5.9               | 5.8               | 5.8               |                   |
| <i>Previous Tealbook<sup>3</sup></i>          | 6.0    | 6.0    | 5.9    | 5.9  | 5.9  | 5.9  | 5.9  | 5.9  | 5.8  | 5.8  | 5.8  | 5.9    | 5.9               | 5.8               | 5.8               |                   |
| GDP gap <sup>4</sup>                          | -3.9   | -3.6   | -3.9   | -3.7 | -3.7 | -3.5 | -3.3 | -3.2 | -2.9 | -2.6 | -2.2 | -3.9   | -3.3              | -2.2              | -8                |                   |
| <i>Previous Tealbook<sup>4</sup></i>          | -3.9   | -3.6   | -4.0   | -3.8 | -3.7 | -3.5 | -3.3 | -3.2 | -3.0 | -2.6 | -2.2 | -4.0   | -3.3              | -2.2              | -9                |                   |
| Industrial production <sup>5</sup>            | 2.4    | .5     | 2.7    | 5.5  | 6.1  | 4.7  | 3.8  | 3.6  | 3.7  | 3.9  | 4.1  | 2.8    | 5.0               | 3.8               | 4.3               |                   |
| <i>Previous Tealbook<sup>5</sup></i>          | 2.4    | .4     | 1.0    | 2.6  | 6.9  | 5.7  | 4.5  | 3.9  | 3.9  | 4.1  | 4.3  | 2.4    | 4.9               | 4.0               | 4.1               |                   |
| Manufacturing industr. prod. <sup>5</sup>     | .8     | -8     | 2.3    | 6.9  | 4.6  | 3.4  | 3.2  | 3.6  | 3.5  | 3.7  | 4.1  | 2.9    | 4.5               | 3.7               | 4.7               |                   |
| <i>Previous Tealbook<sup>5</sup></i>          | .8     | -1.0   | .2     | 3.8  | 5.1  | 4.6  | 4.0  | 3.9  | 3.9  | 3.9  | 4.4  | 2.4    | 4.4               | 4.0               | 4.5               |                   |
| Capacity utilization rate - mfg. <sup>3</sup> | 77.5   | 77.0   | 77.2   | 78.1 | 78.6 | 78.9 | 79.1 | 79.3 | 79.5 | 79.7 | 80.1 | 77.2   | 79.1              | 80.1              | 81.6              |                   |
| <i>Previous Tealbook<sup>3</sup></i>          | 77.5   | 77.0   | 76.8   | 77.1 | 77.6 | 78.1 | 78.4 | 78.7 | 79.0 | 79.2 | 79.6 | 76.8   | 78.4              | 79.6              | 80.9              |                   |
| Housing starts <sup>6</sup>                   | .7     | .8     | .9     | .9   | 1.0  | 1.1  | 1.1  | 1.2  | 1.3  | 1.3  | 1.4  | .8     | 1.0               | 1.3               | 1.6               |                   |
| Light motor vehicle sales <sup>6</sup>        | 14.1   | 14.5   | 15.0   | 15.3 | 15.3 | 15.3 | 15.3 | 15.6 | 15.7 | 15.9 | 15.9 | 14.4   | 15.3              | 15.8              | 16.3              |                   |
| <i>Income and saving</i>                      |        |        |        |      |      |      |      |      |      |      |      |        |                   |                   |                   |                   |
| Nominal GDP <sup>5</sup>                      | 2.8    | 5.9    | 1.5    | 4.2  | 3.3  | 4.2  | 4.4  | 4.2  | 4.6  | 5.0  | 5.2  | 3.6    | 4.0               | 4.8               | 5.2               |                   |
| Real disposable pers. income <sup>5</sup>     | 2.2    | .7     | 6.2    | -7.2 | 3.8  | 1.9  | 3.0  | 3.7  | 3.1  | 3.3  | 3.8  | 3.2    | .3                | 3.5               | 3.1               |                   |
| <i>Previous Tealbook<sup>5</sup></i>          | 2.2    | .5     | 2.3    | -3.0 | 2.7  | 2.5  | 3.1  | 4.9  | 3.4  | 3.5  | 3.9  | 2.2    | 1.3               | 3.9               | 2.9               |                   |
| Personal saving rate <sup>3</sup>             | 3.8    | 3.6    | 4.7    | 2.3  | 2.6  | 2.5  | 2.5  | 2.7  | 2.7  | 2.6  | 2.6  | 4.7    | 2.5               | 2.6               | 2.0               |                   |
| <i>Previous Tealbook<sup>3</sup></i>          | 3.8    | 3.6    | 3.6    | 2.5  | 2.5  | 2.5  | 2.5  | 3.1  | 3.1  | 3.0  | 3.1  | 3.6    | 2.5               | 3.1               | 2.4               |                   |
| Corporate profits <sup>7</sup>                | 4.7    | 9.9    | 5.6    | 2.3  | -1.7 | -1   | -1   | 1.4  | 2.3  | 2.4  | .7   | 2.1    | .1                | 1.7               | 3.2               |                   |
| Profit share of GNP <sup>3</sup>              | 12.1   | 12.3   | 12.4   | 12.3 | 12.2 | 12.1 | 12.0 | 11.9 | 11.8 | 11.8 | 11.6 | 12.4   | 12.0              | 11.6              | 11.4              |                   |
| Net federal saving <sup>8</sup>               | -1,115 | -1,087 | -1,057 | -819 | -810 | -779 | -771 | -656 | -653 | -657 | -672 | -1,080 | -795              | -660              | -580              |                   |
| Net state & local saving <sup>8</sup>         | -124   | -140   | -128   | -122 | -105 | -97  | -88  | -93  | -70  | -63  | -54  | -130   | -103              | -70               | -24               |                   |
| Gross national saving rate <sup>3</sup>       | 12.3   | 12.3   | 12.8   | 13.2 | 13.4 | 13.4 | 13.5 | 13.8 | 13.9 | 13.8 | 13.7 | 12.8   | 13.5              | 13.7              | 14.2              |                   |
| Net national saving rate <sup>3</sup>         | -4     | -3     | .4     | .9   | 1.0  | 1.1  | 1.2  | 1.6  | 1.7  | 1.6  | 1.6  | .4     | 1.2               | 1.6               | 2.2               |                   |

1. Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise indicated.

2. Change, millions.

3. Percent; annual values are for the fourth quarter of the year indicated.

4. Percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential.

Annual values are for the fourth quarter of the year indicated.

5. Percent change, annual rate.

6. Level, millions; annual values are annual averages.

7. Percent change, annual rate, with inventory valuation and capital consumption adjustments.

8. Billions of dollars; annual values are annual averages.



## Greensheets

## Other Macroeconomic Indicators

(Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise noted)

| Item  | 2006 | 2007 | 2008  | 2009  | 2010  | 2011  | 2012  | 2013 | 2014 | 2015 |
|---|------|------|-------|-------|-------|-------|-------|------|------|------|
| <i>Employment and production</i>              |      |      |       |       |       |       |       |      |      |      |
| Nonfarm payroll employment <sup>1</sup>       | 2.1  | 1.2  | -2.8  | -5.6  | .8    | 2.0   | 2.2   | 2.2  | 2.4  | 3.1  |
| Unemployment rate <sup>2</sup>                | 4.5  | 4.8  | 6.9   | 9.9   | 9.5   | 8.7   | 7.8   | 7.5  | 7.1  | 6.3  |
| <i>Previous Tealbook<sup>2</sup></i>          | 4.5  | 4.8  | 6.9   | 9.9   | 9.5   | 8.7   | 7.8   | 7.6  | 7.1  | 6.3  |
| Natural rate of unemployment <sup>2</sup>     | 5.0  | 5.0  | 5.3   | 6.0   | 6.0   | 6.0   | 5.9   | 5.9  | 5.8  | 5.8  |
| <i>Previous Tealbook<sup>2</sup></i>          | 5.0  | 5.0  | 5.3   | 6.0   | 6.0   | 6.0   | 5.9   | 5.9  | 5.8  | 5.8  |
| GDP gap <sup>3</sup>                          | .8   | .8   | -4.3  | -5.3  | -4.2  | -3.8  | -3.9  | -3.3 | -2.2 | -8   |
| <i>Previous Tealbook<sup>3</sup></i>          | .8   | .8   | -4.3  | -5.3  | -4.2  | -3.8  | -4.0  | -3.3 | -2.2 | -9   |
| Industrial production <sup>4</sup>            | 2.1  | 2.5  | -9.0  | -5.7  | 6.3   | 4.1   | 2.8   | 5.0  | 3.8  | 4.3  |
| <i>Previous Tealbook<sup>4</sup></i>          | 2.1  | 2.5  | -9.0  | -5.7  | 6.3   | 4.1   | 2.4   | 4.9  | 4.0  | 4.1  |
| Manufacturing industr. prod. <sup>4</sup>     | 1.8  | 2.8  | -11.8 | -6.5  | 6.5   | 4.2   | 2.9   | 4.5  | 3.7  | 4.7  |
| <i>Previous Tealbook<sup>4</sup></i>          | 1.8  | 2.8  | -11.8 | -6.5  | 6.5   | 4.2   | 2.4   | 4.4  | 4.0  | 4.5  |
| Capacity utilization rate - mfg. <sup>2</sup> | 78.2 | 78.2 | 69.7  | 67.0  | 73.1  | 76.1  | 77.2  | 79.1 | 80.1 | 81.6 |
| <i>Previous Tealbook<sup>2</sup></i>          | 78.2 | 78.2 | 69.7  | 67.0  | 73.1  | 76.1  | 76.8  | 78.4 | 79.6 | 80.9 |
| Housing starts <sup>5</sup>                   | 1.8  | 1.4  | .9    | .6    | .6    | .6    | .8    | 1.0  | 1.3  | 1.6  |
| Light motor vehicle sales <sup>5</sup>        | 16.5 | 16.1 | 13.1  | 10.4  | 11.5  | 12.7  | 14.4  | 15.3 | 15.8 | 16.3 |
| <i>Income and saving</i>                      |      |      |       |       |       |       |       |      |      |      |
| Nominal GDP <sup>4</sup>                      | 5.3  | 4.9  | -1.2  | .4    | 4.3   | 4.0   | 3.6   | 4.0  | 4.8  | 5.2  |
| Real disposable pers. income <sup>4</sup>     | 4.6  | 1.6  | 1.0   | -3.0  | 3.5   | .3    | 3.2   | .3   | 3.5  | 3.1  |
| <i>Previous Tealbook<sup>4</sup></i>          | 4.6  | 1.6  | 1.0   | -3.0  | 3.5   | .3    | 2.2   | 1.3  | 3.9  | 2.9  |
| Personal saving rate <sup>2</sup>             | 2.8  | 2.5  | 6.2   | 3.8   | 4.8   | 3.4   | 4.7   | 2.5  | 2.6  | 2.0  |
| <i>Previous Tealbook<sup>2</sup></i>          | 2.8  | 2.5  | 6.2   | 3.8   | 4.8   | 3.4   | 3.6   | 2.5  | 3.1  | 2.4  |
| Corporate profits <sup>6</sup>                | 3.7  | -8.1 | -33.5 | 57.0  | 17.3  | 9.2   | 2.1   | .1   | 1.7  | 3.2  |
| Profit share of GNP <sup>2</sup>              | 11.6 | 10.1 | 6.8   | 10.7  | 12.0  | 12.5  | 12.4  | 12.0 | 11.6 | 11.4 |
| Net federal saving <sup>7</sup>               | -204 | -245 | -613  | -1229 | -1308 | -1237 | -1080 | -795 | -660 | -580 |
| Net state & local saving <sup>7</sup>         | 51   | 12   | -72   | -113  | -90   | -102  | -130  | -103 | -70  | -24  |
| Gross national saving rate <sup>2</sup>       | 16.5 | 13.9 | 12.6  | 11.0  | 12.1  | 12.4  | 12.8  | 13.5 | 13.7 | 14.2 |
| Net national saving rate <sup>2</sup>         | 4.4  | 1.7  | -.6   | -2.3  | -.6   | -.3   | .4    | 1.2  | 1.6  | 2.2  |

1. Change, millions.

2. Percent; values are for the fourth quarter of the year indicated.

3. Percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential. Values are for the fourth quarter of the year indicated.

