

### **Prefatory Note**

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Class II FOMC – Restricted (FR)

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# Report to the FOMC on Economic Conditions and Monetary Policy



## Book A

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

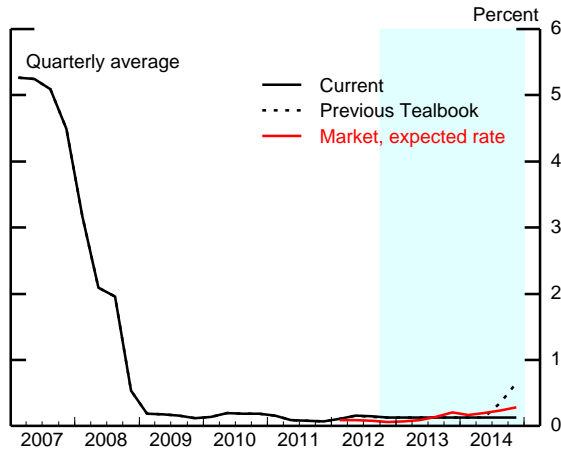
October 17, 2012

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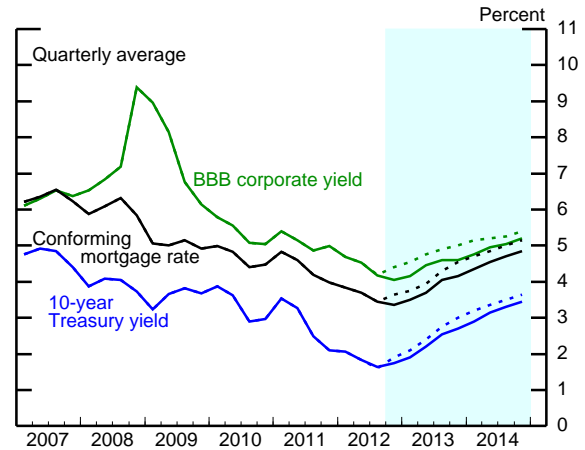
Prepared for the Federal Open Market Committee  
by the staff of the Board of Governors of the Federal Reserve System

# Key Background Factors underlying the Baseline Staff Projection

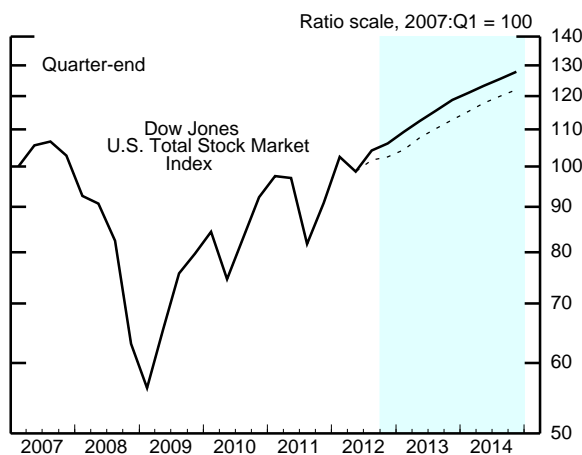
## Federal Funds Rate



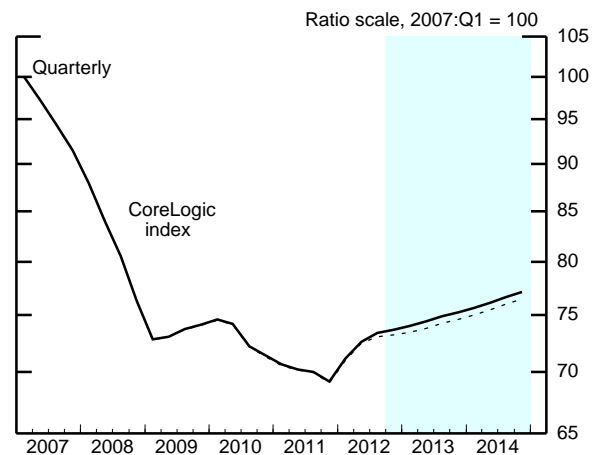
## Long-Term Interest Rates



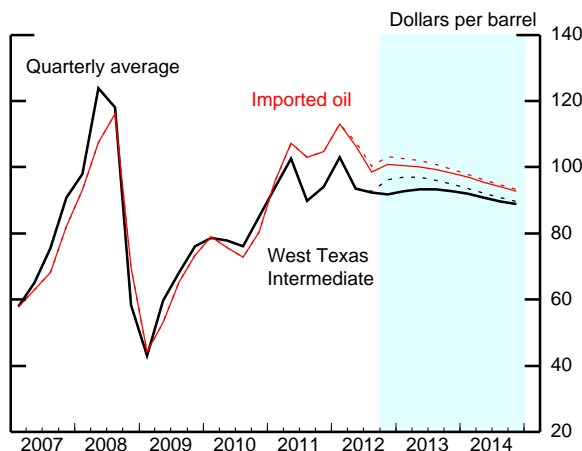
## Equity Prices



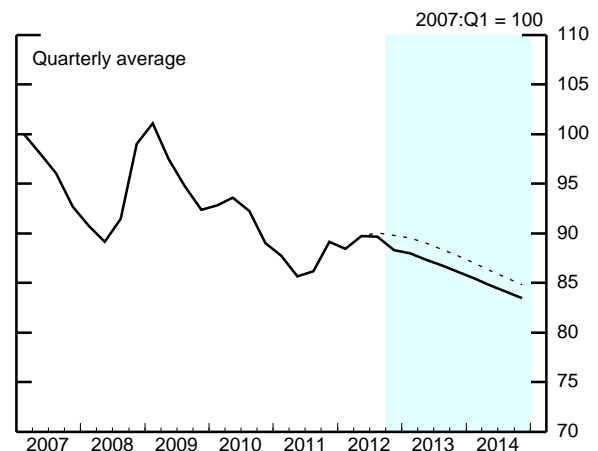
## House Prices



## Crude Oil Prices

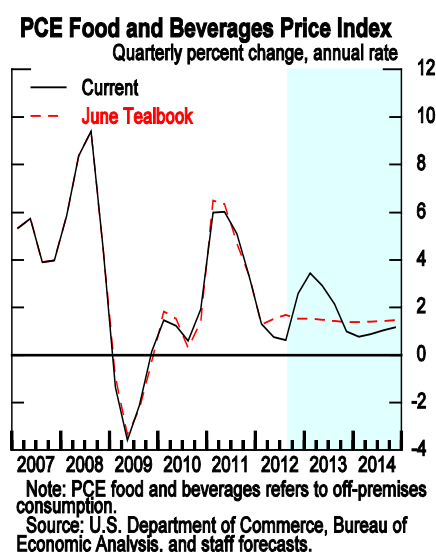
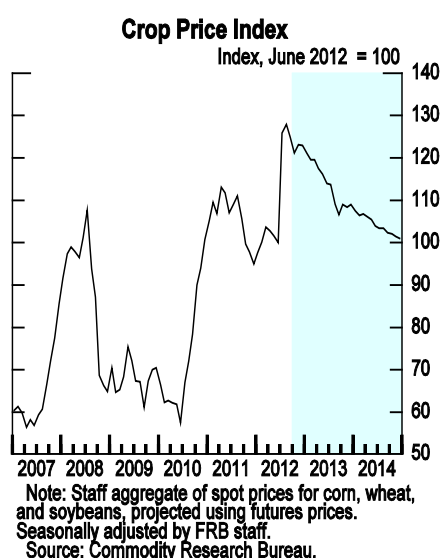


## Broad Real Dollar



process and the difficulties of allocating production across quarters presents a measurement challenge for the Bureau of Economic Analysis. Our best guess is that the adverse effect of the drought on GDP will be registered mainly in the second half of this year, trimming the change in real GDP over that period by roughly  $\frac{1}{4}$  percentage point at an annual rate.<sup>2</sup> We expect that this shock will be reversed early next year, as crop production is assumed to rebound to normal.

The drought-related spike in crop prices has more than reversed the price declines since late 2011 that reflected the market's anticipation of a rebound in production following that year's disappointing harvest.<sup>3</sup> Looking forward, futures prices tilt down sharply, suggesting that market participants anticipate that crop prices will retrace almost all of this season's run-up by the end of next year. The projected transitory nature of the surge in farm commodity prices, together with the relatively slow pass-through of grain costs into retail food prices, damp the projected swing in consumer food prices in the Tealbook forecast. In addition, we expect that adjustments by livestock producers, who reportedly have been selling off breeding stock in response to poor pasture conditions and high grain costs, will hold down meat prices in the near term, providing some offset to the effects of higher grain prices—although eventually the reduction in livestock herds will boost meat prices as well. On balance, our models suggest that the drought-related surge in farm prices will begin to show through to PCE food prices shortly (the black line in the lower-right figure), boosting PCE food inflation to about  $2\frac{1}{2}$  percent in the fourth quarter and a little more than 3 percent over the first half of 2013. These increases will add roughly  $\frac{1}{4}$  percentage point to overall PCE inflation over that interval. Afterward, food price inflation is projected to slow, falling back to near our June, pre-drought projection (the red dashed line) by the end of 2013.



<sup>2</sup> The Bureau of Economic Analysis also put a little of the drought effect into the second quarter.

<sup>3</sup> The surge in crop prices this year, which primarily reflects the shortfall in domestic supply, is considerably smaller than the increases in crop prices in either 2007 to 2008 or 2010 to 2011, periods when the upward pressure on crop prices came in large part from burgeoning world demand.

### Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

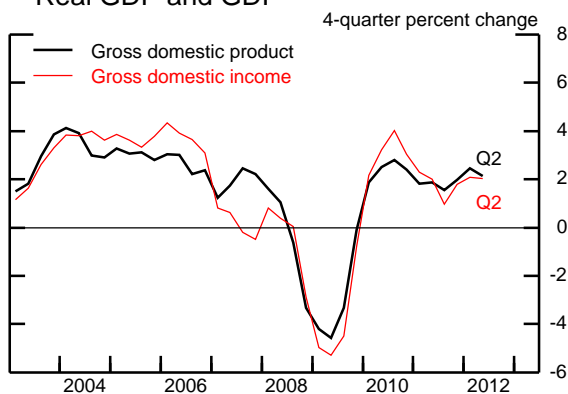
Measure	2012:Q3		2012:Q4		2013:Q1	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
<b>Real GDP</b>	<b>1.3</b>	<b>2.0</b>	<b>1.7</b>	<b>2.0</b>	<b>2.0</b>	<b>1.8</b>
Private domestic final purchases	2.1	2.1	2.2	3.1	1.3	1.4
Personal consumption expenditures	2.3	2.3	2.2	3.1	1.1	1.1
Residential investment	9.7	14.3	5.5	13.9	10.5	13.4
Business fixed investment	-1.0	-2.5	1.5	.8	.6	1.0
Government purchases	-1.7	.6	-1.1	-1.6	-1.5	-1.5
<i>Contributions to change in real GDP</i>						
Inventory investment <sup>1</sup>	-.1	.1	.2	.0	1.2	.8
Net exports <sup>1</sup>	.0	.0	-.2	-.2	.0	.1
<b>Unemployment Rate<sup>2</sup></b>	<b>8.3</b>	<b>8.1</b>	<b>8.3</b>	<b>8.0</b>	<b>8.2</b>	<b>8.0</b>
<b>PCE Chain Price Index</b>	<b>1.9</b>	<b>1.7</b>	<b>1.7</b>	<b>2.1</b>	<b>1.2</b>	<b>.9</b>
Ex. food and energy	1.3	1.2	1.5	1.4	1.6	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.