4. Percent change.

5. Level, millions; values are annual averages.

6. Percent change, with inventory valuation and capital consumption adjustments.

7. Billions of dollars; values are annual averages.

**Staff Projections of Federal Sector Accounts and Related Items**  
(Billions of dollars except as noted)

| Item  | Fiscal year       |        |        |        | 2012            |                 |                 |        | 2013   |        |        |        | 2014   |        |        |        |
|---|-------------------|--------|--------|--------|-----------------|-----------------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|   | 2012 <sup>a</sup> | 2013   | 2014   | 2015   | Q1 <sup>a</sup> | Q2 <sup>a</sup> | Q3 <sup>a</sup> | Q4     | Q1     | Q2     | Q3     | Q4     | Q1     | Q2     | Q3     | Q4     |
| <b>Unified budget</b>                           |                   |        |        |        |                 |                 |                 |        |        |        |        |        |        |        |        |        |
| Receipts <sup>1</sup>                           | 2,449             | 2,753  | 2,992  | 3,228  | 509             | 760             | 625             | 616    | 572    | 856    | 710    | 677    | 616    | 935    | 765    | 739    |
| Outlays <sup>1</sup>                            | 3,538             | 3,510  | 3,558  | 3,703  | 966             | 885             | 810             | 909    | 905    | 862    | 834    | 905    | 910    | 882    | 862    | 948    |
| Surplus/deficit <sup>1</sup>                    | -1,089            | -757   | -566   | -476   | -457            | -125            | -185            | -293   | -333   | -6     | -124   | -228   | -293   | 52     | -97    | -209   |
| <i>Previous Tealbook</i>                        |                   |        |        |        |                 |                 |                 |        |        |        |        |        |        |        |        |        |
| On-budget                                       | -1,089            | -793   | -628   | -544   | -457            | -125            | -185            | -292   | -347   | -14    | -140   | -245   | -308   | 41     | -116   | -230   |
| Off-budget                                      | -1,151            | -770   | -571   | -467   | -458            | -187            | -160            | -311   | -315   | -54    | -91    | -249   | -270   | 8      | -59    | -226   |
|   | 62                | 13     | 5      | -9     | 1               | 62              | -25             | 17     | -18    | 48     | -33    | 22     | -23    | 44     | -38    | 17     |
| <b>Means of financing</b>                       |                   |        |        |        |                 |                 |                 |        |        |        |        |        |        |        |        |        |
| Borrowing                                       | 1,152             | 760    | 635    | 556    | 398             | 198             | 230             | 314    | 230    | 7      | 209    | 237    | 313    | -32    | 117    | 229    |
| Cash decrease                                   | -27               | 5      | 11     | 0      | 42              | -48             | 6               | -7     | 63     | -31    | -20    | 11     | 0      | 0      | 0      | 0      |
| Other <sup>2</sup>                              | -36               | -9     | -80    | -80    | 17              | -25             | -51             | -13    | 40     | 30     | -65    | -20    | -20    | -20    | -20    | -20    |
| Cash operating balance, end of period           | 85                | 81     | 70     | 70     | 43              | 91              | 85              | 93     | 30     | 60     | 81     | 70     | 70     | 70     | 70     | 70     |
| <b>NIPA federal sector</b>                      |                   |        |        |        |                 |                 |                 |        |        |        |        |        |        |        |        |        |
| Receipts  | 2,633             | 2,907  | 3,159  | 3,375  | 2,665           | 2,659           | 2,673           | 2,715  | 2,942  | 2,973  | 3,001  | 3,033  | 3,165  | 3,200  | 3,237  | 3,272  |
| Expenditures                                    | 3,744             | 3,774  | 3,843  | 3,988  | 3,724           | 3,775           | 3,761           | 3,772  | 3,760  | 3,783  | 3,779  | 3,803  | 3,822  | 3,854  | 3,894  | 3,943  |
| Consumption expenditures                        | 1,062             | 1,026  | 988    | 958    | 1,056           | 1,055           | 1,086           | 1,041  | 1,043  | 1,016  | 1,005  | 1,004  | 992    | 983    | 974    | 968    |
| Defense   | 709               | 672    | 645    | 622    | 703             | 701             | 728             | 681    | 683    | 667    | 658    | 657    | 647    | 640    | 635    | 630    |
| Nondefense                                      | 353               | 354    | 344    | 336    | 352             | 354             | 358             | 360    | 359    | 349    | 347    | 346    | 345    | 343    | 340    | 338    |
| Other spending                                  | 2,682             | 2,747  | 2,855  | 3,030  | 2,668           | 2,720           | 2,674           | 2,731  | 2,718  | 2,766  | 2,774  | 2,800  | 2,830  | 2,871  | 2,920  | 2,975  |
| Current account surplus                         | -1,111            | -866   | -684   | -612   | -1,059          | -1,115          | -1,087          | -1,057 | -819   | -810   | -779   | -771   | -656   | -653   | -657   | -672   |
| Gross investment                                | 156               | 152    | 140    | 130    | 152             | 156             | 155             | 156    | 155    | 150    | 147    | 145    | 141    | 138    | 136    | 134    |
| Gross saving less gross investment <sup>3</sup> | -1,126            | -873   | -675   | -589   | -1,071          | -1,130          | -1,100          | -1,070 | -830   | -815   | -779   | -769   | -649   | -642   | -642   | -653   |
| <b>Fiscal indicators<sup>4</sup></b>            |                   |        |        |        |                 |                 |                 |        |        |        |        |        |        |        |        |        |
| High-employment (HEB) surplus/deficit           | -918.6            | -661.6 | -503.1 | -484.7 | -865.1          | -922.6          | -907.1          | -864.6 | -614.0 | -600.9 | -566.7 | -570.1 | -472.7 | -476.8 | -492.7 | -522.5 |
| Change in HEB, percent of potential GDP         | -1.0              | -1.7   | -1.0   | -2     | -8              | .3              | -2              | -3     | -1.5   | -1     | -2     | .0     | -6     | .0     | .1     | .1     |
| Fiscal impetus (FI), percent of GDP             | -7                | -1.1   | -7     | -3     | -7              | -6              | .3              | -1.5   | -1.4   | -1.3   | -1.0   | -6     | -1.0   | -8     | -6     | -4     |
| <i>Previous Tealbook</i>                        | -6                | -9     | -7     | -3     | -7              | -6              | .3              | -1.3   | -1.5   | -7     | -8     | -7     | -1.1   | -7     | -5     | -4     |

1. Budget receipts, outlays, and surplus/deficit include corresponding social security (OASDI) categories. The OASDI surplus and the Postal Service surplus are excluded from the on-budget surplus and shown separately as off-budget, as classified under current law.

2. Other means of financing are checks issued less checks paid, accrued items, and changes in other financial assets and liabilities.

3. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises.

4. HEB is gross saving less gross investment (NIPA) of the federal government in current dollars, with cyclically sensitive receipts and outlays adjusted to the staff's measure of potential output and the natural rate of unemployment. The sign on Change in HEB, as a percent of nominal potential GDP, is reversed. FI is the weighted difference of discretionary changes in federal spending and taxes in chained (2005) dollars, scaled by real GDP. The FI estimates are calendar year contributions to Q4/Q4 real GDP growth. Also, for FI and the change in HEB, positive values indicate aggregate demand stimulus. Quarterly figures for change in HEB and FI are not at annual rates.

a Actual.

# Foreign Real GDP and Consumer Prices: Selected Countries

(Quarterly percent changes at an annual rate)

| Measure and country                 | 2012 |      |      |      | 2013 |     |     |     | Projected-----2014 |      |     |     |
|-------------------------------------|------|------|------|------|------|-----|-----|-----|--------------------|------|-----|-----|
|                                     | Q1   | Q2   | Q3   | Q4   | Q1   | Q2  | Q3  | Q4  | Q1                 | Q2   | Q3  | Q4  |
| <b>Real GDP</b> <sup>1</sup>        |      |      |      |      |      |     |     |     |                    |      |     |     |
| Total foreign                       | 3.2  | 1.9  | 1.8  | 2.1  | 2.7  | 2.9 | 3.1 | 3.2 | 3.4                | 3.1  | 3.4 | 3.5 |
| <i>Previous Tealbook</i>            | 3.4  | 1.9  | 1.8  | 2.2  | 2.7  | 3.1 | 3.2 | 3.3 | 3.4                | 3.2  | 3.5 | 3.5 |
| Advanced foreign economies          | 1.3  | .6   | .3   | -.4  | .9   | 1.3 | 1.5 | 1.8 | 2.0                | 1.5  | 2.1 | 2.2 |
| Canada                              | 1.2  | 1.9  | .7   | .6   | 1.8  | 1.9 | 2.0 | 2.2 | 2.2                | 2.4  | 2.6 | 2.8 |
| Japan                               | 6.1  | -.9  | -3.7 | .2   | 1.8  | 2.1 | 2.1 | 2.3 | 3.5                | -2.4 | -.8 | -.8 |
| United Kingdom                      | -.3  | -1.4 | 3.9  | -1.0 | .4   | 1.0 | 1.6 | 2.0 | 2.1                | 2.2  | 2.4 | 2.6 |
| Euro area                           | -.2  | -.7  | -.3  | -2.3 | -.7  | .0  | .4  | -.9 | 1.1                | 1.3  | 1.5 | 1.7 |
| Germany                             | 2.0  | 1.1  | .9   | -2.3 | .4   | .9  | 1.1 | 1.6 | 1.7                | 1.8  | 1.9 | 1.9 |
| Emerging market economies           | 5.2  | 3.4  | 3.3  | 4.6  | 4.5  | 4.6 | 4.7 | 4.7 | 4.8                | 4.8  | 4.8 | 4.9 |
| Asia                                | 6.0  | 3.8  | 4.8  | 6.3  | 5.6  | 5.6 | 5.7 | 5.7 | 5.8                | 5.8  | 5.8 | 5.9 |
| Korea                               | 3.5  | 1.1  | -.2  | 1.5  | 3.1  | 3.6 | 3.8 | 4.0 | 4.1                | 4.2  | 4.3 | 4.4 |
| China                               | 7.0  | 6.5  | 8.4  | 9.5  | 8.5  | 8.2 | 8.2 | 8.1 | 8.1                | 8.1  | 8.1 | 8.1 |
| Latin America                       | 4.6  | 2.8  | 1.7  | 3.2  | 3.5  | 3.7 | 3.8 | 3.8 | 3.8                | 3.8  | 3.8 | 3.9 |
| Mexico                              | 5.3  | 3.1  | 1.5  | 3.1  | 3.7  | 3.9 | 4.0 | 3.9 | 3.9                | 3.9  | 3.9 | 4.0 |
| Brazil                              | .6   | 1.3  | 1.5  | 2.2  | 3.0  | 3.5 | 3.7 | 3.7 | 3.8                | 3.8  | 4.0 | 4.0 |
| <b>Consumer prices</b> <sup>2</sup> |      |      |      |      |      |     |     |     |                    |      |     |     |
| Total foreign                       | 2.5  | 2.1  | 2.4  | 2.3  | 2.2  | 2.2 | 2.2 | 2.3 | 2.4                | 3.0  | 2.5 | 2.5 |
| <i>Previous Tealbook</i>            | 2.6  | 2.0  | 2.3  | 2.4  | 2.2  | 2.3 | 2.3 | 2.3 | 2.4                | 3.0  | 2.5 | 2.5 |
| Advanced foreign economies          | 1.9  | .8   | .9   | 1.6  | .8   | 1.2 | 1.1 | 1.3 | 1.3                | 2.7  | 1.4 | 1.4 |
| Canada                              | 2.0  | .2   | .1   | 1.4  | 1.0  | 1.6 | 1.5 | 1.6 | 1.7                | 1.8  | 1.8 | 1.8 |
| Japan                               | 1.2  | -.7  | -1.5 | .0   | .0   | .0  | .0  | .1  | .2                 | 8.2  | -.3 | -.3 |
| United Kingdom                      | 1.7  | 1.3  | 3.1  | 4.5  | 2.3  | 2.2 | 1.9 | 3.0 | 1.6                | 1.6  | 1.7 | 2.8 |
| Euro Area                           | 2.4  | 2.0  | 2.4  | 2.4  | 1.0  | 1.3 | 1.3 | 1.3 | 1.4                | 1.4  | 1.5 | 1.5 |
| Germany                             | 2.3  | 1.4  | 2.1  | 2.2  | 1.6  | 2.0 | 1.7 | 1.7 | 1.7                | 1.7  | 1.8 | 1.9 |
| Emerging market economies           | 3.0  | 3.1  | 3.5  | 2.8  | 3.2  | 2.9 | 3.1 | 3.2 | 3.3                | 3.3  | 3.3 | 3.3 |
| Asia                                | 2.4  | 3.2  | 2.3  | 2.4  | 3.6  | 2.6 | 3.0 | 3.0 | 3.1                | 3.2  | 3.2 | 3.2 |
| Korea                               | 1.6  | 1.2  | 1.0  | 3.1  | 2.3  | 2.8 | 2.8 | 2.9 | 3.0                | 3.0  | 3.0 | 3.1 |
| China                               | 2.0  | 2.5  | 1.7  | 2.0  | 3.8  | 2.2 | 2.8 | 2.9 | 3.0                | 3.0  | 3.0 | 3.0 |
| Latin America                       | 4.6  | 2.6  | 6.3  | 3.6  | 2.6  | 3.7 | 3.5 | 3.5 | 3.7                | 3.7  | 3.7 | 3.7 |
| Mexico                              | 4.5  | 2.5  | 6.5  | 3.0  | 2.0  | 3.5 | 3.2 | 3.2 | 3.4                | 3.4  | 3.4 | 3.4 |
| Brazil                              | 4.0  | 3.8  | 7.3  | 7.5  | 6.9  | 5.3 | 5.5 | 5.5 | 5.5                | 5.4  | 5.4 | 5.4 |

<sup>1</sup> Foreign GDP aggregates calculated using shares of U.S. exports.

<sup>2</sup> Foreign CPI aggregates calculated using shares of U.S. non-oil imports.

**Foreign Real GDP and Consumer Prices: Selected Countries**  
(Percent change, Q4 to Q4)

| Measure and country                 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | -----Projected----- |      |      |
|-------------------------------------|------|------|------|------|------|------|---------------------|------|------|
|                                     |      |      |      |      |      |      | 2013                | 2014 | 2015 |
| <b>Real GDP</b> <sup>1</sup>        |      |      |      |      |      |      |                     |      |      |
| Total foreign                       | 4.3  | -.7  | .8   | 4.6  | 2.9  | 2.3  | 3.0                 | 3.4  | 3.5  |
| <i>Previous Tealbook</i>            | 4.3  | -.7  | .8   | 4.5  | 2.9  | 2.3  | 3.1                 | 3.4  | 3.5  |
| Advanced foreign economies          | 2.4  | -1.6 | -1.5 | 3.0  | 1.4  | .4   | 1.4                 | 2.0  | 2.3  |
| Canada                              | 2.3  | .0   | -1.6 | 3.6  | 2.4  | 1.1  | 2.0                 | 2.5  | 2.7  |
| Japan                               | 1.6  | -4.8 | -6   | 3.5  | -.1  | .4   | 2.1                 | .7   | .6   |
| United Kingdom                      | 3.8  | -4.6 | -9   | 1.5  | .9   | .3   | 1.2                 | 2.3  | 2.6  |
| Euro area                           | 2.4  | -2.1 | -2.3 | 2.3  | .6   | -.9  | .1                  | 1.4  | 2.0  |
| Germany                             | 2.4  | -1.9 | -2.2 | 4.2  | 1.9  | .4   | 1.0                 | 1.8  | 2.4  |
| Emerging market economies           | 6.7  | .4   | 3.5  | 6.2  | 4.5  | 4.1  | 4.6                 | 4.8  | 4.8  |
| Asia                                | 8.9  | .8   | 8.1  | 7.8  | 5.0  | 5.2  | 5.7                 | 5.8  | 5.9  |
| Korea                               | 5.8  | -3.2 | 6.3  | 5.0  | 3.4  | 1.6  | 3.6                 | 4.2  | 4.6  |
| China                               | 13.7 | 7.7  | 11.3 | 9.7  | 8.8  | 7.8  | 8.2                 | 8.1  | 8.0  |
| Latin America                       | 4.4  | -.2  | -.8  | 4.5  | 3.9  | 3.1  | 3.7                 | 3.8  | 3.8  |
| Mexico                              | 3.5  | -1.1 | -2.2 | 4.1  | 4.0  | 3.3  | 3.9                 | 3.9  | 3.8  |
| Brazil                              | 6.6  | .9   | 5.3  | 5.4  | 1.4  | 1.4  | 3.5                 | 3.9  | 4.0  |
| <b>Consumer prices</b> <sup>2</sup> |      |      |      |      |      |      |                     |      |      |
| Total foreign                       | 3.7  | 3.3  | 1.2  | 3.2  | 3.4  | 2.3  | 2.2                 | 2.6  | 2.6  |
| <i>Previous Tealbook</i>            | 3.7  | 3.3  | 1.3  | 3.2  | 3.4  | 2.3  | 2.3                 | 2.6  | 2.6  |
| Advanced foreign economies          | 2.2  | 2.0  | .2   | 1.7  | 2.2  | 1.3  | 1.1                 | 1.7  | 1.7  |
| Canada                              | 2.5  | 1.8  | .8   | 2.2  | 2.7  | .9   | 1.4                 | 1.8  | 1.8  |
| Japan                               | .5   | 1.1  | -2.0 | -.2  | -.3  | -.2  | .0                  | 2.2  | 1.7  |
| United Kingdom                      | 2.1  | 3.9  | 2.2  | 3.4  | 4.6  | 2.6  | 2.3                 | 1.9  | 1.9  |
| Euro Area                           | 2.9  | 2.3  | .4   | 2.0  | 2.9  | 2.3  | 1.2                 | 1.4  | 1.7  |
| Germany                             | 3.1  | 1.7  | .3   | 1.6  | 2.6  | 2.0  | 1.7                 | 1.8  | 1.9  |
| Emerging market economies           | 5.1  | 4.6  | 2.1  | 4.3  | 4.3  | 3.1  | 3.1                 | 3.3  | 3.3  |
| Asia                                | 5.5  | 3.6  | 1.2  | 4.3  | 4.5  | 2.6  | 3.0                 | 3.1  | 3.2  |
| Korea                               | 3.4  | 4.5  | 2.4  | 3.2  | 4.0  | 1.7  | 2.7                 | 3.0  | 3.2  |
| China                               | 6.7  | 2.5  | .6   | 4.6  | 4.6  | 2.1  | 2.9                 | 3.0  | 3.0  |
| Latin America                       | 4.2  | 6.7  | 3.9  | 4.4  | 4.0  | 4.3  | 3.3                 | 3.7  | 3.7  |
| Mexico                              | 3.8  | 6.2  | 4.0  | 4.3  | 3.5  | 4.1  | 3.0                 | 3.4  | 3.4  |
| Brazil                              | 4.3  | 6.3  | 4.3  | 5.6  | 6.7  | 5.6  | 5.8                 | 5.4  | 5.4  |

<sup>1</sup> Foreign GDP aggregates calculated using shares of U.S. exports.

<sup>2</sup> Foreign CPI aggregates calculated using shares of U.S. non-oil imports.

## Greensheets

## U.S. Current Account

## Quarterly Data

|                                      | 2012          |               |               |               | 2013          |               |               |               | Projected-----2014 |               |               |               |
|--------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|
|                                      | Q1            | Q2            | Q3            | Q4            | Q1            | Q2            | Q3            | Q4            | Q1                 | Q2            | Q3            | Q4            |
| <i>Billions of dollars, s.a.a.r.</i> |               |               |               |               |               |               |               |               |                    |               |               |               |
| <b>U.S. current account balance</b>  | <b>-535.4</b> | <b>-473.4</b> | <b>-431.4</b> | <b>-442.2</b> | <b>-469.2</b> | <b>-435.3</b> | <b>-461.6</b> | <b>-497.0</b> | <b>-522.1</b>      | <b>-505.3</b> | <b>-521.2</b> | <b>-540.1</b> |
| <i>Previous Tealbook</i>             | -534.5        | -472.4        | -430.0        | -450.8        | -458.5        | -437.3        | -444.1        | -473.3        | -496.9             | -469.9        | -475.2        | -496.7        |
| Current account as percent of GDP    | -3.5          | -3.0          | -2.7          | -2.8          | -2.9          | -2.7          | -2.8          | -3.0          | -3.1               | -3.0          | -3.1          | -3.1          |
| <i>Previous Tealbook</i>             | -3.5          | -3.0          | -2.7          | -2.8          | -2.9          | -2.7          | -2.7          | -2.9          | -3.0               | -2.8          | -2.8          | -2.9          |
| Net goods & services                 | -594.4        | -550.6        | -499.4        | -513.7        | -521.3        | -472.9        | -482.6        | -506.1        | -520.1             | -495.7        | -498.0        | -512.4        |
| Investment income, net               | 197.4         | 215.9         | 211.0         | 215.0         | 196.8         | 178.4         | 165.2         | 155.4         | 142.7              | 131.3         | 120.9         | 118.6         |
| Direct, net                          | 282.9         | 291.6         | 286.1         | 279.2         | 259.2         | 245.2         | 239.1         | 238.3         | 235.3              | 232.6         | 232.4         | 241.5         |
| Portfolio, net                       | -85.6         | -75.7         | -75.2         | -64.2         | -62.4         | -66.7         | -73.9         | -83.0         | -92.5              | -101.3        | -111.6        | -122.9        |
| Other income and transfers, net      | -138.4        | -138.7        | -143.1        | -143.5        | -144.8        | -140.9        | -144.2        | -146.3        | -144.8             | -140.9        | -144.2        | -146.3        |

## Annual Data

|                                     | -----Projected----- |               |               |               |               |               |               |               |               |  |
|-------------------------------------|---------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--|
|                                     | 2007                | 2008          | 2009          | 2010          | 2011          | 2012          | 2013          | 2014          | 2015          |  |
| <i>Billions of dollars</i>          |                     |               |               |               |               |               |               |               |               |  |
| <b>U.S. current account balance</b> | <b>-710.3</b>       | <b>-677.1</b> | <b>-381.9</b> | <b>-442.0</b> | <b>-465.9</b> | <b>-470.6</b> | <b>-465.8</b> | <b>-522.2</b> | <b>-536.0</b> |  |
| <i>Previous Tealbook</i>            | -710.3              | -677.1        | -381.9        | -442.0        | -465.9        | -471.9        | -453.3        | -484.7        | -490.6        |  |
| Current account as percent of GDP   | -5.1                | -4.7          | -2.7          | -3.0          | -3.1          | -3.0          | -2.9          | -3.1          | -3.0          |  |
| <i>Previous Tealbook</i>            | -5.1                | -4.7          | -2.7          | -3.0          | -3.1          | -3.0          | -2.8          | -2.9          | -2.7          |  |
| Net goods & services                | -696.7              | -698.3        | -379.2        | -494.7        | -559.9        | -539.5        | -495.7        | -506.5        | -502.2        |  |
| Investment income, net              | 111.1               | 157.8         | 127.6         | 191.0         | 235.0         | 209.8         | 174.0         | 128.4         | 109.2         |  |
| Direct, net                         | 244.6               | 284.3         | 253.0         | 297.9         | 321.7         | 285.0         | 245.4         | 235.4         | 259.5         |  |
| Portfolio, net                      | -133.5              | -126.5        | -125.4        | -106.9        | -86.7         | -75.2         | -71.5         | -107.1        | -150.3        |  |
| Other income and transfers, net     | -124.7              | -136.6        | -130.3        | -138.2        | -141.1        | -140.9        | -144.0        | -144.0        | -143.0        |  |