Change in Private Payroll Employment



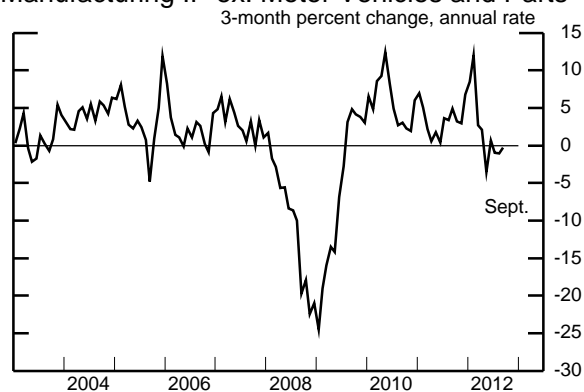
Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

Unemployment Rate



Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

Manufacturing IP ex. Motor Vehicles and Parts

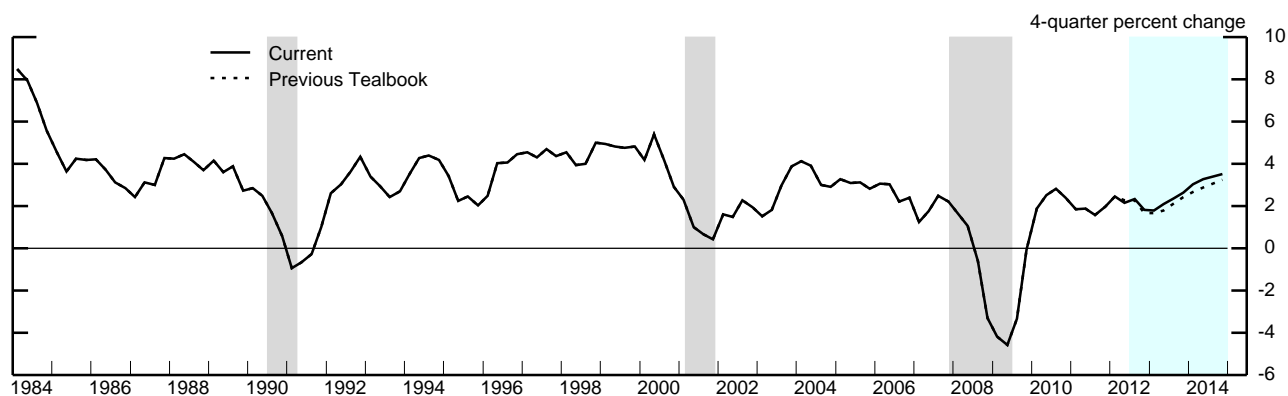


Source: Federal Reserve Board, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

**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
		H1	H2		
<b>Real GDP</b>	<b>2.0</b>	<b>1.6</b>	<b>2.0</b>	<b>2.6</b>	<b>3.5</b>
Previous Tealbook	2.0	1.8	1.5	2.4	3.2
Final sales	1.7	2.1	2.0	2.5	3.5
Previous Tealbook	1.7	2.1	1.4	2.1	3.1
Personal consumption expenditures	1.9	2.0	2.7	2.8	3.7
Previous Tealbook	1.9	2.1	2.3	2.4	3.4
Residential investment	3.9	14.3	14.1	14.8	13.2
Previous Tealbook	3.9	14.3	7.6	11.9	12.4
Nonresidential structures	6.9	6.6	-4.2	2.7	2.3
Previous Tealbook	6.9	6.5	-2.3	2.2	2.2
Equipment and software	11.4	5.1	.5	4.2	7.5
Previous Tealbook	11.4	4.8	1.3	5.1	7.2
Federal purchases	-4.2	-2.3	-1.4	-4.2	-4.2
Previous Tealbook	-4.2	-2.2	-2.8	-4.2	-4.3
State and local purchases	-2.7	-1.6	.0	.3	.9
Previous Tealbook	-2.7	-1.6	-.5	.3	.9
Exports	4.3	4.8	1.1	5.1	6.2
Previous Tealbook	4.3	5.2	3.3	4.5	5.7
Imports	3.5	2.9	1.4	3.9	5.0
Previous Tealbook	3.5	3.0	3.3	4.2	4.8
Contributions to change in real GDP (percentage points)					
Inventory change	.3	-.4	.1	.2	.0
Previous Tealbook	.3	-.3	.0	.3	.1
Net exports	.0	.1	-.1	.0	.0
Previous Tealbook	.0	.2	-.1	-.1	.0

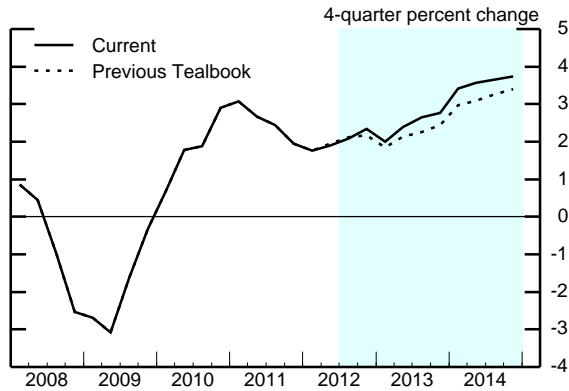
### Real GDP



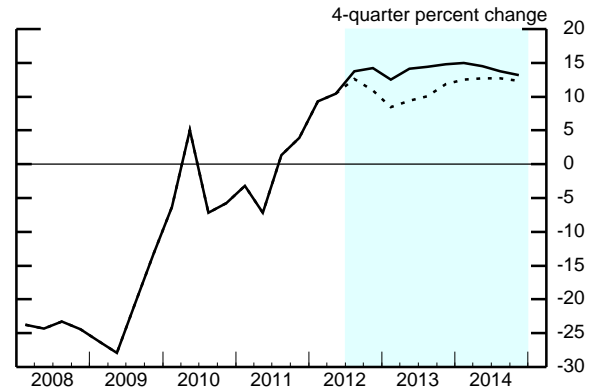
Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research.  
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

## Components of Final Demand

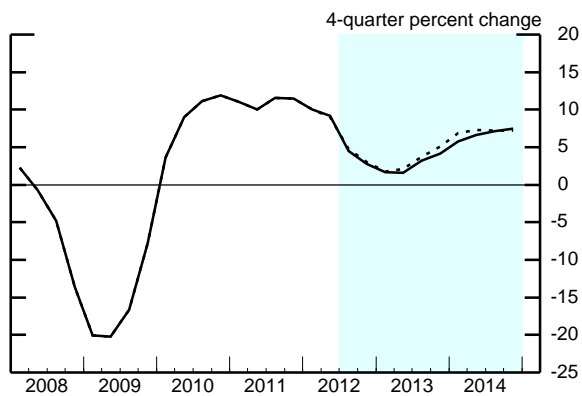
Personal Consumption Expenditures



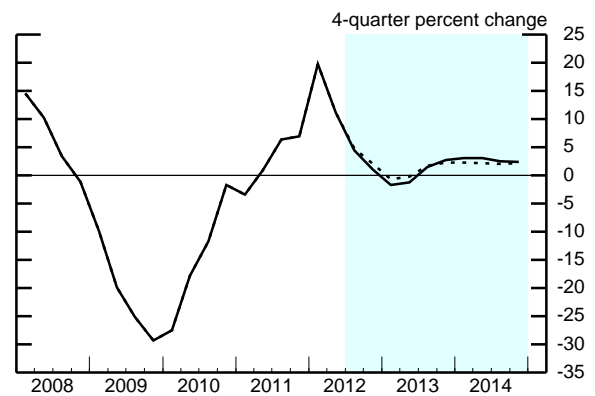
Residential Investment



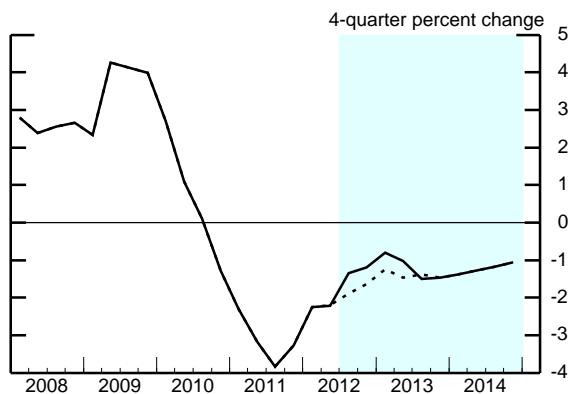
Equipment and Software



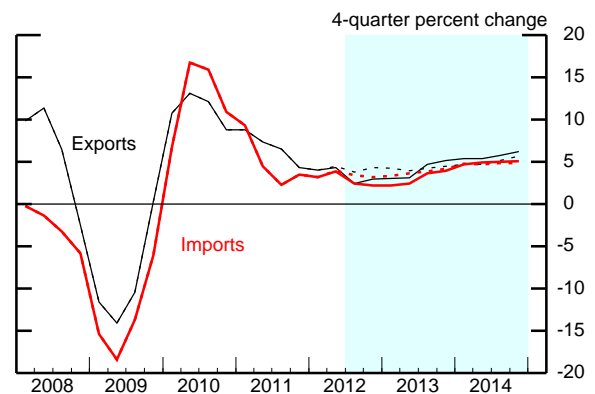
Nonresidential Structures



Government Consumption & Investment

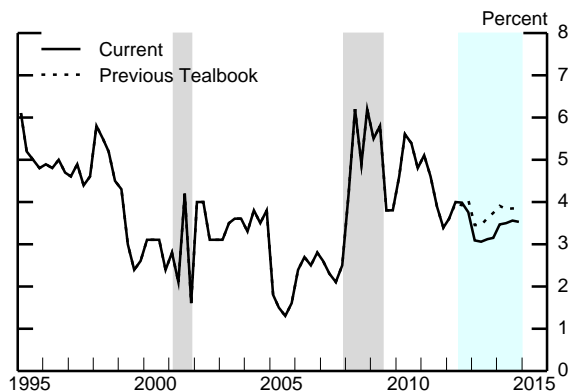


Exports and Imports



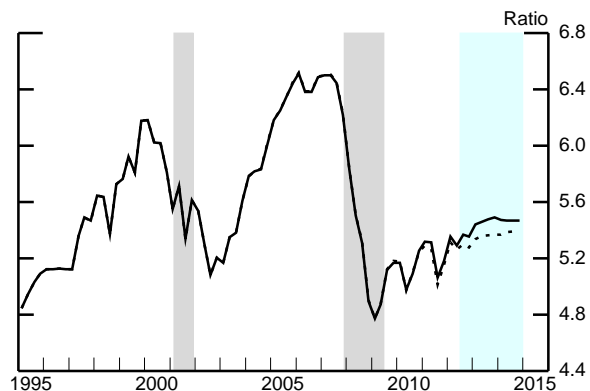
## Aspects of the Medium-Term Projection

Personal Saving Rate



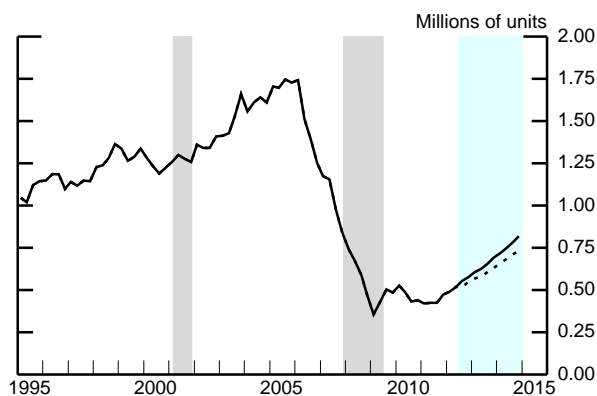
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Wealth-to-Income Ratio



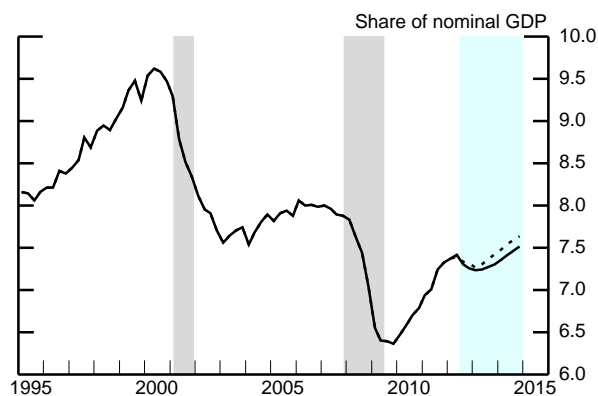
Note: Household net worth as a ratio to disposable personal income.  
Source: For net worth, Federal Reserve Board, flow of funds data; for income, Dept. of Commerce, Bureau of Economic Analysis.

Single-Family Housing Starts



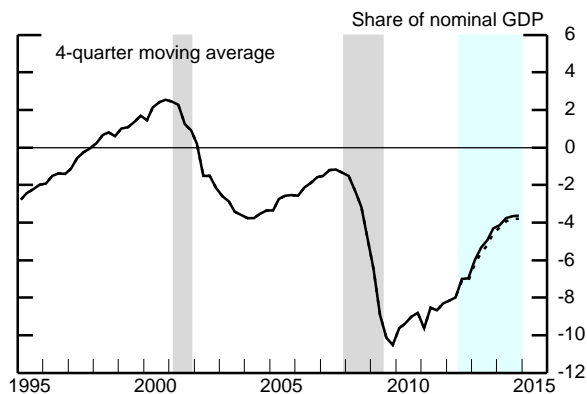
Source: U.S. Census Bureau.

Equipment and Software Spending



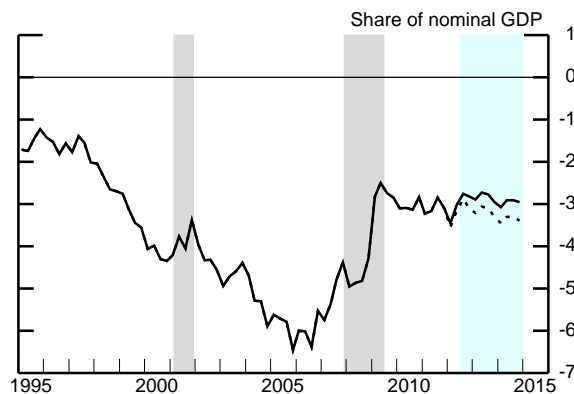
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

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.



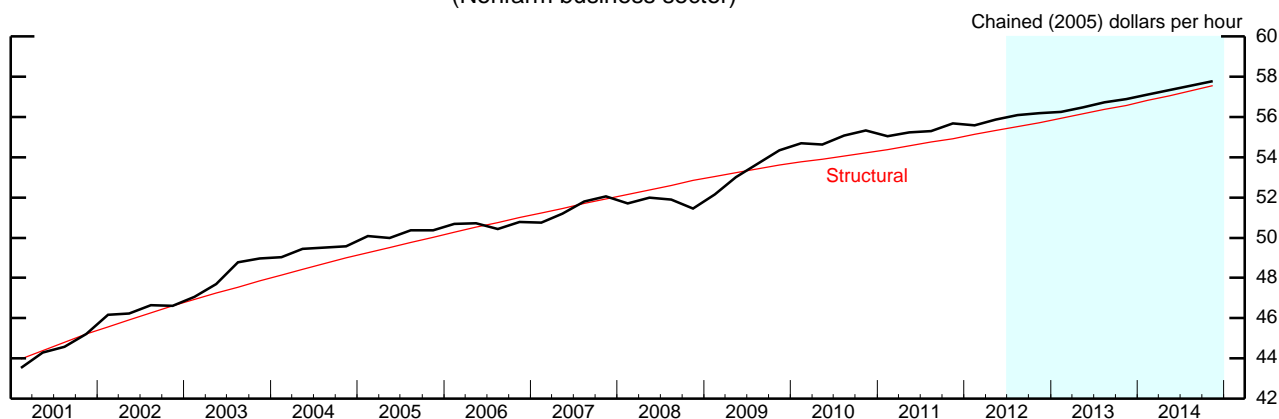
**Decomposition of Potential GDP**  
(Percent change, Q4 to Q4, except as noted)

Measure	1974-1995	1996-2000	2001-2010	2011	2012	2013	2014
Potential real GDP	3.0	3.4	2.2	1.5	1.8	2.0	2.1
Previous Tealbook	3.0	3.4	2.2	1.7	1.8	2.0	2.1
<i>Selected contributions<sup>1</sup></i>							
Structural labor productivity	1.4	2.6	2.1	1.3	1.4	1.6	1.7
Previous Tealbook	1.4	2.6	2.2	1.5	1.4	1.6	1.7
Capital deepening	.7	1.5	.7	.4	.5	.6	.6
Previous Tealbook	.7	1.5	.7	.4	.5	.6	.7
Multifactor productivity	.5	.8	1.2	.8	.9	.9	1.0
Previous Tealbook	.5	.8	1.2	.9	.8	.9	.9
Structural hours	1.5	1.0	.6	.5	.6	.6	.6
Previous Tealbook	1.5	1.0	.6	.5	.6	.6	.6
Labor force participation	.4	.0	-.3	-.4	-.3	-.3	-.3
Previous Tealbook	.4	.0	-.3	-.4	-.3	-.3	-.3

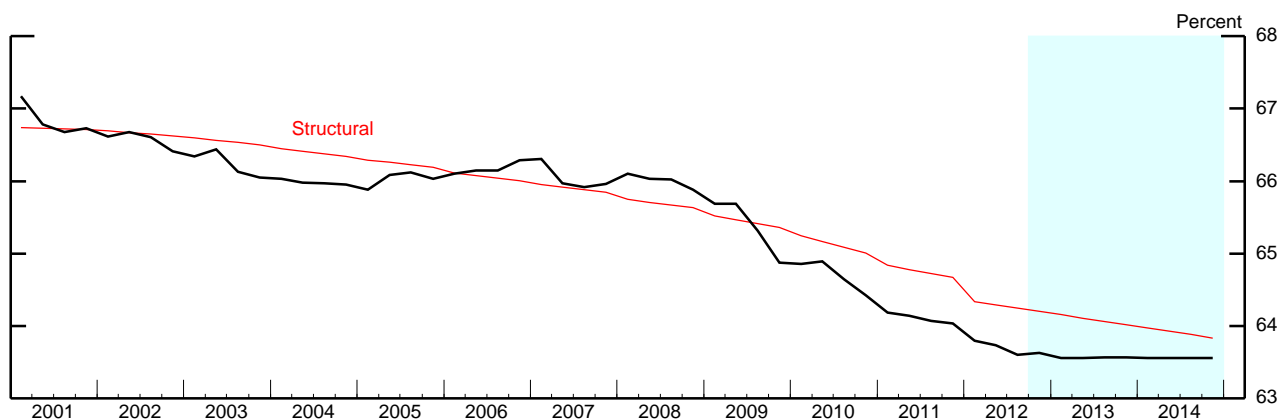
Note: Components may not sum to totals because of rounding. For multiyear periods, the percent change is the annual average from Q4 of the year preceding the first year shown to Q4 of the last year shown.

1. Percentage points.

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



**Structural and Actual Labor Force Participation Rate**



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

## The Outlook for the Labor Market and Resource Utilization

(Percent change from final quarter of preceding period)

Measure	2011	2012		2013	2014
		H1	H2		
Output per hour, nonfarm business	.6	.7	1.1	1.3	1.6
Previous Tealbook	.6	.8	.9	1.3	1.6
Nonfarm private employment <sup>1</sup>	175	157	137	170	249
Previous Tealbook	175	159	145	153	218
Labor force participation rate <sup>2</sup>	64.0	63.7	63.6	63.6	63.6
Previous Tealbook	64.0	63.7	63.7	63.7	63.7
Civilian unemployment rate <sup>2</sup>	8.7	8.2	8.0	7.8	7.2
Previous Tealbook	8.7	8.2	8.3	8.0	7.6
Memo: GDP gap <sup>3</sup>	-4.0	-4.1	-4.0	-3.4	-2.0
Previous Tealbook	-4.4	-4.4	-4.6	-4.1	-3.1

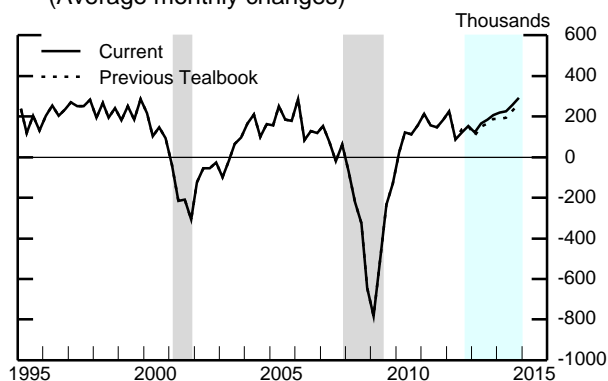
1. Thousands, average monthly changes.

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

3. 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.

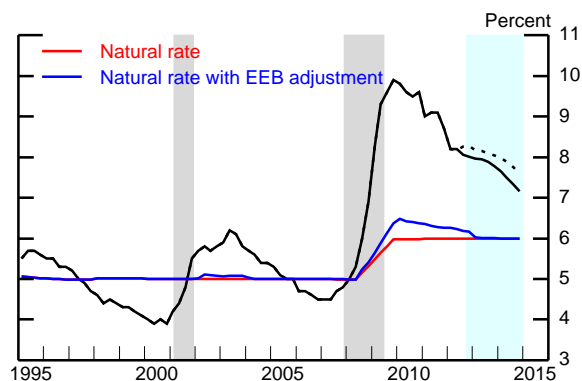
Source: U.S. Department of Labor, BLS; staff assumptions.

### Nonfarm Private Employment (Average monthly changes)



Source: U.S. Dept. of Labor, BLS.

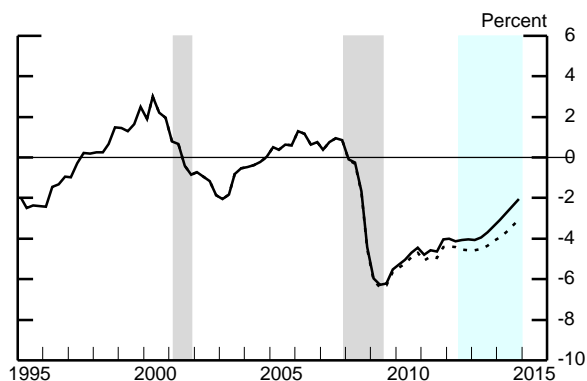
### Unemployment Rate



Note: The EEB adjustment is the staff estimate of the effect of extended and emergency unemployment compensation programs on the natural rate of unemployment.

Source: U.S. Dept. of Labor, BLS; staff assumptions.

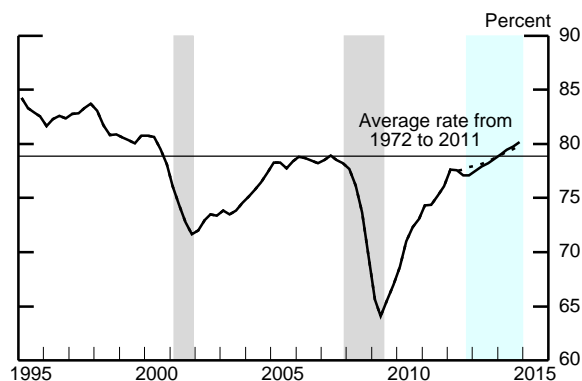
### GDP Gap



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 Projections

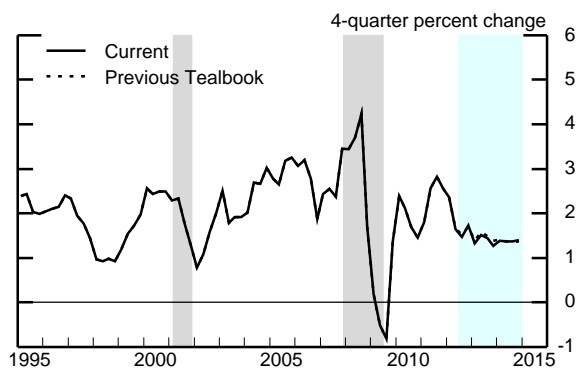
(Percent change at annual rate from final quarter of preceding period)

Measure	2011	2012		2013	2014
		H1	H2		
PCE chain-weighted price index	2.5	1.6	1.9	1.3	1.4
Previous Tealbook	2.5	1.6	1.8	1.4	1.4
Food and beverages	5.1	1.0	1.6	2.4	1.0
Previous Tealbook	5.1	1.0	2.4	2.6	.9
Energy	11.9	-3.3	11.0	-4.7	-2.3
Previous Tealbook	11.9	-3.3	6.3	-3.4	-2.2
Excluding food and energy	1.7	2.0	1.3	1.6	1.7
Previous Tealbook	1.7	2.0	1.4	1.6	1.6
Prices of core goods imports <sup>1</sup>	4.3	.5	-.9	1.4	1.5
Previous Tealbook	4.3	.5	-1.1	1.1	1.4

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

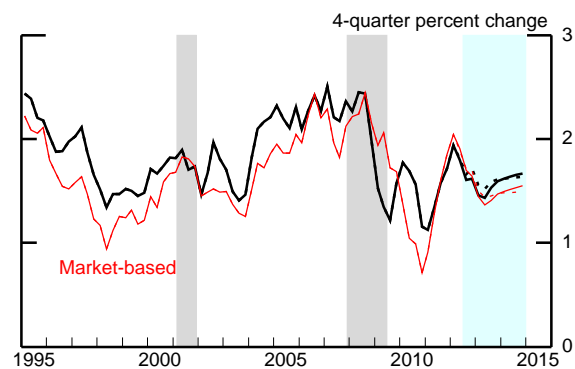
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Total PCE Prices



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

PCE Prices ex. Food and Energy



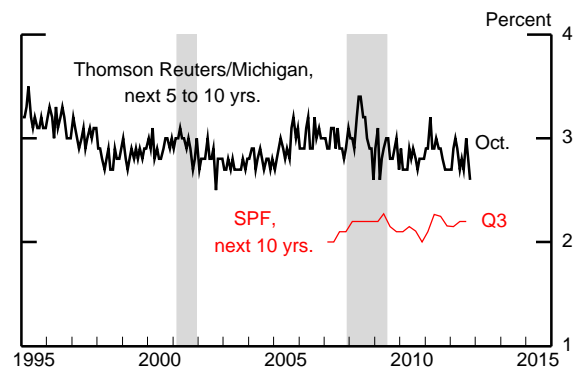
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Compensation per Hour



Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

Long-Term Inflation Expectations



Note: The Survey of Professional Forecasters (SPF) projection is for the PCE price index.

Source: Thomson Reuters/Michigan, next 5 to 10 yrs. Source: Thomson Reuters/University of Michigan Surveys of Consumers; Federal Reserve Bank of Philadelphia.