Class I FOMC – Restricted Controlled (FR)

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# Report to the FOMC on Economic Conditions and Monetary Policy



## Book B Monetary Policy: Strategies and Alternatives

March 14, 2013

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Prepared for the Federal Open Market Committee  
by the staff of the Board of Governors of the Federal Reserve System

## Policy Rules and the Staff Projection

Strategies

### Near-Term Prescriptions of Selected Policy Rules

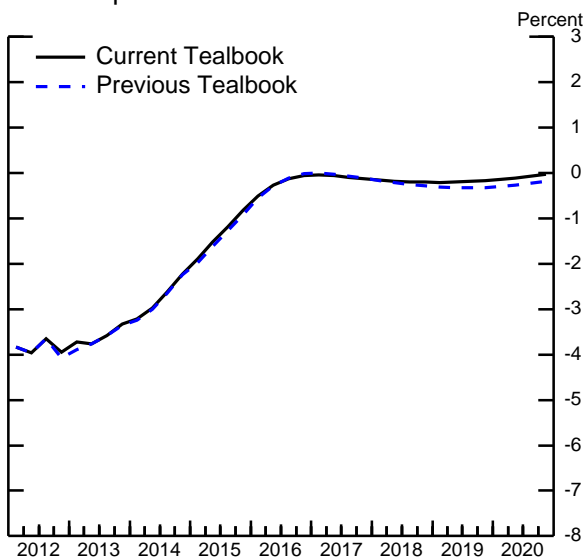
|                                  | Constrained Policy |               | Unconstrained Policy |               |
|----------------------------------|--------------------|---------------|----------------------|---------------|
|                                  | <u>2013Q2</u>      | <u>2013Q3</u> | <u>2013Q2</u>        | <u>2013Q3</u> |
| Taylor (1993) rule               | <b>1.03</b>        | <b>1.35</b>   | <b>1.03</b>          | <b>1.35</b>   |
| <i>Previous Tealbook</i>         | 1.12               | 1.43          | 1.12                 | 1.43          |
| Taylor (1999) rule               | <b>0.13</b>        | <b>0.13</b>   | <b>-0.82</b>         | <b>-0.41</b>  |
| <i>Previous Tealbook</i>         | 0.13               | 0.13          | -0.73                | -0.33         |
| Inertial Taylor (1999) rule      | <b>0.13</b>        | <b>0.13</b>   | <b>0.00</b>          | <b>-0.07</b>  |
| <i>Previous Tealbook outlook</i> | 0.13               | 0.13          | 0.01                 | -0.04         |
| Outcome-based rule               | <b>0.13</b>        | <b>0.13</b>   | <b>-0.06</b>         | <b>-0.10</b>  |
| <i>Previous Tealbook outlook</i> | 0.13               | 0.13          | 0.04                 | 0.04          |
| First-difference rule            | <b>0.22</b>        | <b>0.46</b>   | <b>0.22</b>          | <b>0.46</b>   |
| <i>Previous Tealbook outlook</i> | 0.29               | 0.49          | 0.29                 | 0.49          |
| Nominal income targeting rule    | <b>0.13</b>        | <b>0.13</b>   | <b>-0.55</b>         | <b>-1.01</b>  |
| <i>Previous Tealbook outlook</i> | 0.13               | 0.13          | -0.52                | -0.97         |

### Memo: Equilibrium and Actual Real Federal Funds Rate

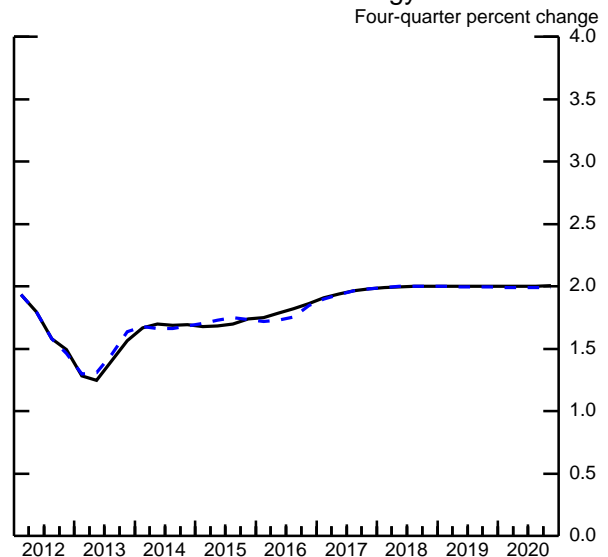
|   | Current<br>Tealbook | <i>Previous<br/>Tealbook</i> |
|---|---------------------|------------------------------|
| Tealbook-consistent FRB/US $r^*$ estimate | -1.76               | -1.83                        |
| Actual real federal funds rate            | -1.36               | -1.33                        |

## Key Elements of the Staff Projection

GDP Gap



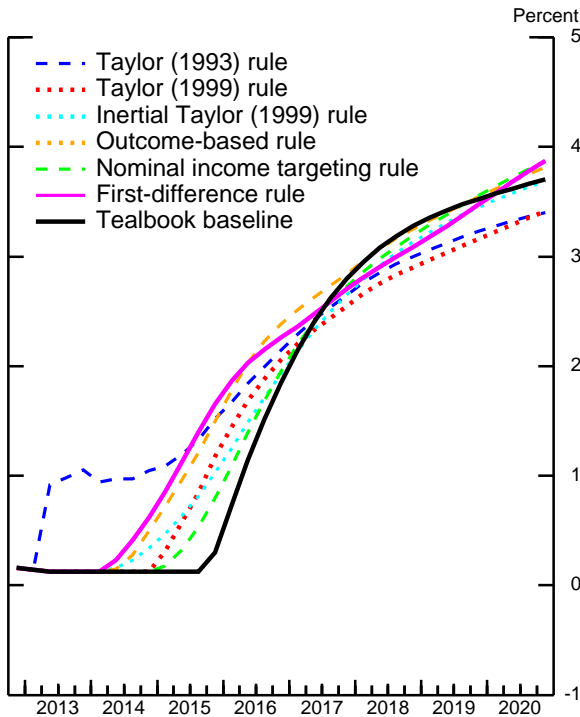
PCE Prices ex. Food and Energy



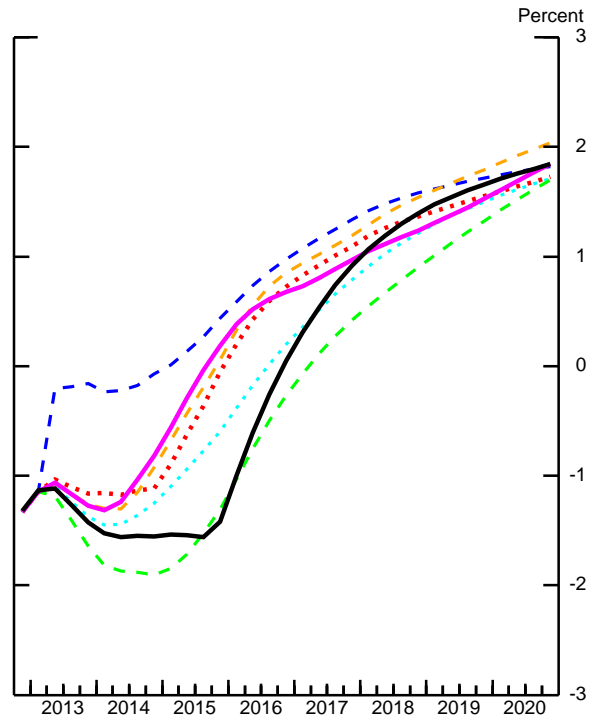
Note: For rules that have the lagged policy rate as a right-hand-side variable, the lines denoted "Previous Tealbook outlook" report rule prescriptions based on the previous Tealbook's staff outlook, but jumping off from the average value for the policy rate thus far in the quarter.

## Policy Rule Simulations without Thresholds

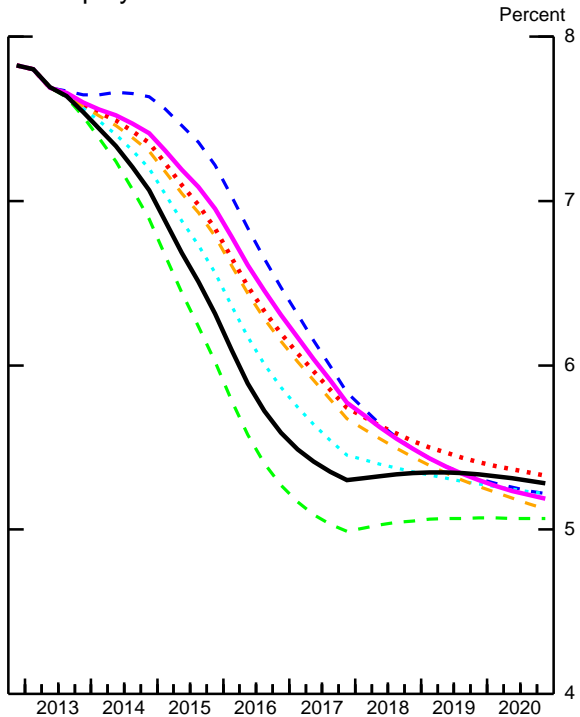
Nominal Federal Funds Rate



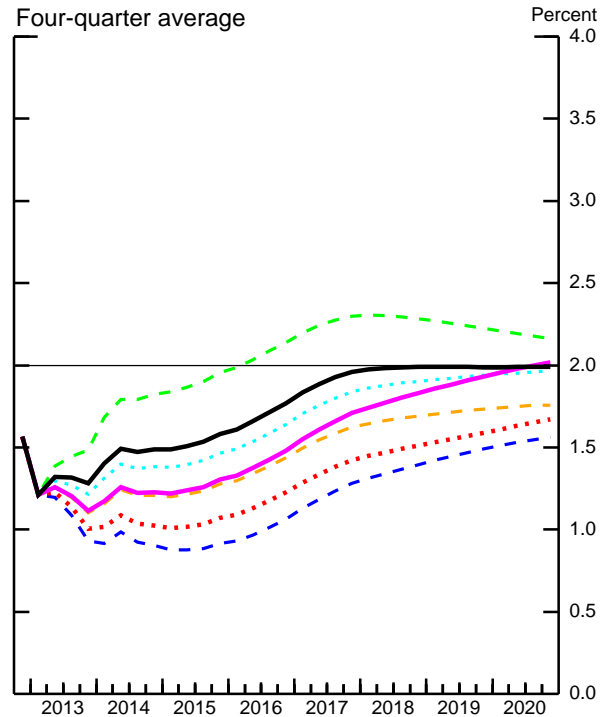
Real Federal Funds Rate



Unemployment Rate



PCE Inflation  
Four-quarter average

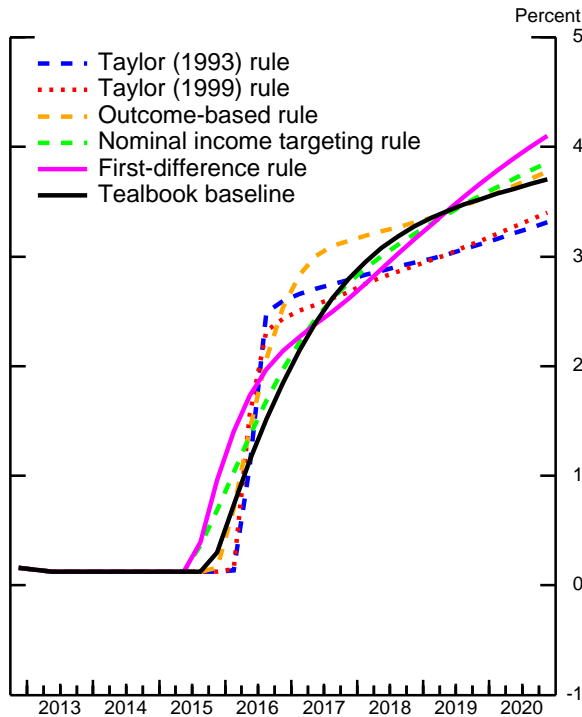


Note: The policy rule simulations in this exhibit are based on rules that respond to core inflation. This choice of rule specification was made in light of the tendency for current and near-term core inflation rates to outperform headline inflation rates as predictors of the medium-term behavior of headline inflation.