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

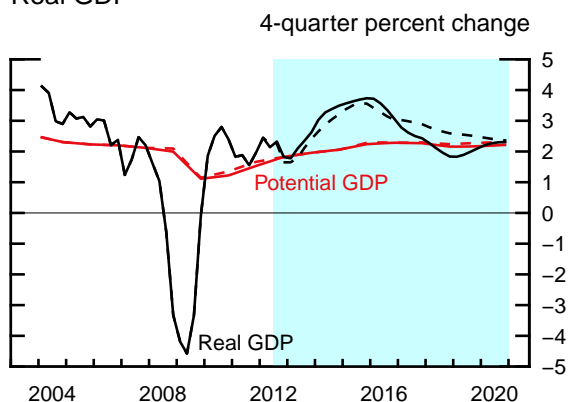
**The Long-Term Outlook**

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

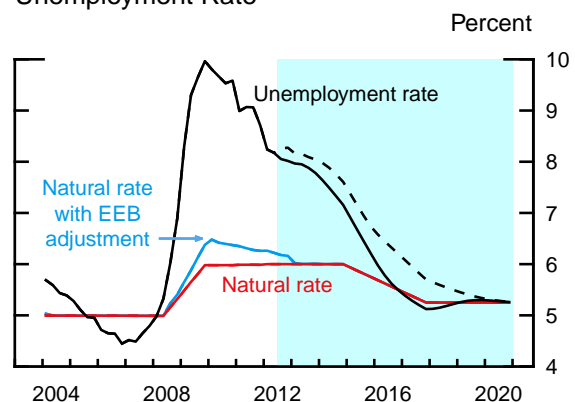
Measure	2012	2013	2014	2015	2016	2017
Real GDP	1.8	2.6	3.5	3.7	3.1	2.4
Previous Tealbook	1.6	2.4	3.2	3.6	3.0	2.9
Civilian unemployment rate <sup>1</sup>	8.0	7.8	7.2	6.2	5.5	5.1
Previous Tealbook	8.3	8.0	7.6	6.7	6.2	5.7
PCE prices, total	1.7	1.3	1.4	1.5	1.8	2.0
Previous Tealbook	1.7	1.4	1.4	1.5	1.8	1.9
Core PCE prices	1.6	1.6	1.7	1.7	1.9	2.0
Previous Tealbook	1.7	1.6	1.6	1.7	1.8	1.9
Federal funds rate <sup>1</sup>	.1	.1	.1	.7	2.6	3.9
Previous Tealbook	.1	.1	.6	2.1	2.9	3.5
10-year Treasury yield <sup>1</sup>	1.8	2.7	3.5	4.1	4.4	4.6
Previous Tealbook	1.9	3.0	3.7	4.2	4.3	4.4

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

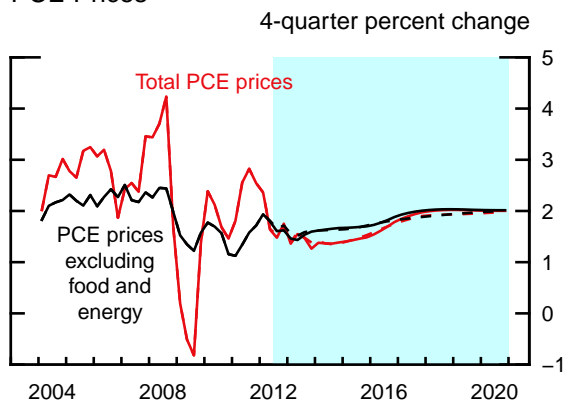
Real GDP



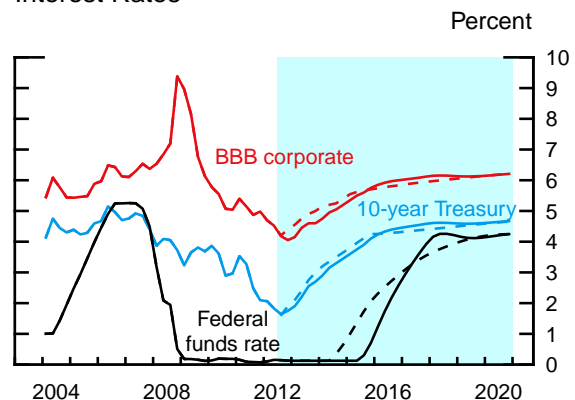
Unemployment Rate



PCE Prices



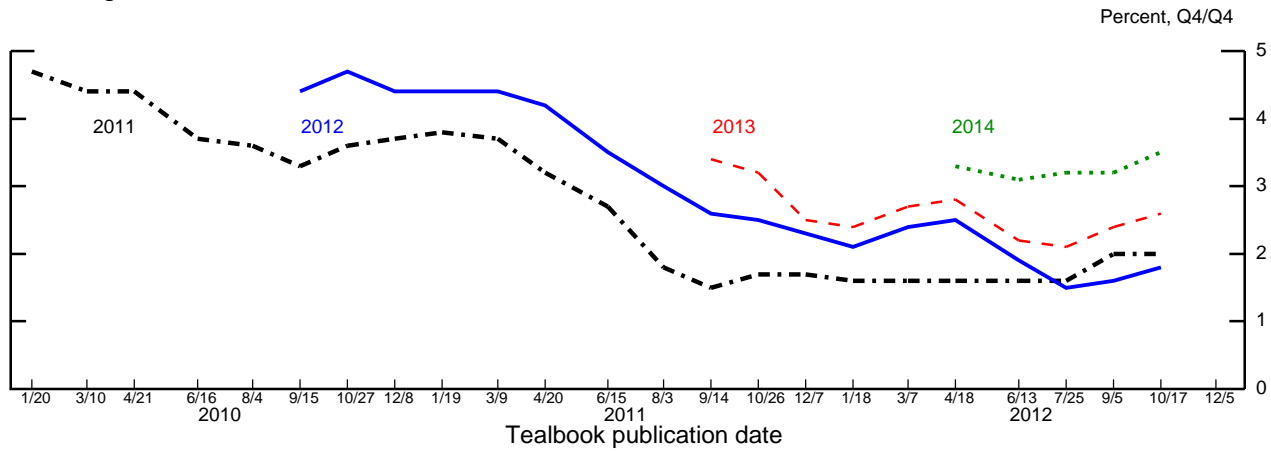
Interest Rates



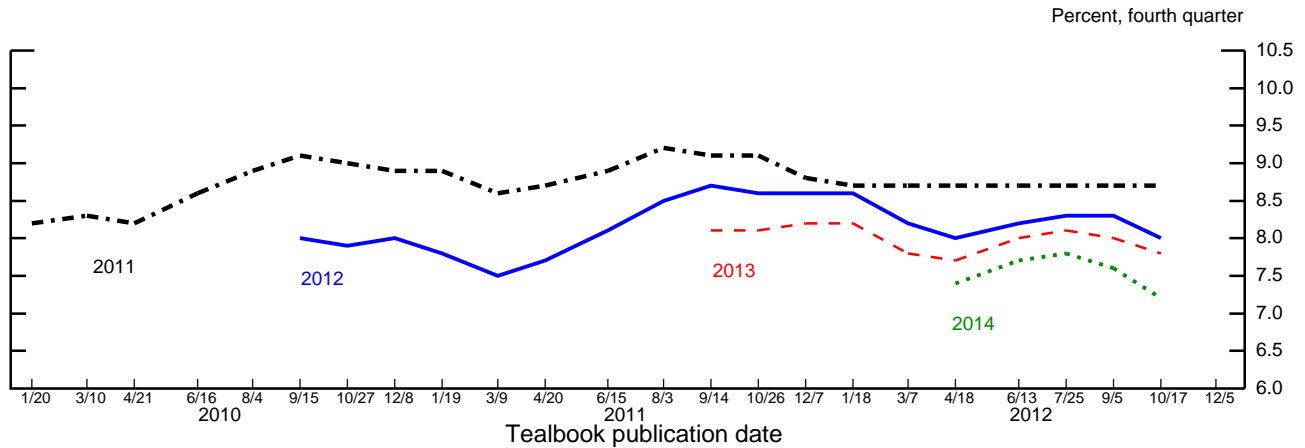
Note: In each panel, shading represents the projection period, and dashed lines are the previous Tealbook.

# Evolution of the Staff Forecast

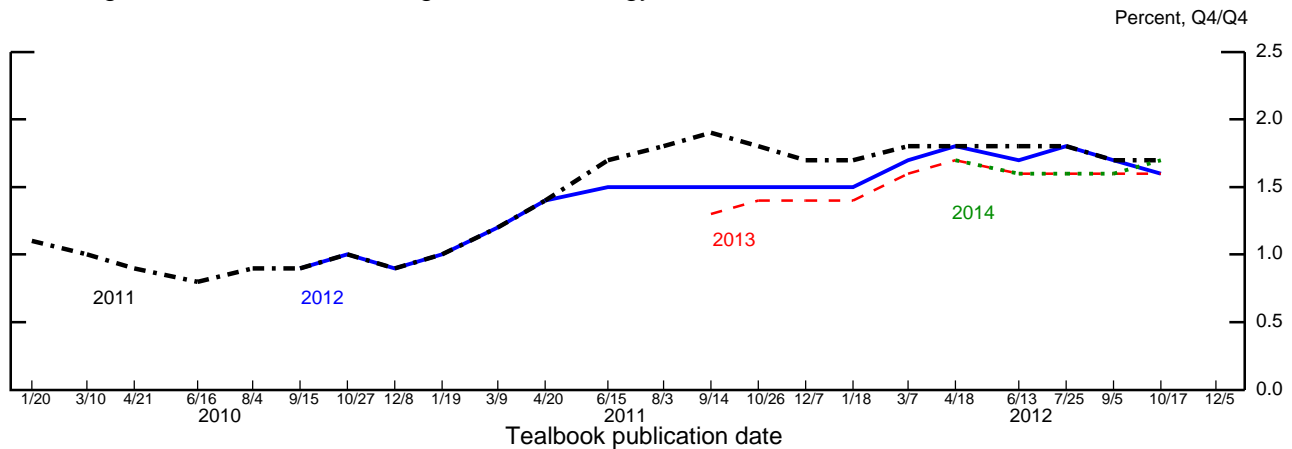
Change in Real GDP



Unemployment Rate



Change in PCE Prices excluding Food and Energy



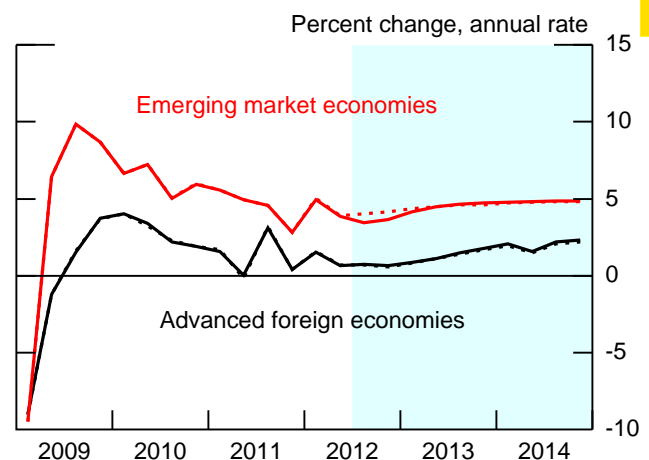
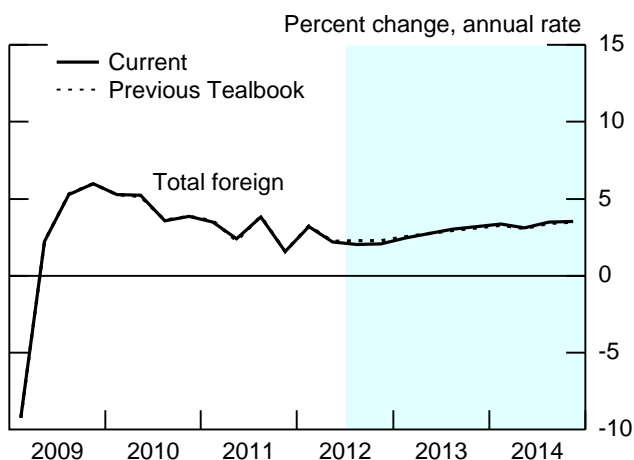
## The Foreign Outlook

(Percent change, annual rate)

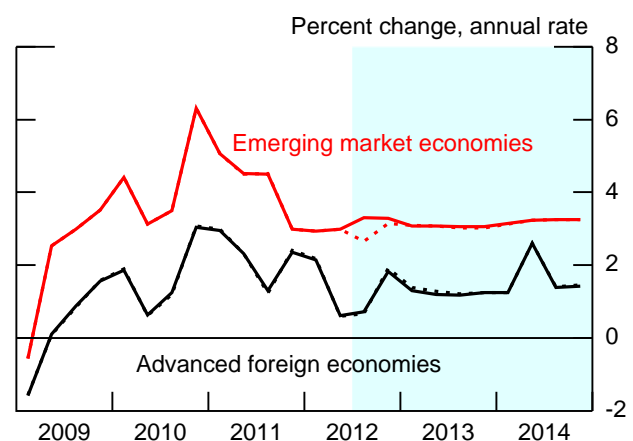
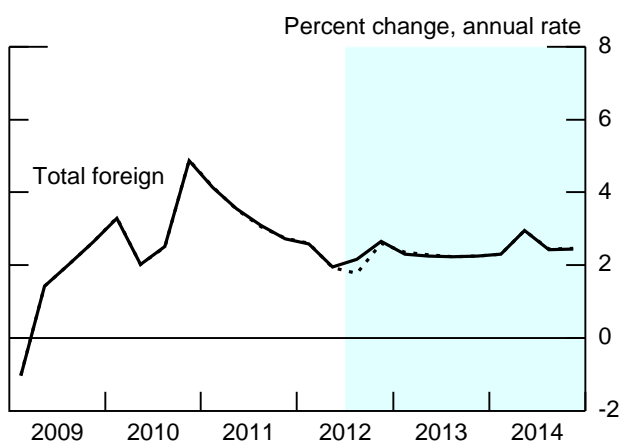
	2011	2012				2013			2014
		Q1	Q2	Q3	Q4	Q1	Q2	H2	
<b>Real GDP</b>									
Total foreign	2.8	3.2	2.2	2.0	2.1	2.4	2.7	3.1	3.4
Previous Tealbook	2.8	3.2	2.3	2.3	2.3	2.5	2.7	3.0	3.3
Advanced foreign economies	1.3	1.5	.6	.7	.6	.9	1.1	1.6	2.0
Previous Tealbook	1.3	1.6	.7	.7	.6	.8	1.1	1.5	1.9
Emerging market economies	4.5	5.0	3.9	3.4	3.6	4.1	4.5	4.7	4.8
Previous Tealbook	4.5	5.0	3.9	4.0	4.1	4.4	4.5	4.6	4.8
<b>Consumer Prices</b>									
Total foreign	3.4	2.6	1.9	2.2	2.7	2.3	2.2	2.2	2.5
Previous Tealbook	3.4	2.6	1.9	1.8	2.6	2.3	2.3	2.2	2.5
Advanced foreign economies	2.2	2.1	.6	.7	1.8	1.3	1.2	1.2	1.7
Previous Tealbook	2.2	2.2	.6	.7	1.9	1.4	1.3	1.2	1.7
Emerging market economies	4.3	2.9	3.0	3.3	3.3	3.1	3.1	3.1	3.2
Previous Tealbook	4.3	2.9	3.0	2.7	3.2	3.1	3.1	3.0	3.2