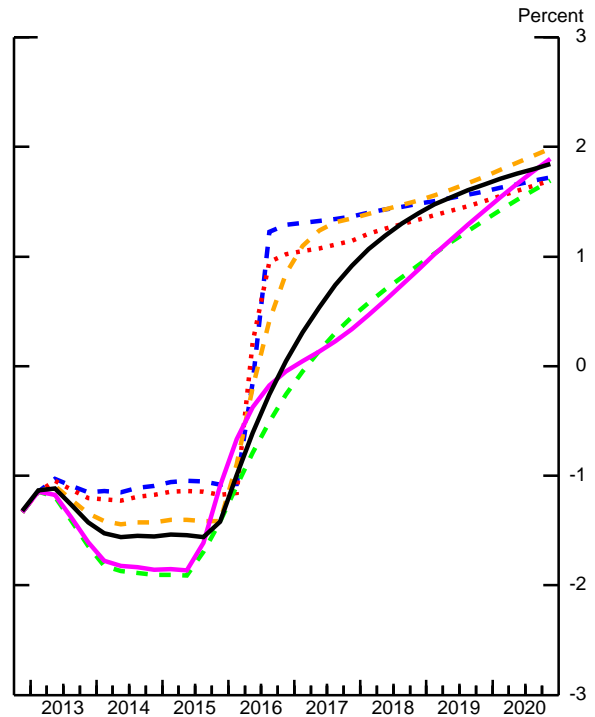


## Policy Rule Simulations with Thresholds

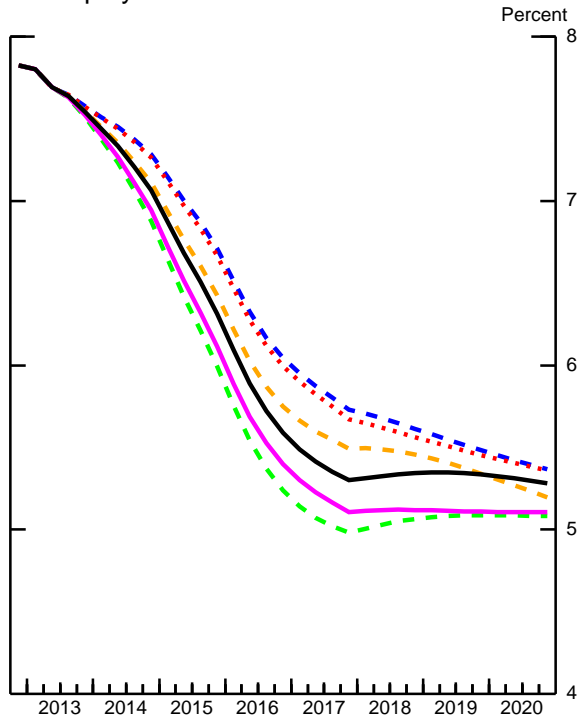
Nominal Federal Funds Rate



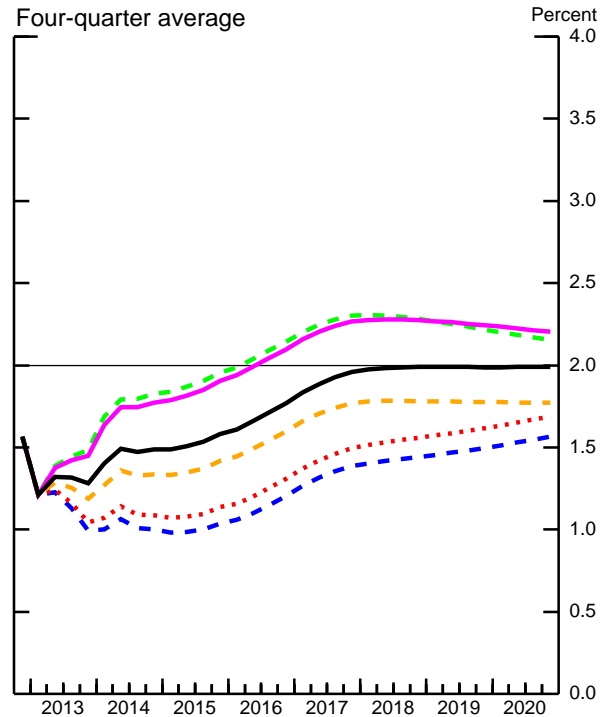
Real Federal Funds Rate



Unemployment Rate



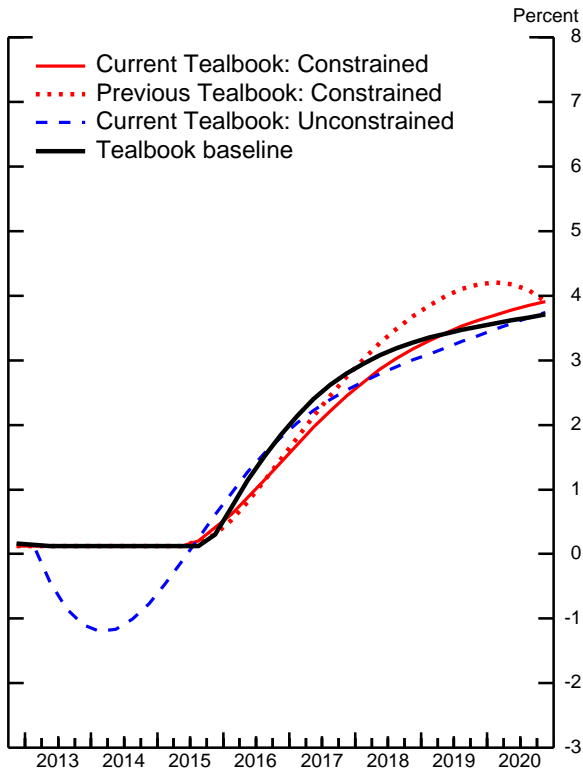
PCE Inflation  
Four-quarter average



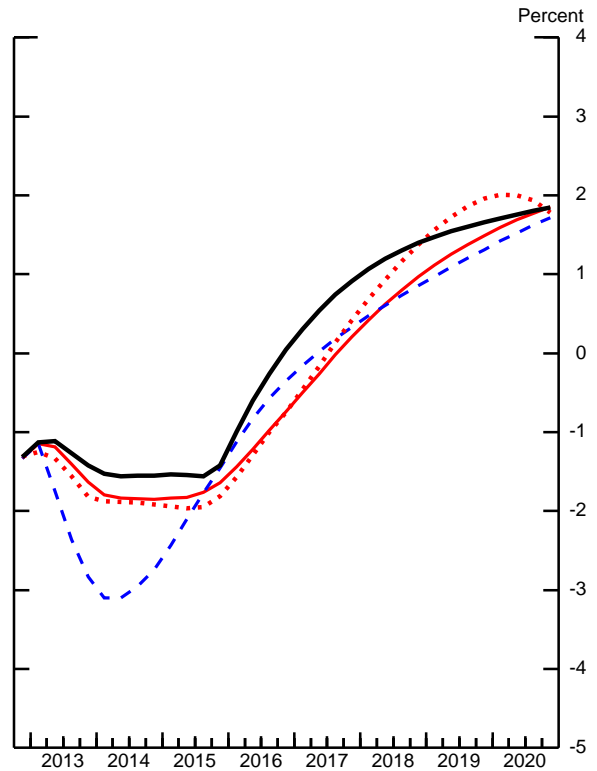
Note: The policy rule simulations in this exhibit are based on rules that respond to core inflation. This choice of rule specification was made in light of the tendency for current and near-term core inflation rates to outperform headline inflation rates as predictors of the medium-term behavior of headline inflation.