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

### Real GDP

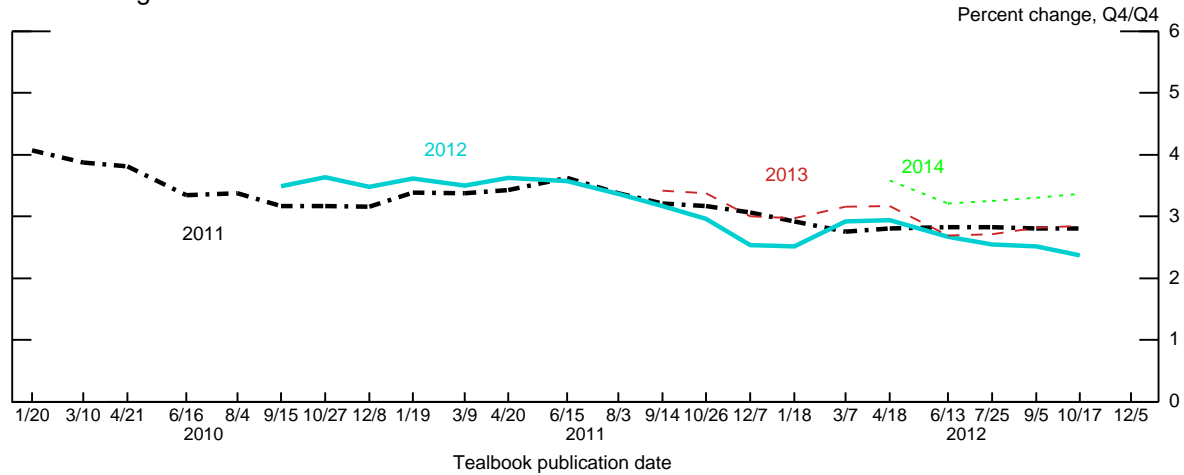


### Consumer Prices

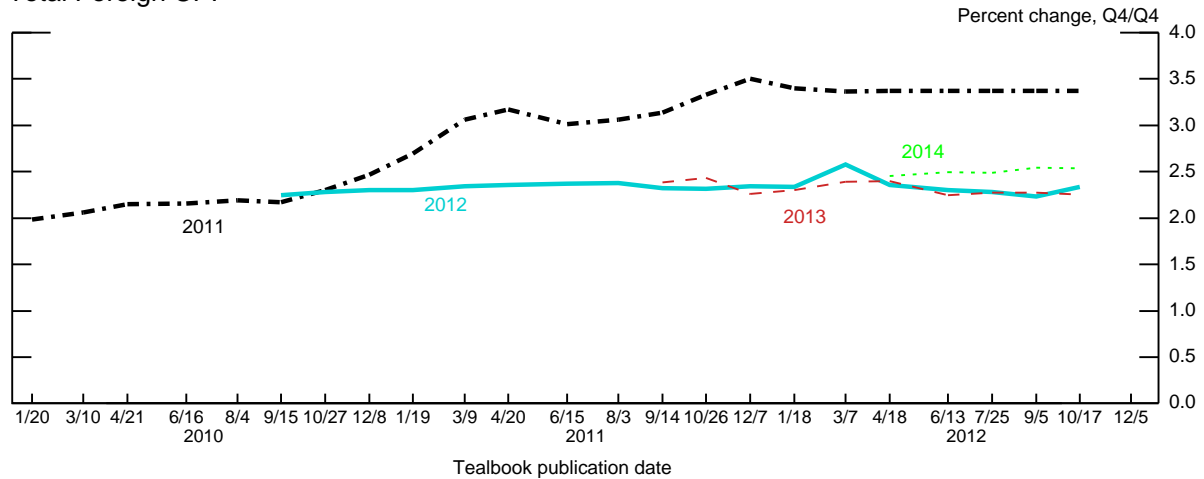


## Evolution of Staff's International Forecast

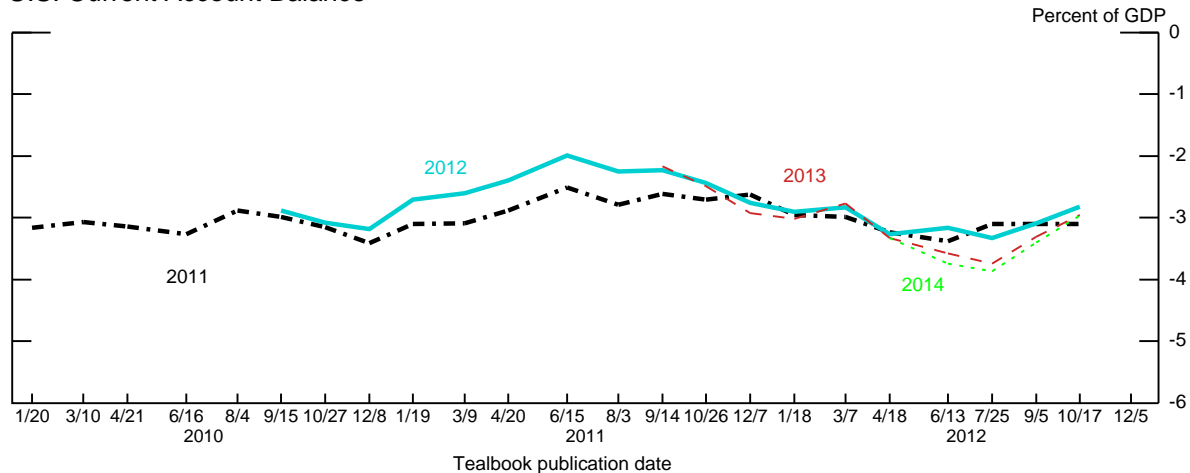
Total Foreign GDP



Total Foreign CPI

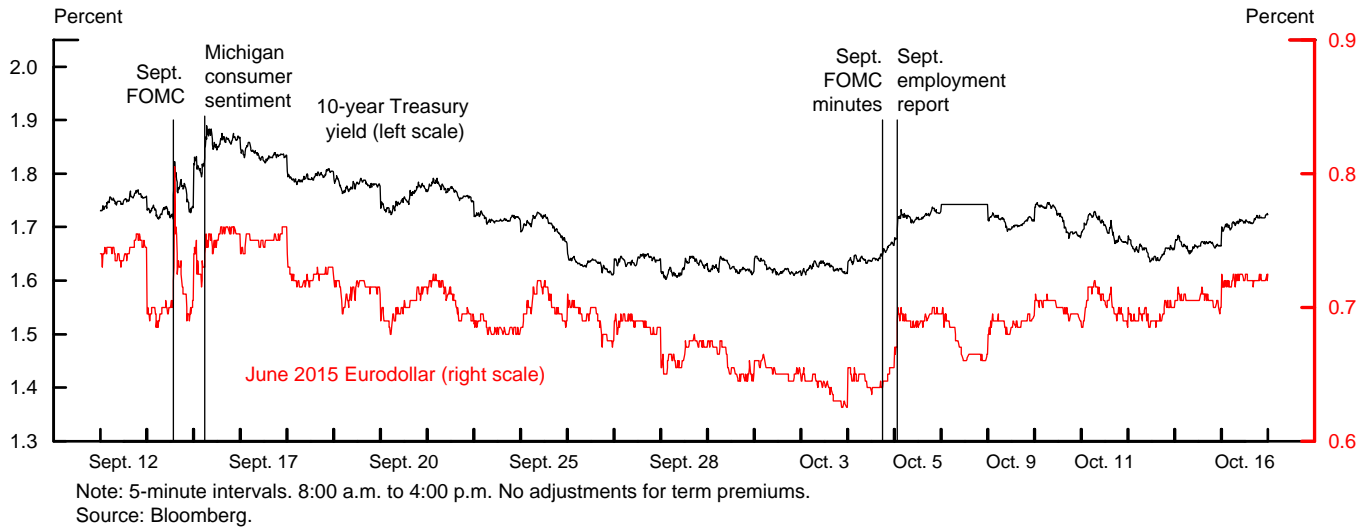


U.S. Current Account Balance



## Policy Expectations and Treasury Yields

### Selected Interest Rates



### Inflation Compensation

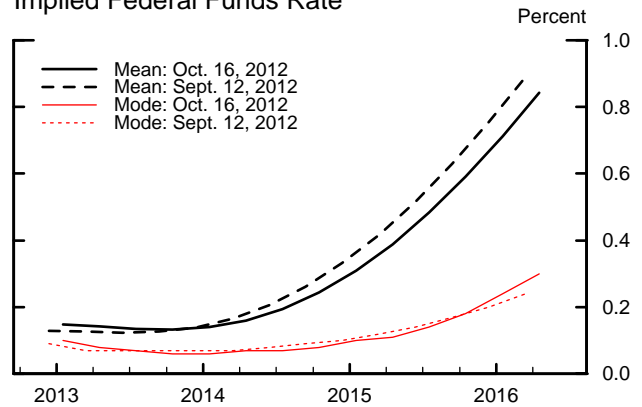


Note: Estimates based on smoothed nominal and inflation-indexed Treasury yield curves.

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

Source: Barclays PLC and staff estimates.

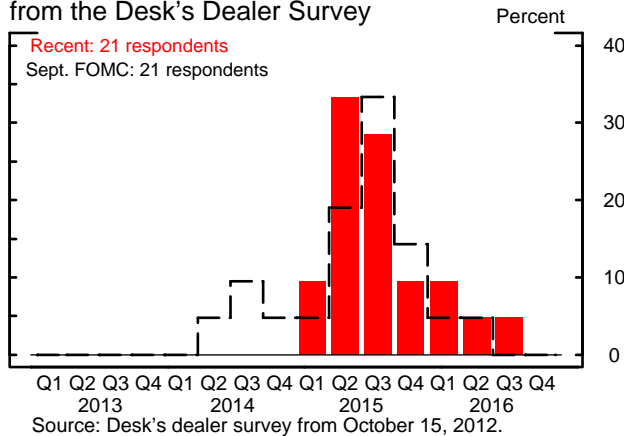
### Implied Federal Funds Rate



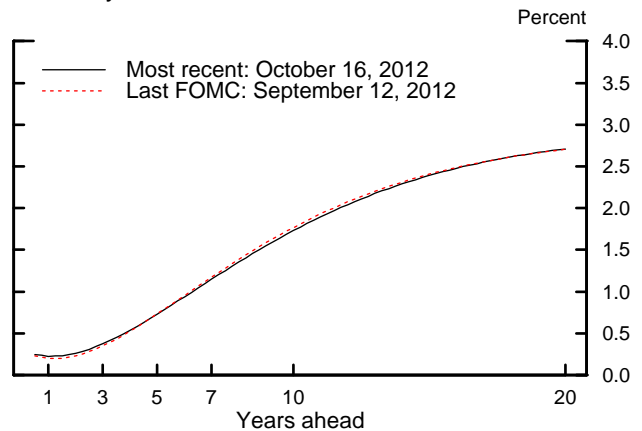
Note: Mean is estimated using overnight index swap quotes. Mode is estimated from the distribution of federal funds rate implied by interest rate caps. Both include a term premium of zero basis points per month.

Source: Bloomberg and CME Group.

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



### Treasury Yield Curve

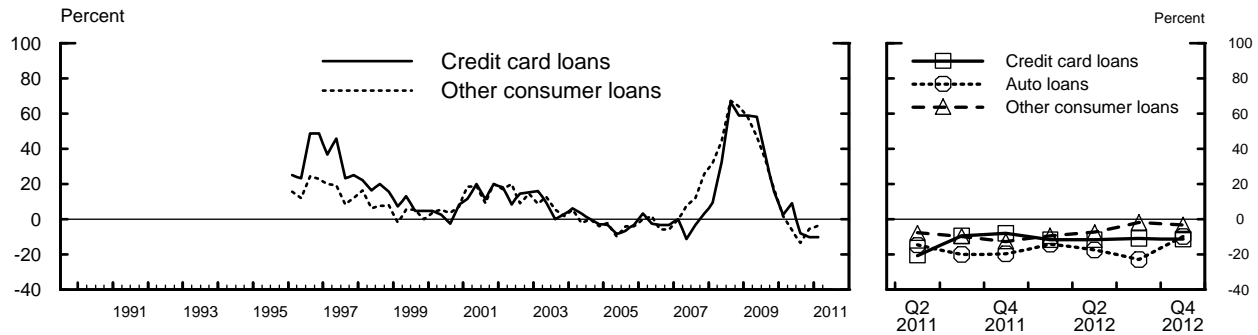


Note: Smoothed yield curve estimated from off-the-run Treasury coupon securities. Yields shown are those on notional par Treasury securities with semiannual coupons.  
Source: Federal Reserve Board.