## Constrained vs. Unconstrained Optimal Control Policy

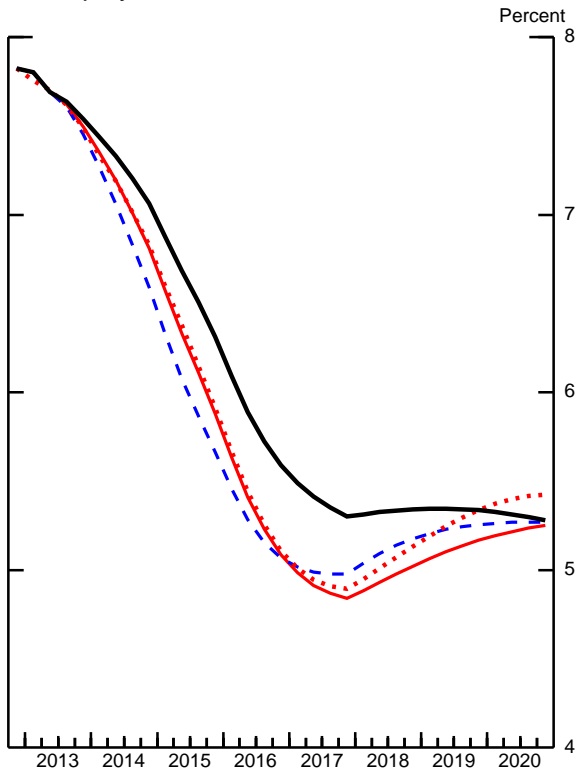
Nominal Federal Funds Rate



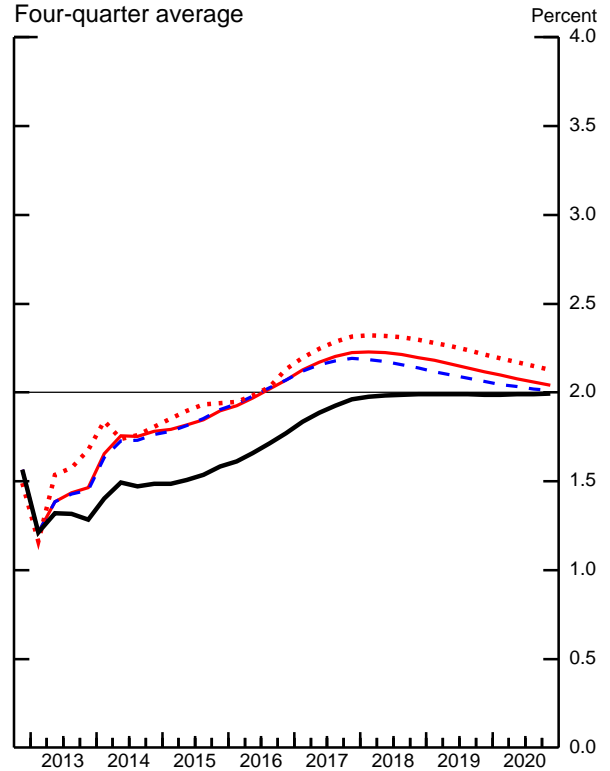
Real Federal Funds Rate



Unemployment Rate

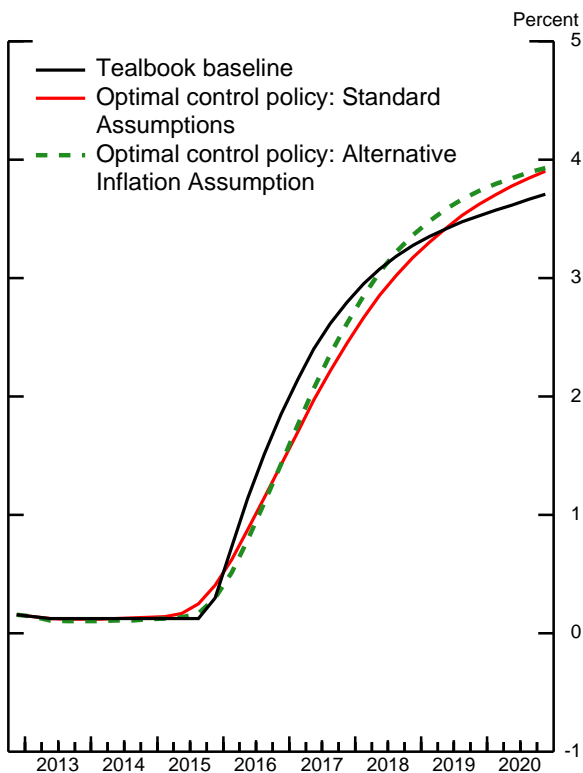


PCE Inflation  
Four-quarter average

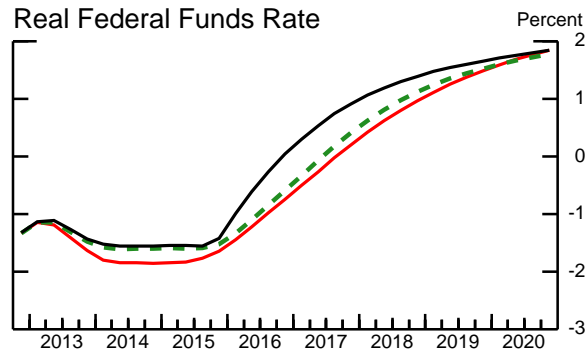


## Constrained Optimal Control Policy under Alternative Inflation Processes

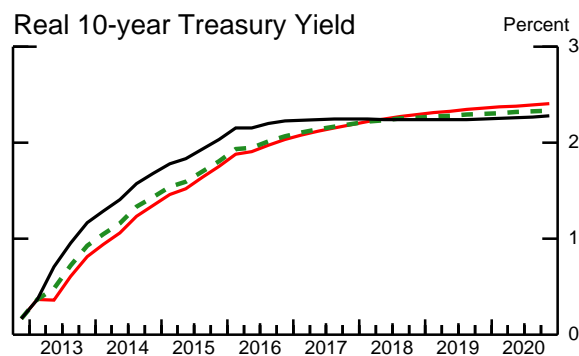
Nominal Federal Funds Rate



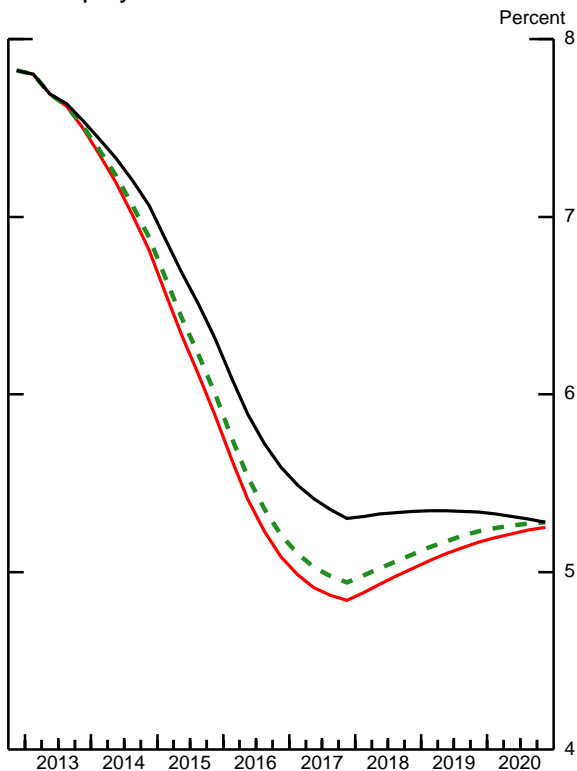
Real Federal Funds Rate



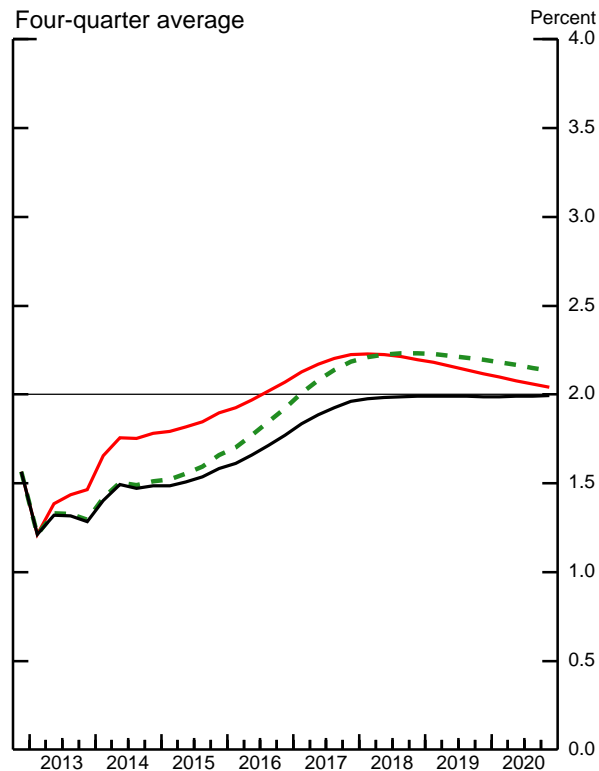
Real 10-year Treasury Yield



Unemployment Rate



PCE Inflation  
Four-quarter average



**Outcomes under Alternative Policies without Thresholds**  
(Percent change, annual rate, from end of preceding period except as noted)

| Measure and scenario                    | 2012 |      |      |      |      |      |
|---|------|------|------|------|------|------|
|   | H2   | 2013 | 2014 | 2015 | 2016 | 2017 |
| <i>Real GDP</i>                         |      |      |      |      |      |      |
| Extended Tealbook baseline <sup>1</sup> | 1.8  | 2.5  | 3.2  | 3.6  | 3.0  | 2.1  |
| Taylor (1993)                           | 1.8  | 2.1  | 2.2  | 3.0  | 3.1  | 2.7  |
| Taylor (1999)                           | 1.8  | 2.3  | 2.7  | 3.1  | 2.9  | 2.4  |
| Inertial Taylor (1999)                  | 1.8  | 2.5  | 2.9  | 3.3  | 3.0  | 2.3  |
| Outcome based                           | 1.8  | 2.4  | 2.7  | 3.1  | 2.9  | 2.5  |
| First difference                        | 1.8  | 2.3  | 2.6  | 3.0  | 2.9  | 2.6  |
| Nominal income targeting                | 1.8  | 2.7  | 3.5  | 3.7  | 3.0  | 2.1  |
| Constrained optimal control             | 1.8  | 2.7  | 3.6  | 3.9  | 3.1  | 2.0  |
| <i>Unemployment rate<sup>2</sup></i>    |      |      |      |      |      |      |
| Extended Tealbook baseline <sup>1</sup> | 7.8  | 7.5  | 7.1  | 6.3  | 5.6  | 5.3  |
| Taylor (1993)                           | 7.8  | 7.6  | 7.6  | 7.2  | 6.5  | 5.8  |
| Taylor (1999)                           | 7.8  | 7.6  | 7.4  | 6.8  | 6.2  | 5.7  |
| Inertial Taylor (1999)                  | 7.8  | 7.6  | 7.2  | 6.6  | 5.9  | 5.5  |
| Outcome based                           | 7.8  | 7.6  | 7.3  | 6.8  | 6.1  | 5.7  |
| First difference                        | 7.8  | 7.6  | 7.4  | 7.0  | 6.3  | 5.8  |
| Nominal income targeting                | 7.8  | 7.5  | 6.9  | 6.0  | 5.3  | 5.0  |
| Constrained optimal control             | 7.8  | 7.5  | 6.8  | 5.9  | 5.1  | 4.8  |
| <i>Total PCE prices</i>                 |      |      |      |      |      |      |
| Extended Tealbook baseline <sup>1</sup> | 1.5  | 1.3  | 1.5  | 1.6  | 1.8  | 2.0  |
| Taylor (1993)                           | 1.5  | 0.9  | 0.9  | 0.9  | 1.1  | 1.3  |
| Taylor (1999)                           | 1.5  | 1.0  | 1.0  | 1.1  | 1.2  | 1.4  |
| Inertial Taylor (1999)                  | 1.5  | 1.2  | 1.4  | 1.5  | 1.6  | 1.8  |
| Outcome based                           | 1.5  | 1.1  | 1.2  | 1.3  | 1.4  | 1.6  |
| First difference                        | 1.5  | 1.1  | 1.2  | 1.3  | 1.5  | 1.7  |
| Nominal income targeting                | 1.5  | 1.5  | 1.8  | 2.0  | 2.1  | 2.3  |
| Constrained optimal control             | 1.5  | 1.5  | 1.8  | 1.9  | 2.1  | 2.2  |
| <i>Core PCE prices</i>                  |      |      |      |      |      |      |
| Extended Tealbook baseline <sup>1</sup> | 1.0  | 1.6  | 1.7  | 1.7  | 1.9  | 2.0  |
| Taylor (1993)                           | 1.0  | 1.2  | 1.1  | 1.1  | 1.2  | 1.3  |
| Taylor (1999)                           | 1.0  | 1.3  | 1.2  | 1.2  | 1.3  | 1.4  |
| Inertial Taylor (1999)                  | 1.0  | 1.5  | 1.6  | 1.6  | 1.7  | 1.9  |
| Outcome based                           | 1.0  | 1.4  | 1.4  | 1.4  | 1.5  | 1.6  |
| First difference                        | 1.0  | 1.4  | 1.4  | 1.5  | 1.6  | 1.7  |
| Nominal income targeting                | 1.0  | 1.8  | 2.0  | 2.1  | 2.2  | 2.3  |
| Constrained optimal control             | 1.0  | 1.8  | 2.0  | 2.1  | 2.2  | 2.2  |
| <i>Federal funds rate<sup>2</sup></i>   |      |      |      |      |      |      |
| Extended Tealbook baseline <sup>1</sup> | 0.2  | 0.1  | 0.1  | 0.3  | 1.8  | 2.8  |
| Taylor (1993)                           | 0.2  | 1.1  | 1.0  | 1.5  | 2.1  | 2.7  |
| Taylor (1999)                           | 0.2  | 0.1  | 0.1  | 1.2  | 2.1  | 2.5  |
| Inertial Taylor (1999)                  | 0.2  | 0.1  | 0.3  | 1.0  | 1.9  | 2.7  |
| Outcome based                           | 0.2  | 0.1  | 0.5  | 1.5  | 2.4  | 2.8  |
| First difference                        | 0.2  | 0.1  | 0.6  | 1.7  | 2.3  | 2.7  |
| Nominal income targeting                | 0.2  | 0.1  | 0.1  | 0.8  | 2.0  | 2.7  |
| Constrained optimal control             | 0.2  | 0.1  | 0.1  | 0.4  | 1.4  | 2.5  |

1. Policy in the Tealbook baseline keeps the federal funds rate at its effective lower bound of 12.5 basis points as long as the unemployment rate is above 6.5 percent and projected one-year-ahead inflation is less than 2.5 percent. Once either threshold is crossed, the federal funds rate follows the prescription of the inertial Taylor (1999) rule.