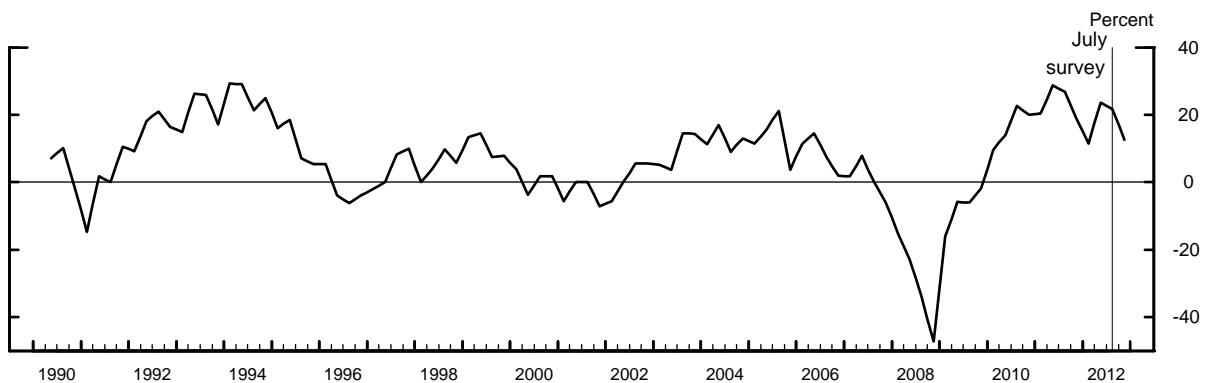
## Measures of Supply and Demand for Consumer Loans

Net Percentage of Domestic Respondents Tightening Standards for Consumer Loans

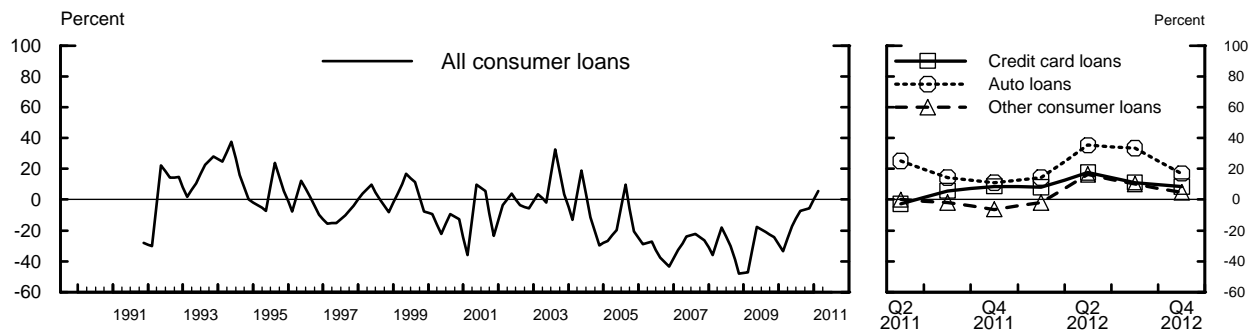


Note: For data starting in 2011:Q2, changes in standards for auto loans and consumer loans excluding credit card and auto loans are reported separately. In 2011:Q2 only, new and used auto loans are reported separately and equally weighted to calculate the auto loans series.

Net Percentage of Domestic Respondents Reporting Increased Willingness to Make Consumer Installment Loans



Net Percentage of Domestic Respondents Reporting Stronger Demand for Consumer Loans



Note: For data starting in 2011:Q2, changes in demand for credit card loans, auto loans, and consumer loans excluding credit card and auto loans are reported separately.

**Alternative Scenarios**

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

Measure and scenario	2012	2013	2014	2015	2016-17
	H2				
<i>Real GDP</i>					
Extended Tealbook baseline	2.0	2.6	3.5	3.7	2.7
Fiscal cliff	2.0	1.3	2.6	3.5	3.7
Greater expectations	2.9	4.5	3.8	2.5	2.0
More momentum	2.6	3.5	3.5	2.9	2.4
Headwinds and attenuation	2.0	1.9	2.1	2.3	2.6
Damaged labor market	1.8	2.4	3.1	2.7	1.5
European crisis with severe spillovers	1.1	-3.1	1.2	4.2	3.3
Hard landing in China	1.8	1.7	2.9	3.9	3.2
<i>Unemployment rate<sup>1</sup></i>					
Extended Tealbook baseline	8.0	7.8	7.2	6.2	5.1
Fiscal cliff	8.0	8.3	8.2	7.4	5.5
Greater expectations	7.9	6.9	5.9	5.3	5.2
More momentum	7.8	7.3	6.6	5.8	5.3
Headwinds and attenuation	8.0	8.0	8.0	7.8	7.0
Damaged labor market	8.0	7.9	7.4	6.8	6.8
European crisis with severe spillovers	8.1	9.8	10.4	9.3	7.5
Hard landing in China	8.0	8.1	7.9	6.9	5.5
<i>Total PCE prices</i>					
Extended Tealbook baseline	1.9	1.3	1.4	1.5	1.9
Fiscal cliff	1.9	1.3	1.2	1.1	1.5
Greater expectations	1.9	1.4	1.7	1.9	2.2
More momentum	1.9	1.4	1.6	1.7	2.0
Headwinds and attenuation	1.9	1.3	1.3	1.1	1.2
Damaged labor market	2.0	1.5	1.9	2.2	2.5
European crisis with severe spillovers	1.2	-1.1	.4	1.6	2.2
Hard landing in China	1.6	.4	.7	1.3	2.0
<i>Core PCE prices</i>					
Extended Tealbook baseline	1.3	1.6	1.7	1.7	1.9
Fiscal cliff	1.3	1.6	1.5	1.3	1.5
Greater expectations	1.3	1.7	2.0	2.1	2.2
More momentum	1.3	1.7	1.9	1.9	2.0
Headwinds and attenuation	1.3	1.6	1.6	1.3	1.2
Damaged labor market	1.4	1.8	2.2	2.4	2.5
European crisis with severe spillovers	1.1	.3	.8	1.5	2.0
Hard landing in China	1.2	1.2	1.3	1.5	1.9
<i>Federal funds rate<sup>1</sup></i>					
Extended Tealbook baseline	.1	.1	.1	.7	3.9
Fiscal cliff	.1	.1	.1	.1	3.4
Greater expectations	.1	.6	1.8	2.2	4.0
More momentum	.1	.1	.6	1.4	3.7
Headwinds and attenuation	.1	.1	.1	.1	.5
Damaged labor market	.1	.1	1.0	2.6	4.9
European crisis with severe spillovers	.1	.1	.1	.1	1.5
Hard landing in China	.1	.1	.1	.2	3.1

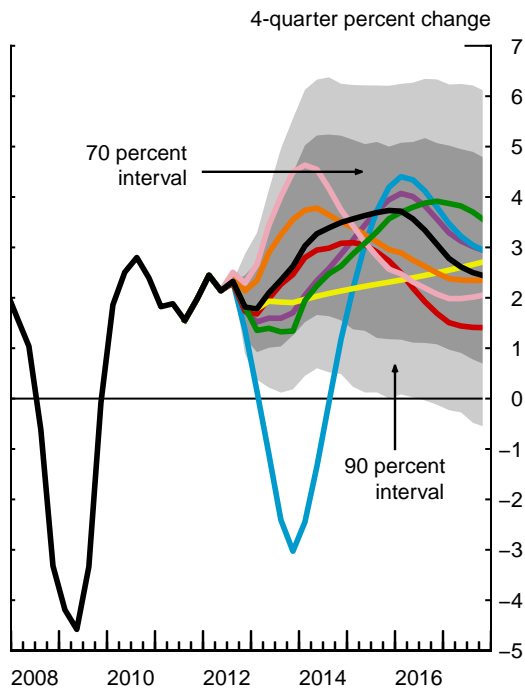
1. Percent, average for the final quarter of the period.

## Forecast Confidence Intervals and Alternative Scenarios

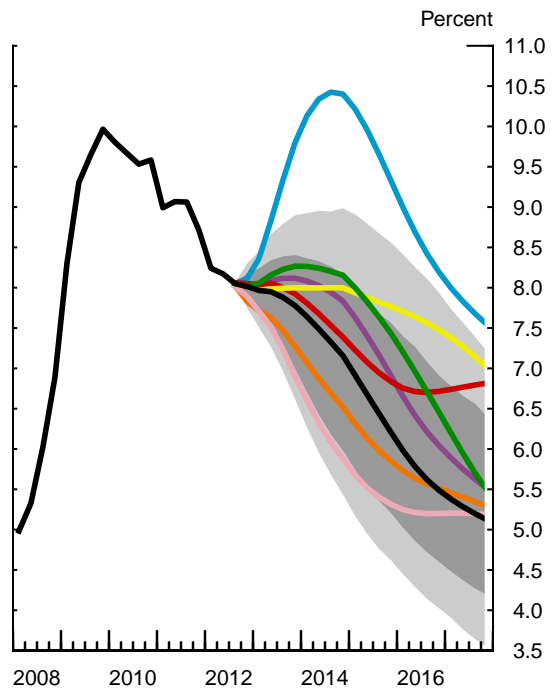
Confidence Intervals Based on FRB/US Stochastic Simulations

- Extended Tealbook baseline
- More momentum
- European crisis with severe spillovers
- Fiscal cliff
- Headwinds and attenuation
- Hard landing in China
- Greater expectations
- Damaged labor market

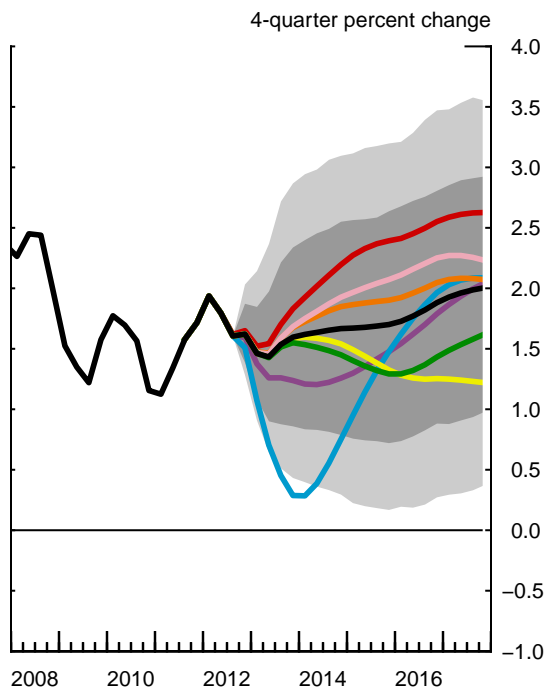
Real GDP



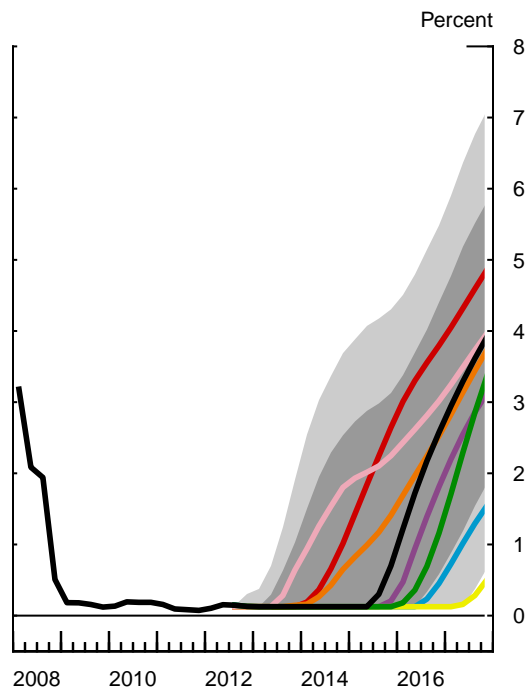
Unemployment Rate



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	2012	2013	2014	2015	2016	2017
<i>Real GDP</i> (percent change, Q4 to Q4)						
Projection	1.8	2.6	3.5	3.7	3.1	2.4
Confidence interval						
Tealbook forecast errors	1.3–2.3	.9–4.3	1.6–5.4	...	...	...
FRB/US stochastic simulations	1.2–2.4	1.3–4.5	1.6–5.2	1.2–5.0	1.1–5.1	.7–4.8
<i>Civilian unemployment rate</i> (percent, Q4)						
Projection	8.0	7.8	7.2	6.2	5.5	5.1
Confidence interval						
Tealbook forecast errors	7.9–8.1	7.1–8.5	6.0–8.4	...	...	...
FRB/US stochastic simulations	7.9–8.2	7.0–8.4	6.0–8.2	5.2–7.6	4.6–6.9	4.2–6.4
<i>PCE prices, total</i> (percent change, Q4 to Q4)						
Projection	1.7	1.3	1.4	1.5	1.8	2.0
Confidence interval						
Tealbook forecast errors	1.5–2.0	.0–2.5	.1–2.7	...	...	...
FRB/US stochastic simulations	1.4–2.2	.3–2.3	.2–2.6	.2–2.7	.5–2.9	.7–3.1
<i>PCE prices excluding food and energy</i> (percent change, Q4 to Q4)						
Projection	1.6	1.6	1.7	1.7	1.9	2.0
Confidence interval						
Tealbook forecast errors	1.4–1.8	.9–2.3	.9–2.5	...	...	...
FRB/US stochastic simulations	1.4–1.9	.9–2.3	.8–2.6	.7–2.6	.9–2.8	1.0–2.9
<i>Federal funds rate</i> (percent, Q4)						
Projection	.1	.1	.1	.7	2.6	3.9
Confidence interval						
FRB/US stochastic simulations	.1–.1	.1–1.0	.1–2.5	.1–3.1	.6–4.4	1.9–5.8

Note: Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1969–2009 set of model equation residuals.

Intervals derived from Tealbook forecast errors are based on projections made from 1979–2009, except for PCE prices excluding food and energy, where the sample is 1981–2009.

... 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 Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
<i>Real GDP</i>						
Staff	1.6	1.8	2.4	2.6	3.2	3.5
FRB/US	1.5	1.4	1.7	1.9	2.9	3.1
EDO	1.9	2.0	3.1	3.2	3.1	3.2
Blue Chip	1.8	1.7	2.4	2.3	...	...
<i>Unemployment rate<sup>1</sup></i>						
Staff	8.3	8.0	8.0	7.8	7.6	7.2
FRB/US	8.4	8.1	8.8	8.5	8.5	8.1
EDO	8.2	8.1	7.8	7.7	7.4	7.4
Blue Chip	8.1	8.1	7.7	7.8	...	...
<i>Total PCE prices</i>						
Staff	1.7	1.7	1.4	1.3	1.4	1.4
FRB/US	1.7	1.8	1.2	1.2	1.0	1.0
EDO	1.6	1.6	1.6	1.5	1.6	1.6
Blue Chip <sup>2</sup>	1.9	1.9	2.2	2.1	...	...
<i>Core PCE prices</i>						
Staff	1.7	1.6	1.6	1.6	1.6	1.7
FRB/US	1.7	1.7	1.5	1.5	1.2	1.3
EDO	1.7	1.6	1.6	1.5	1.6	1.6
Blue Chip	...	...	...	...	...	...
<i>Federal funds rate<sup>1</sup></i>						
Staff	.1	.1	.1	.1	.6	.1
FRB/US	.2	.3	.2	.5	.9	1.6
EDO	.4	.3	1.2	1.2	1.9	1.9
Blue Chip <sup>3</sup>	.1	.1	.2	.2	...	...

Note: Blue Chip forecast completed on October 10, 2012.

1. Percent, average for Q4.

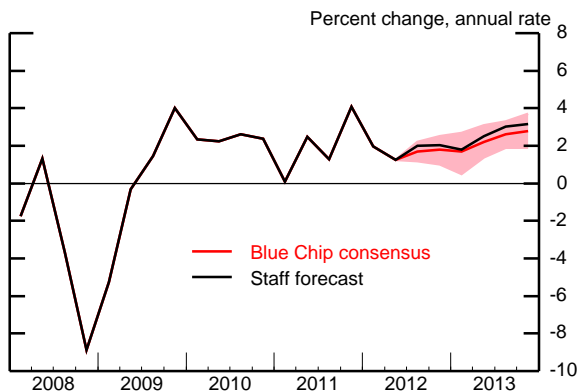
2. Consumer price index.

3. Treasury bill rate.

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

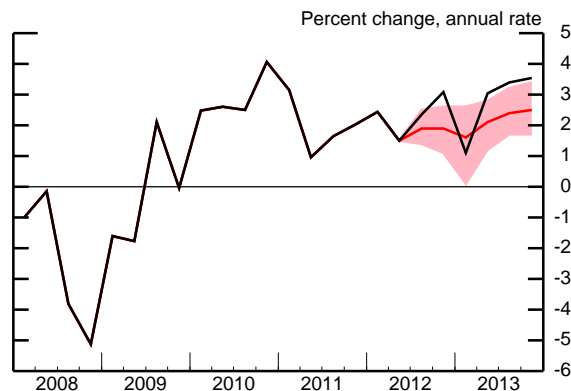
## Tealbook Forecast Compared with Blue Chip (Blue Chip survey released October 10, 2012)

Real GDP

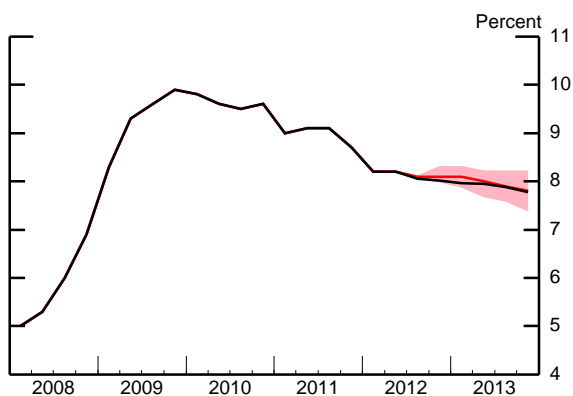


Note: The shaded area represents the area between the Blue Chip top 10 and bottom 10 averages.

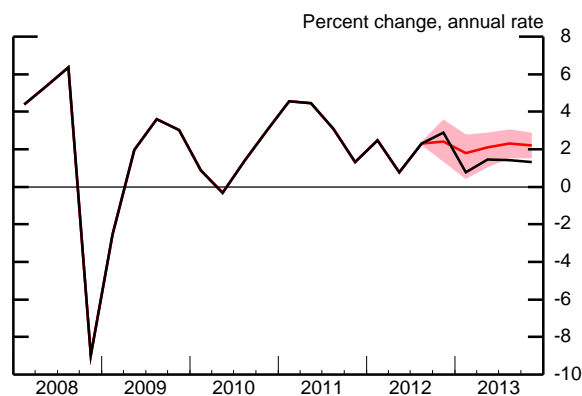
Real PCE



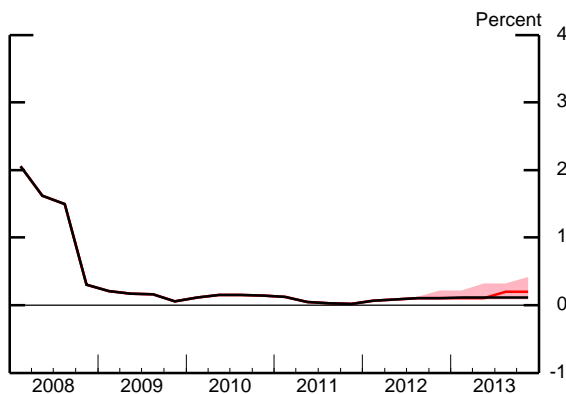
Unemployment Rate



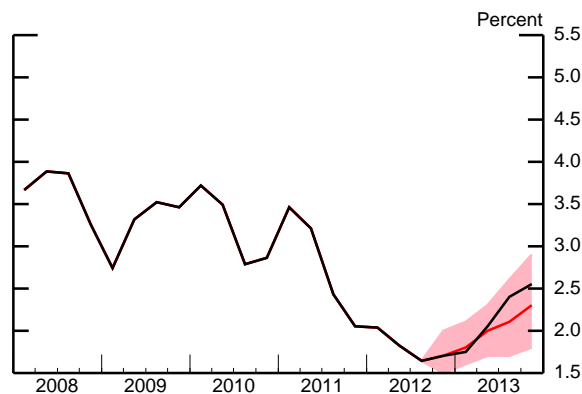
Consumer Price Index



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—2013:Q3 )

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	.06	.07	.11	.14
Previous Tealbook	.07	.06	.11	.14
<i>Less than 1 percent</i>				
Current Tealbook	.29	.26	.32	.09
Previous Tealbook	.27	.31	.32	.10

### Probability of Unemployment Events (4 quarters ahead—2013:Q3)

Probability that the unemployment rate will ...	Staff	FRB/US	EDO	BVAR
<i>Increase by 1 percentage point</i>				
Current Tealbook	.02	.15	.17	.01
Previous Tealbook	.02	.16	.16	.02
<i>Decrease by 1 percentage point</i>				
Current Tealbook	.04	.00	.29	.30
Previous Tealbook	.06	.00	.32	.14

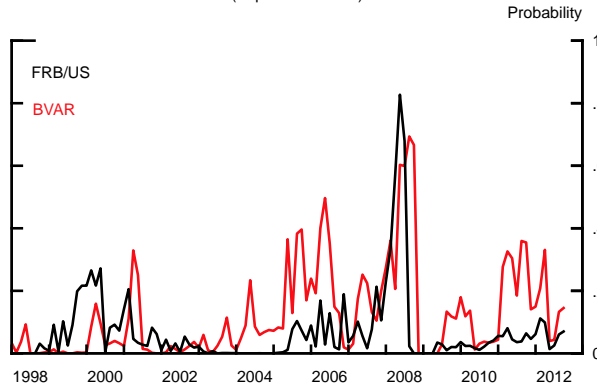
### Probability of Near-Term Recession

Probability that real GDP declines in each of 2012:Q4 and 2013:Q1	Staff	FRB/US	EDO	BVAR	Factor Model
Current Tealbook	.03	.06	.06	.03	.24
Previous Tealbook	.03	.07	.05	.03	.21

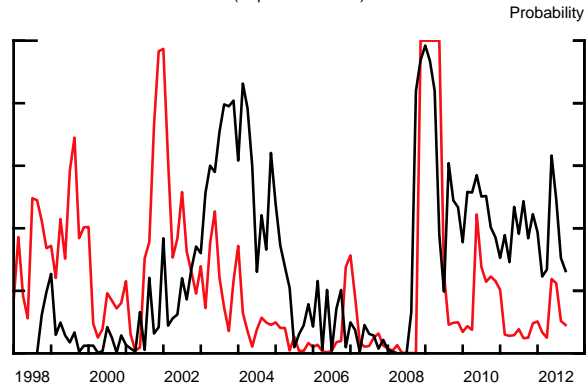
Note: “Staff” represents Tealbook forecast errors applied to the Tealbook baseline; baselines for FRB/US, BVAR, EDO, and the factor model are generated by those models themselves, up to the current-quarter estimate. The current quarter is taken as data from the staff estimate for the second Tealbook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

## Assessment of Key Macroeconomic Risks (2)

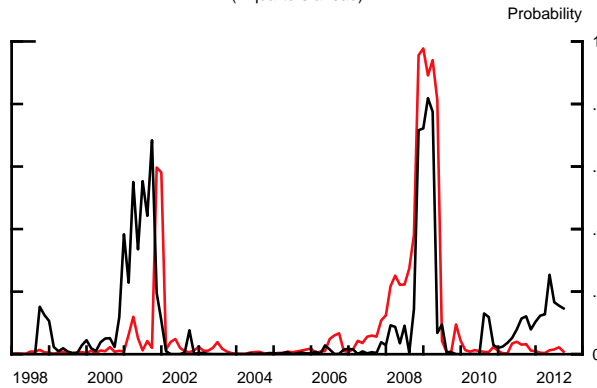
Probability that Total PCE Inflation Is above 3 Percent  
(4 quarters ahead)



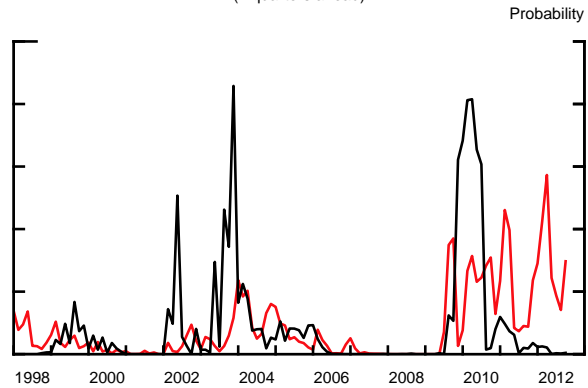
Probability that Total PCE Inflation Is below 1 Percent  
(4 quarters ahead)



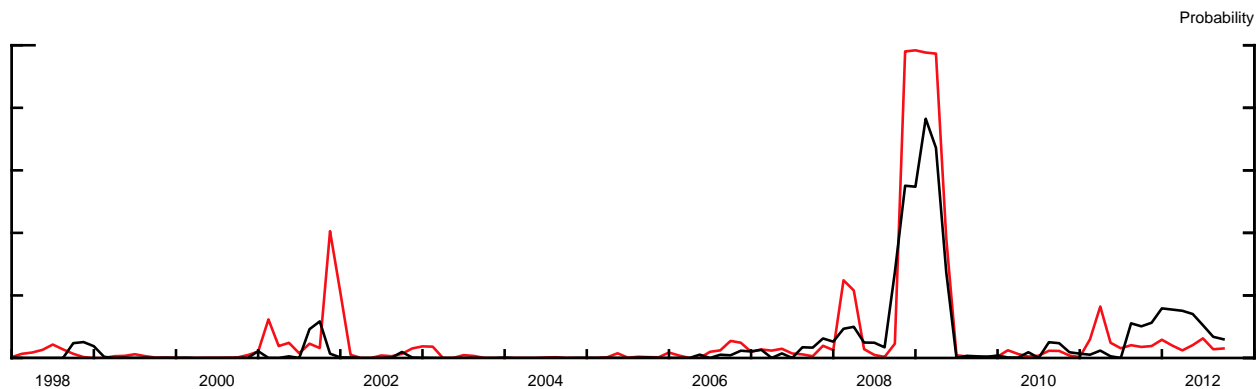
Probability that the Unemployment Rate Increases 1 ppt  
(4 quarters ahead)



Probability that the Unemployment Rate Decreases 1 ppt  
(4 quarters ahead)



Probability that Real GDP Declines in each of the Next Two Quarters



Note: See notes on facing page. Recession and inflation probabilities for FRB/US and the BVAR are real-time estimates. See Robert J. Tetlow and Brian Ironside (2007), "Real-Time Model Uncertainty in the United States: The Fed, 1996–2003," *Journal of Money and Banking*, vol. 39 (October), pp. 1533–61.