2. Percent, average for the final quarter of the period.

**Outcomes under Alternative Policies with Thresholds<sup>1</sup>**  
(Percent change, annual rate, from end of preceding period except as noted)

| Measure and scenario                    | 2012 |      |      |      |      |      |
|---|------|------|------|------|------|------|
|   | H2   | 2013 | 2014 | 2015 | 2016 | 2017 |
| <i>Real GDP</i>                         |      |      |      |      |      |      |
| Extended Tealbook baseline <sup>1</sup> | 1.8  | 2.5  | 3.2  | 3.6  | 3.0  | 2.1  |
| Taylor (1993)                           | 1.8  | 2.4  | 2.8  | 3.2  | 2.8  | 2.2  |
| Taylor (1999)                           | 1.8  | 2.4  | 2.8  | 3.3  | 2.8  | 2.2  |
| Outcome based                           | 1.8  | 2.5  | 3.1  | 3.4  | 2.8  | 2.1  |
| First difference                        | 1.8  | 2.6  | 3.4  | 3.7  | 3.0  | 2.2  |
| Nominal income targeting                | 1.8  | 2.7  | 3.5  | 3.8  | 3.0  | 2.1  |
| Constrained optimal control             | 1.8  | 2.7  | 3.6  | 3.9  | 3.1  | 2.0  |
| <i>Unemployment rate<sup>2</sup></i>    |      |      |      |      |      |      |
| Extended Tealbook baseline <sup>1</sup> | 7.8  | 7.5  | 7.1  | 6.3  | 5.6  | 5.3  |
| Taylor (1993)                           | 7.8  | 7.6  | 7.3  | 6.7  | 6.0  | 5.7  |
| Taylor (1999)                           | 7.8  | 7.6  | 7.3  | 6.7  | 6.0  | 5.7  |
| Outcome based                           | 7.8  | 7.5  | 7.1  | 6.4  | 5.8  | 5.5  |
| First difference                        | 7.8  | 7.5  | 6.9  | 6.1  | 5.4  | 5.1  |
| Nominal income targeting                | 7.8  | 7.5  | 6.9  | 6.0  | 5.2  | 5.0  |
| Constrained optimal control             | 7.8  | 7.5  | 6.8  | 5.9  | 5.1  | 4.8  |
| <i>Total PCE prices</i>                 |      |      |      |      |      |      |
| Extended Tealbook baseline <sup>1</sup> | 1.5  | 1.3  | 1.5  | 1.6  | 1.8  | 2.0  |
| Taylor (1993)                           | 1.5  | 1.0  | 1.0  | 1.0  | 1.2  | 1.4  |
| Taylor (1999)                           | 1.5  | 1.0  | 1.1  | 1.1  | 1.3  | 1.5  |
| Outcome based                           | 1.5  | 1.2  | 1.3  | 1.4  | 1.6  | 1.8  |
| First difference                        | 1.5  | 1.4  | 1.8  | 1.9  | 2.1  | 2.3  |
| Nominal income targeting                | 1.5  | 1.5  | 1.8  | 2.0  | 2.1  | 2.3  |
| Constrained optimal control             | 1.5  | 1.5  | 1.8  | 1.9  | 2.1  | 2.2  |
| <i>Core PCE prices</i>                  |      |      |      |      |      |      |
| Extended Tealbook baseline <sup>1</sup> | 1.0  | 1.6  | 1.7  | 1.7  | 1.9  | 2.0  |
| Taylor (1993)                           | 1.0  | 1.3  | 1.2  | 1.2  | 1.3  | 1.4  |
| Taylor (1999)                           | 1.0  | 1.3  | 1.3  | 1.3  | 1.4  | 1.5  |
| Outcome based                           | 1.0  | 1.5  | 1.5  | 1.6  | 1.7  | 1.8  |
| First difference                        | 1.0  | 1.7  | 2.0  | 2.1  | 2.2  | 2.3  |
| Nominal income targeting                | 1.0  | 1.8  | 2.0  | 2.1  | 2.2  | 2.3  |
| Constrained optimal control             | 1.0  | 1.8  | 2.0  | 2.1  | 2.2  | 2.2  |
| <i>Federal funds rate<sup>2</sup></i>   |      |      |      |      |      |      |
| Extended Tealbook baseline <sup>1</sup> | 0.2  | 0.1  | 0.1  | 0.3  | 1.8  | 2.8  |
| Taylor (1993)                           | 0.2  | 0.1  | 0.1  | 0.1  | 2.6  | 2.8  |
| Taylor (1999)                           | 0.2  | 0.1  | 0.1  | 0.1  | 2.4  | 2.7  |
| Outcome based                           | 0.2  | 0.1  | 0.1  | 0.2  | 2.5  | 3.1  |
| First difference                        | 0.2  | 0.1  | 0.1  | 1.0  | 2.1  | 2.6  |
| Nominal income targeting                | 0.2  | 0.1  | 0.1  | 0.7  | 2.0  | 2.8  |
| Constrained optimal control             | 0.2  | 0.1  | 0.1  | 0.4  | 1.4  | 2.5  |

1. With the exception of constrained optimal control, monetary policy is specified to keep the federal funds rate at its effective lower bound of 12.5 basis points as long as the unemployment rate is above 6.5 percent and projected one-year-ahead inflation is less than 2.5 percent. Once either of these thresholds is crossed, the federal funds rate follows the prescriptions of the specified rule. Policy in the Tealbook baseline also uses these threshold conditions and switches to the inertial Taylor (1999) rule once either of these thresholds is crossed.

2. Percent, average for the final quarter of the period.

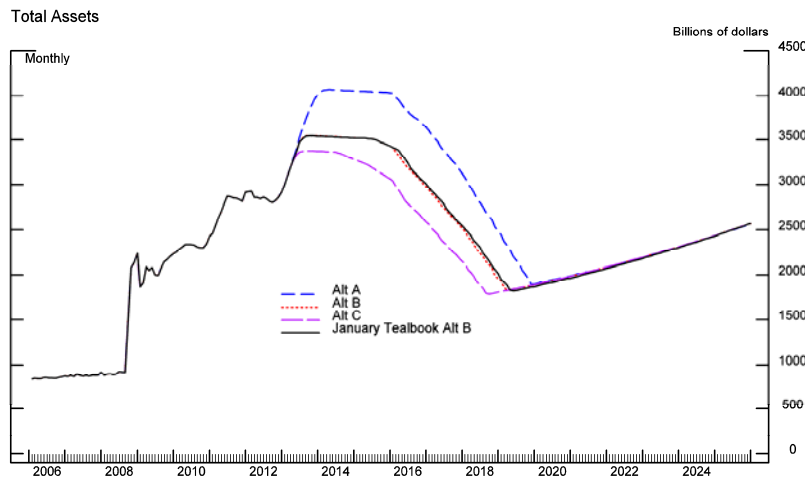
On balance, M2 is projected to increase at a pace below that of nominal income over the forecast period. For the remainder of 2013 and through 2014, we expect growth of M2 and its largest component, liquid deposits, to moderate relative to the rapid expansion observed over recent years. We anticipate that a gradual improvement in global financial conditions will encourage investors to shift their portfolios away from the safe and liquid assets in M2 toward riskier financial assets. M2 growth is expected to slow further toward the end of 2015 in response to the projected increase in short-term market interest rates and the accompanying rise in the opportunity cost of holding money.

| Growth Rates for M2                        |                    |
|--|--------------------|
| (Percent, seasonally adjusted annual rate) |                    |
| Monthly Growth Rates                       | Tealbook Forecast* |
| Jul-12                                     | 11.1               |
| Aug-12                                     | 8.7                |
| Sep-12                                     | 9.1                |
| Oct-12                                     | 9.9                |
| Nov-12                                     | 5.9                |
| Dec-12                                     | 12.7               |
| Jan-13                                     | 4.3                |
| Feb-13                                     | -3.1               |
| Mar-13                                     | -0.4               |
| Apr-13                                     | 5.0                |
| May-13                                     | 5.0                |
| Jun-13                                     | 5.2                |
| Quarterly Growth Rates                     |                    |
| 2012 Q3                                    | 8.6                |
| 2012 Q4                                    | 9.1                |
| 2013 Q1                                    | 4.2                |
| 2013 Q2                                    | 2.9                |
| 2013 Q3                                    | 1.9                |
| 2013 Q4                                    | 2.1                |
| 2014 Q1                                    | 2.0                |
| 2014 Q2                                    | 2.4                |
| 2014 Q3                                    | 2.8                |
| 2014 Q4                                    | 3.0                |
| Annual Growth Rates                        |                    |
| 2012                                       | 7.5                |
| 2013                                       | 2.8                |
| 2014                                       | 2.6                |
| 2015                                       | 1.7                |

\*This forecast is consistent with nominal GDP and interest rates in the Tealbook forecast. Actual data through March 4, 2013; projections thereafter.

## BALANCE SHEET AND MONETARY BASE

The staff has prepared three scenarios for the Federal Reserve's balance sheet that correspond to Alternatives A, B, and C. All three policy alternatives include additional asset purchases.<sup>1</sup> Alternative B continues purchases of \$45 billion per month of longer-term Treasury securities and \$40 billion per month of agency MBS. Alternative A increases the pace of securities purchases, while Alternative C decreases the pace. All three alternatives maintain the 0 to ¼ percent target range for the federal funds rate and retain threshold-based forward guidance for the funds rate based on the unemployment rate and the outlook for inflation. Projections under each scenario are based on assumptions about the trajectory of various components of the balance sheet.<sup>2</sup> Details of these assumptions, as well as projections for each major component of the balance sheet, can be found in the Appendix that follows this section.<sup>3</sup>



<sup>1</sup> The Committee is assumed to maintain for now its existing policy of rolling over maturing Treasury securities at auction and of reinvesting principal payments from agency MBS and agency debt securities into agency MBS. The effect of assuming that maturing Treasury securities are rolled over at auction is very modest; as a result of the maturity extension program, there are currently less than \$5 billion of Treasury securities in the SOMA portfolio that mature before January 2016.

<sup>2</sup> The projections assume that the Committee follows an exit strategy consistent with exit principles articulated in the minutes of the June 2011 FOMC meeting. For alternative assumptions about the exit of unconventional monetary policy and the implications for the evolution of the balance sheet, see the memo by K. Femia, J. Ihrig, J. Kandrak, E. Klee, C. Miller, and J. Remache, titled "Exit Strategy Considerations," which was distributed to the Committee on March 5, 2013.

<sup>3</sup> The entire expected path of the portfolio has implications for the evolution of interest rates, economic activity, and Federal Reserve income. To the extent that market participants have different expectations for the size, pace, and composition of purchases as well as the execution of the exit strategy than assumed in these scenarios, the resulting effects on interest rates, economic activity, and Federal Reserve income will differ from those presented here.

Growth Rates for the Monetary Base

| Date | Alternative B | Alternative A | Alternative C | January<br>Alternative B |
|------|---------------|---------------|---------------|--------------------------|
|------|---------------|---------------|---------------|--------------------------|

Percent, annual rate

Monthly

|        |      |      |      |      |
|--------|------|------|------|------|
| Dec-12 | 13.7 | 13.7 | 13.7 | 14.7 |
| Jan-13 | 21.5 | 21.5 | 21.5 | 23.5 |
| Feb-13 | 37.3 | 37.3 | 37.3 | 63.4 |
| Mar-13 | 56.1 | 56.3 | 55.4 | 69.6 |
| Apr-13 | 30.3 | 33.3 | 27.5 | 19.0 |
| May-13 | 36.2 | 41.3 | 26.6 | 33.9 |
| Jun-13 | 51.5 | 56.3 | 32.3 | 50.1 |
| Jul-13 | 17.3 | 31.3 | -0.5 | 15.5 |
| Aug-13 | 17.5 | 43.1 | 7.9  | 17.5 |

Quarterly

|         |      |      |      |      |
|---------|------|------|------|------|
| 2012 Q4 | -0.5 | -0.5 | -0.5 | -0.8 |
| 2013 Q1 | 26.7 | 26.8 | 26.6 | 35.3 |
| 2013 Q2 | 41.8 | 44.7 | 36.0 | 43.0 |
| 2013 Q3 | 25.8 | 42.3 | 11.7 | 24.8 |
| 2013 Q4 | -0.1 | 26.7 | -2.4 | 0.7  |
| 2014 Q1 | -1.7 | 12.1 | -1.9 | -2.3 |
| 2014 Q2 | 0.6  | 3.3  | 0.6  | 1.5  |
| 2014 Q3 | 0.8  | 0.8  | -0.8 | 0.3  |

Annual - Q4 to Q4

|      |       |       |       |       |
|------|-------|-------|-------|-------|
| 2012 | 0.3   | 0.3   | 0.3   | 0.4   |
| 2013 | 25.4  | 39.9  | 18.9  | 28.2  |
| 2014 | -0.9  | 3.3   | -2.0  | -0.8  |
| 2015 | -2.0  | -0.8  | -5.1  | -2.0  |
| 2016 | -11.6 | -7.6  | -16.1 | -10.5 |
| 2017 | -16.7 | -14.6 | -18.5 | -16.3 |
| 2018 | -23.8 | -21.6 | -21.5 | -21.7 |
| 2019 | -9.6  | -27.9 | 4.2   | -12.5 |
| 2020 | 4.3   | 1.1   | 4.3   | 4.3   |
| 2021 | 4.5   | 4.3   | 4.5   | 4.5   |
| 2022 | 4.5   | 4.4   | 4.5   | 4.6   |
| 2023 | 4.5   | 4.4   | 4.5   | 4.6   |
| 2024 | 4.4   | 4.4   | 4.4   | 4.5   |
| 2025 | 4.4   | 4.4   | 4.4   | 4.5   |

Note: Not seasonally adjusted.

Projections



| 10-Year Treasury Term Premium Effect |               |               |               |                          |
|--------------------------------------|---------------|---------------|---------------|--------------------------|
| Date                                 | Alternative B | Alternative A | Alternative C | January<br>Alternative B |

Basis Points

Quarterly Averages

|         |      |      |     |      |
|---------|------|------|-----|------|
| 2013 Q1 | -107 | -117 | -81 | -109 |
| 2013 Q2 | -98  | -115 | -78 | -99  |
| 2013 Q3 | -87  | -111 | -74 | -88  |
| 2013 Q4 | -82  | -106 | -69 | -83  |
| 2014 Q1 | -77  | -100 | -64 | -78  |
| 2014 Q2 | -72  | -94  | -59 | -73  |
| 2014 Q3 | -68  | -89  | -55 | -68  |
| 2014 Q4 | -63  | -83  | -51 | -63  |
| 2015 Q1 | -58  | -78  | -46 | -59  |
| 2015 Q2 | -54  | -73  | -42 | -54  |
| 2015 Q3 | -50  | -68  | -39 | -50  |
| 2015 Q4 | -46  | -63  | -35 | -46  |
| 2016 Q4 | -32  | -45  | -24 | -32  |
| 2017 Q4 | -22  | -31  | -16 | -21  |
| 2018 Q4 | -16  | -22  | -12 | -15  |
| 2019 Q4 | -12  | -16  | -11 | -12  |
| 2020 Q4 | -11  | -13  | -10 | -10  |
| 2021 Q4 | -10  | -11  | -9  | -9   |
| 2022 Q4 | -8   | -9   | -8  | -8   |
| 2023 Q4 | -6   | -7   | -6  | -6   |
| 2024 Q4 | -5   | -6   | -5  | -5   |
| 2025 Q4 | -3   | -4   | -3  | -3   |

Projections

# Federal Reserve Balance Sheet End-of-Year Projections -- Alternative B

Billions of dollars

|   | <u>Feb 28, 2013</u> | <u>2013</u> | <u>2015</u> | <u>2017</u> | <u>2019</u> | <u>2021</u> | <u>2023</u> | <u>2025</u> |
|---|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Total assets  | 3,102               | 3,543       | 3,432       | 2,515       | 1,889       | 2,084       | 2,311       | 2,569       |
| Selected assets   |                     |             |             |             |             |             |             |             |
| Liquidity programs for financial firms  | 8                   | 8           | 0           | 0           | 0           | 0           | 0           | 0           |
| Primary, secondary, and seasonal credit   | 0                   | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| Central bank liquidity swaps  | 8                   | 8           | 0           | 0           | 0           | 0           | 0           | 0           |
| Term Asset-Backed Securities Loan Facility (TALF)   | 1                   | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| Net portfolio holdings of Maiden Lane LLC,<br>Maiden Lane II LLC, and Maiden Lane III LLC | 1                   | 1           | 0           | 0           | 0           | 0           | 0           | 0           |
| Securities held outright  | 2,844               | 3,274       | 3,209       | 2,337       | 1,749       | 1,969       | 2,205       | 2,471       |
| U.S. Treasury securities  | 1,755               | 1,930       | 1,929       | 1,521       | 1,410       | 1,969       | 2,205       | 2,471       |
| Agency debt securities  | 74                  | 57          | 33          | 4           | 2           | 0           | 0           | 0           |
| Agency mortgage-backed securities   | 1,016               | 1,287       | 1,247       | 812         | 337         | 0           | 0           | 0           |
| Net portfolio holdings of TALF LLC  | 1                   | 1           | 0           | 0           | 0           | 0           | 0           | 0           |
| Total other assets  | 246                 | 258         | 223         | 178         | 140         | 115         | 106         | 98          |
| Total liabilities   | 3,047               | 3,480       | 3,349       | 2,405       | 1,743       | 1,892       | 2,056       | 2,233       |
| Selected liabilities  |                     |             |             |             |             |             |             |             |
| Federal Reserve notes in circulation  | 1,129               | 1,187       | 1,337       | 1,467       | 1,594       | 1,743       | 1,908       | 2,084       |
| Reverse repurchase agreements   | 97                  | 100         | 100         | 100         | 100         | 100         | 100         | 100         |
| Deposits with Federal Reserve Banks   | 1,809               | 2,182       | 1,901       | 827         | 39          | 39          | 39          | 39          |
| Reserve balances held by depository institutions  | 1,696               | 2,081       | 1,887       | 814         | 25          | 25          | 25          | 25          |
| U.S. Treasury, General Account  | 82                  | 93          | 5           | 5           | 5           | 5           | 5           | 5           |
| Other Deposits  | 31                  | 9           | 9           | 9           | 9           | 9           | 9           | 9           |
| Interest on Federal Reserve Notes due<br>to U.S. Treasury                                 | 1                   | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| Total capital   | 55                  | 63          | 83          | 110         | 146         | 192         | 255         | 337         |

Projections

Source: Federal Reserve H.4.1 statistical releases and staff calculations.

Note: Components may not sum to totals due to rounding.

# Federal Reserve Balance Sheet End-of-Year Projections -- Alternative A

Billions of dollars

|   | <u>Feb 28, 2013</u> | <u>2013</u> | <u>2015</u> | <u>2017</u> | <u>2019</u> | <u>2021</u> | <u>2023</u> | <u>2025</u> |
|---|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Total assets  | 3,102               | 4,011       | 4,035       | 3,126       | 1,898       | 2,086       | 2,308       | 2,565       |
| Selected assets   |                     |             |             |             |             |             |             |             |
| Liquidity programs for financial firms  | 8                   | 8           | 0           | 0           | 0           | 0           | 0           | 0           |
| Primary, secondary, and seasonal credit   | 0                   | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| Central bank liquidity swaps  | 8                   | 8           | 0           | 0           | 0           | 0           | 0           | 0           |
| Term Asset-Backed Securities Loan Facility (TALF)   | 1                   | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| Net portfolio holdings of Maiden Lane LLC,<br>Maiden Lane II LLC, and Maiden Lane III LLC | 1                   | 1           | 0           | 0           | 0           | 0           | 0           | 0           |
| Securities held outright  | 2,844               | 3,721       | 3,788       | 2,927       | 1,743       | 1,964       | 2,196       | 2,462       |
| U.S. Treasury securities  | 1,755               | 2,192       | 2,206       | 1,794       | 1,176       | 1,964       | 2,196       | 2,462       |
| Agency debt securities  | 74                  | 57          | 33          | 4           | 2           | 0           | 0           | 0           |
| Agency mortgage-backed securities   | 1,016               | 1,471       | 1,549       | 1,129       | 564         | 0           | 0           | 0           |
| Net portfolio holdings of TALF LLC  | 1                   | 1           | 0           | 0           | 0           | 0           | 0           | 0           |
| Total other assets  | 246                 | 280         | 247         | 199         | 155         | 122         | 112         | 103         |
| Total liabilities   | 3,047               | 3,948       | 3,952       | 3,016       | 1,753       | 1,894       | 2,054       | 2,228       |
| Selected liabilities  |                     |             |             |             |             |             |             |             |
| Federal Reserve notes in circulation  | 1,129               | 1,187       | 1,337       | 1,479       | 1,603       | 1,744       | 1,905       | 2,079       |
| Reverse repurchase agreements   | 97                  | 100         | 100         | 100         | 100         | 100         | 100         | 100         |
| Deposits with Federal Reserve Banks   | 1,809               | 2,649       | 2,502       | 1,425       | 39          | 39          | 39          | 39          |
| Reserve balances held by depository institutions  | 1,696               | 2,548       | 2,400       | 1,412       | 25          | 25          | 25          | 25          |
| U.S. Treasury, General Account  | 82                  | 93          | 93          | 5           | 5           | 5           | 5           | 5           |
| Other Deposits  | 31                  | 9           | 9           | 9           | 9           | 9           | 9           | 9           |
| Interest on Federal Reserve Notes due<br>to U.S. Treasury                                 | 1                   | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| Total capital   | 55                  | 63          | 83          | 110         | 146         | 192         | 255         | 337         |

Source: Federal Reserve H.4.1 statistical releases and staff calculations.

Note: Components may not sum to totals due to rounding.

# Federal Reserve Balance Sheet End-of-Year Projections -- Alternative C

Billions of dollars

|   | <u>Feb 28, 2013</u> | <u>2013</u> | <u>2015</u> | <u>2017</u> | <u>2019</u> | <u>2021</u> | <u>2023</u> | <u>2025</u> |
|---|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Total assets  | 3,102               | 3,374       | 3,068       | 2,152       | 1,889       | 2,084       | 2,311       | 2,570       |
| Selected assets   |                     |             |             |             |             |             |             |             |
| Liquidity programs for financial firms  | 8                   | 8           | 0           | 0           | 0           | 0           | 0           | 0           |
| Primary, secondary, and seasonal credit   | 0                   | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| Central bank liquidity swaps  | 8                   | 8           | 0           | 0           | 0           | 0           | 0           | 0           |
| Term Asset-Backed Securities Loan Facility (TALF)   | 1                   | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| Net portfolio holdings of Maiden Lane LLC,<br>Maiden Lane II LLC, and Maiden Lane III LLC | 1                   | 1           | 0           | 0           | 0           | 0           | 0           | 0           |
| Securities held outright  | 2,844               | 3,118       | 2,863       | 1,989       | 1,761       | 1,973       | 2,209       | 2,474       |
| U.S. Treasury securities  | 1,755               | 1,843       | 1,839       | 1,443       | 1,666       | 1,973       | 2,209       | 2,474       |
| Agency debt securities  | 74                  | 57          | 33          | 4           | 2           | 0           | 0           | 0           |
| Agency mortgage-backed securities   | 1,016               | 1,218       | 991         | 542         | 93          | 0           | 0           | 0           |
| Net portfolio holdings of TALF LLC  | 1                   | 1           | 0           | 0           | 0           | 0           | 0           | 0           |
| Total other assets  | 246                 | 245         | 205         | 162         | 128         | 111         | 103         | 95          |
| Total liabilities   | 3,047               | 3,311       | 2,985       | 2,041       | 1,744       | 1,892       | 2,057       | 2,233       |
| Selected liabilities  |                     |             |             |             |             |             |             |             |
| Federal Reserve notes in circulation  | 1,129               | 1,187       | 1,337       | 1,467       | 1,594       | 1,743       | 1,908       | 2,084       |
| Reverse repurchase agreements   | 97                  | 100         | 100         | 100         | 100         | 100         | 100         | 100         |
| Deposits with Federal Reserve Banks   | 1,809               | 2,012       | 1,536       | 463         | 39          | 39          | 39          | 39          |
| Reserve balances held by depository institutions  | 1,696               | 1,910       | 1,522       | 450         | 25          | 25          | 25          | 25          |
| U.S. Treasury, General Account  | 82                  | 93          | 5           | 5           | 5           | 5           | 5           | 5           |
| Other Deposits  | 31                  | 9           | 9           | 9           | 9           | 9           | 9           | 9           |
| Interest on Federal Reserve Notes due<br>to U.S. Treasury                                 | 1                   | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| Total capital   | 55                  | 63          | 83          | 110         | 146         | 192         | 255         | 337         |

Projections

Source: Federal Reserve H.4.1 statistical releases and staff calculations.

Note: Components may not sum to totals due to rounding.