**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>	
	09/05/12	10/17/12	09/05/12	10/17/12	09/05/12	10/17/12	09/05/12	10/17/12	09/05/12	10/17/12
<i>Quarterly</i>										
2011:Q1	2.2	2.2	.1	.1	3.2	3.2	1.3	1.3	9.0	9.0
Q2	5.2	5.2	2.5	2.5	3.6	3.6	2.3	2.3	9.1	9.1
Q3	4.3	4.3	1.3	1.3	2.3	2.3	1.9	1.9	9.1	9.1
Q4	4.2	4.2	4.1	4.1	1.1	1.1	1.3	1.3	8.7	8.7
2012:Q1	4.2	4.2	2.0	2.0	2.5	2.5	2.2	2.2	8.2	8.2
Q2	3.3	2.8	1.7	1.3	.7	.7	1.8	1.7	8.2	8.2
Q3	4.3	5.2	1.3	2.0	1.9	1.7	1.3	1.2	8.3	8.1
Q4	3.1	4.3	1.7	2.0	1.7	2.1	1.5	1.4	8.3	8.0
2013:Q1	3.4	2.8	2.0	1.8	1.2	.9	1.6	1.6	8.2	8.0
Q2	3.8	4.0	2.3	2.5	1.5	1.4	1.6	1.6	8.2	8.0
Q3	4.1	4.4	2.6	3.0	1.4	1.4	1.6	1.6	8.1	7.9
Q4	4.3	4.5	2.8	3.1	1.3	1.3	1.6	1.6	8.0	7.8
<i>Two-quarter<sup>2</sup></i>										
2011:Q2	3.7	3.7	1.3	1.3	3.4	3.4	1.8	1.8	-5	-5
Q4	4.3	4.3	2.7	2.7	1.7	1.7	1.6	1.6	-4	-4
2012:Q2	3.7	3.5	1.8	1.6	1.6	1.6	2.0	2.0	-5	-5
Q4	3.7	4.7	1.5	2.0	1.8	1.9	1.4	1.3	.1	-2
2013:Q2	3.6	3.4	2.1	2.2	1.4	1.2	1.6	1.6	-1	.0
Q4	4.2	4.5	2.7	3.1	1.4	1.4	1.6	1.6	-2	-2
<i>Four-quarter<sup>3</sup></i>										
2010:Q4	4.3	4.3	2.4	2.4	1.5	1.5	1.2	1.2	-3	-3
2011:Q4	4.0	4.0	2.0	2.0	2.5	2.5	1.7	1.7	-9	-9
2012:Q4	3.7	4.1	1.6	1.8	1.7	1.7	1.7	1.6	-4	-7
2013:Q4	3.9	3.9	2.4	2.6	1.4	1.3	1.6	1.6	-3	-2
2014:Q4	4.7	5.0	3.2	3.5	1.4	1.4	1.6	1.7	-4	-6
<i>Annual</i>										
2010	3.8	3.8	2.4	2.4	1.9	1.9	1.5	1.5	9.6	9.6
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	2.1	2.2	1.8	1.8	1.8	1.7	8.2	8.1
2013	3.7	3.9	2.0	2.2	1.5	1.4	1.6	1.5	8.1	7.9
2014	4.5	4.8	3.0	3.3	1.4	1.4	1.6	1.6	7.8	7.4

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	2011				2012				2013				2011 <sup>1</sup>	2012 <sup>1</sup>	2013 <sup>1</sup>	2014 <sup>1</sup>
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4					
Real GDP <i>Previous Tealbook</i>	2.5 2.5	1.3 1.3	4.1 4.1	2.0 2.0	1.3 1.7	2.0 1.3	2.0 1.7	1.8 2.0	2.5 2.3	3.0 2.6	3.1 2.8	2.0 2.0	1.8 1.6	2.6 2.4	3.5 3.2	
Final sales <i>Previous Tealbook</i>	2.4 2.4	2.3 2.3	1.5 1.5	2.4 2.4	1.7 1.9	1.9 1.4	2.1 1.4	1.0 .8	2.7 2.4	3.2 2.7	3.0 2.5	1.7 1.7	2.0 1.8	2.5 2.1	3.5 3.1	
Priv. dom. final purch. <i>Previous Tealbook</i>	2.5 2.5	3.6 3.6	3.2 3.2	3.5 3.5	1.9 2.0	2.1 2.1	3.1 2.2	1.4 1.3	3.5 3.3	4.0 3.5	4.1 3.6	2.9 2.9	2.7 2.5	3.2 2.9	4.3 4.0	
Personal cons. expend. <i>Previous Tealbook</i>	1.0 1.0	1.7 1.7	2.0 2.0	2.4 2.4	1.5 1.7	2.3 2.3	3.1 2.2	1.1 1.1	3.0 2.8	3.4 3.0	3.5 3.0	1.9 1.9	2.3 2.2	2.8 2.4	3.7 3.4	
Durables	-2.3	5.4	13.9	11.5	-.2	8.0	12.4	2.3	10.4	10.1	9.8	5.9	7.8	8.1	9.6	
Nondurables	-.3	-.4	1.8	1.6	.6	2.9	2.7	.9	1.8	2.3	2.6	1.4	2.0	1.9	2.9	
Services	1.9	1.8	.3	1.3	2.1	1.3	1.7	1.0	2.3	2.7	2.8	1.5	1.6	2.2	3.0	
Residential investment <i>Previous Tealbook</i>	4.1 4.1	1.4 1.4	12.1 12.1	20.5 20.5	8.5 8.4	14.3 9.7	13.9 5.5	13.4 10.5	14.9 12.0	15.6 12.4	15.2 12.6	3.9 3.9	14.2 10.9	14.8 11.9	13.2 12.4	
Business fixed invest. <i>Previous Tealbook</i>	14.5 14.5	19.0 19.0	9.5 9.5	7.5 7.5	3.6 3.1	-2.5 -1.0	.8 1.5	1.0 .6	3.7 4.5	5.2 6.1	5.2 5.9	10.2 10.2	2.3 2.7	3.8 4.2	6.0 5.7	
Equipment & software <i>Previous Tealbook</i>	7.8 7.8	18.3 18.3	8.8 8.8	5.4 5.4	4.8 4.1	-1.0 .7	2.0 2.0	1.0 .2	4.2 5.4	5.5 7.5	6.1 7.3	11.4 11.4	2.8 3.0	4.2 5.1	7.5 7.2	
Nonres. structures <i>Previous Tealbook</i>	35.2 35.2	20.7 20.7	11.5 11.5	12.9 12.9	.6 .5	-6.1 -5.0	-2.2 .5	.9 1.4	2.7 2.3	4.4 2.6	3.0 2.6	6.9 6.9	1.0 2.0	2.7 2.2	2.3 2.2	
Net exports <sup>2</sup> <i>Previous Tealbook</i> <sup>2</sup>	-400 -400	-398 -398	-418 -418	-416 -416	-407 -405	-406 -405	-413 -411	-409 -412	-406 -414	-402 -414	-408 -423	-408 -408	-411 -409	-406 -416	-411 -430	
Exports	4.1	6.1	1.4	4.4	5.3	-1.3	3.5	4.8	5.3	5.0	5.3	4.3	2.9	5.1	6.2	
Imports	.1	4.7	4.9	3.1	2.8	-1.2	4.1	3.1	3.8	3.4	5.4	3.5	2.2	3.9	5.0	
Gov't. cons. & invest. <i>Previous Tealbook</i>	-.8 -.8	-2.9 -2.9	-2.2 -2.2	-3.0 -3.0	-.7 -.7	.6 -1.7	-1.6 -1.1	-1.5 -1.5	-1.5 -1.5	-1.4 -1.4	-1.4 -1.4	-3.3 -3.3	-1.2 -1.6	-1.5 -1.5	-1.1 -1.1	
Federal	2.8	-4.3	-4.4	-4.2	-.2	1.4	-4.2	-4.0	-4.3	-4.1	-4.3	-4.2	-1.8	-4.2	-4.2	
Defense	8.3	2.6	-10.6	-7.1	-.2	3.4	-4.9	-4.7	-5.1	-4.8	-5.1	-4.0	-2.3	-4.9	-4.9	
Nondefense	-7.5	-17.4	10.2	1.8	-.4	-2.4	-2.7	-2.7	-2.7	-2.8	-2.8	-4.6	-.9	-2.7	-2.9	
State & local	-3.2	-2.0	-.7	-2.2	-1.0	.0	.1	.2	.3	.3	.4	-2.7	-.8	.3	.9	
Change in bus. inventories <sup>2</sup> <i>Previous Tealbook</i> <sup>2</sup>	28 28	-4 -4	71 71	57 57	41 53	48 47	48 54	74 94	69 90	64 87	70 97	31 31	49 53	69 92	78 107	
Nonfarm <sup>2</sup>	36	-1	74	62	53	67	67	68	61	57	63	36	63	62	73	
Farm <sup>2</sup>	-6	-3	-2	-3	-8	-19	-19	7	7	7	7	-4	-12	7	5	

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	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Real GDP <i>Previous Tealbook</i>	2.8 2.8	2.4 2.4	2.2 2.2	-3.3 -3.3	-1 -1	2.4 2.4	2.0 2.0	1.8 1.6	2.6 2.4	3.5 3.2
Final sales <i>Previous Tealbook</i>	2.7	2.8	2.4	-2.6	-5	1.7	1.7	2.0	2.5	3.5
Priv. dom. final purch. <i>Previous Tealbook</i>	2.7 3.2 3.2	2.8 2.4 2.4	2.4 1.2 1.2	-2.6 -2.6 -4.5 -4.5	-5 -5 -2.8 -2.8	1.7 1.7 3.2 3.2	1.7 1.7 2.9 2.9	1.8 2.7 2.5	2.1 3.2 2.9	3.1 4.3 4.0
Personal cons. expend. <i>Previous Tealbook</i>	2.8	3.2	1.7	-2.5	-3	2.9	1.9	2.3	2.8	3.7
Durables	2.8	3.2	1.7	-2.5	-3	2.9	1.9	2.2	2.4	3.4
Nondurables	2.8	7.0	4.6	-13.0	3.0	9.5	5.9	7.8	8.1	9.6
Services	3.1 2.7	2.9 2.6	.8 1.4	-3.1 -5	.4 -1.1	3.0 1.9	1.4 1.5	2.0 1.6	1.9 2.2	2.9 3.0
Residential investment <i>Previous Tealbook</i>	5.3 5.3	-15.7 -15.7	-20.7 -20.7	-24.4 -24.4	-13.3 -13.3	-5.7 -5.7	3.9 3.9	14.2 10.9	14.8 11.9	13.2 12.4
Business fixed invest. <i>Previous Tealbook</i>	4.5 4.5	7.8 7.8	7.9 7.9	-9.4 -9.4	-15.7 -15.7	7.7 7.7	10.2 10.2	2.3 2.7	3.8 4.2	6.0 5.7
Equipment & software <i>Previous Tealbook</i>	6.2 6.2	6.0 6.0	3.9 3.9	-13.6 -13.6	-7.8 -7.8	11.9 11.9	11.4 11.4	2.8 3.0	4.2 5.1	7.5 7.2
Nontres. structures <i>Previous Tealbook</i>	-1 -1	13.0 13.0	17.3 17.3	-1.2 -1.2	-29.4 -29.4	-1.8 -1.8	6.9 6.9	1.0 2.0	2.7 2.2	2.3 2.2
Net exports <sup>1</sup> <i>Previous Tealbook</i> <sup>1</sup>	-723 -723	-729 -729	-649 -649	-495 -495	-355 -355	-420 -420	-408 -408	-411 -409	-406 -416	-411 -430
Exports	6.7	10.2	10.1	-2.5	.3	8.8	4.3	2.9	5.1	6.2
Imports	5.2	4.1	.8	-5.9	-6.1	10.9	3.5	2.2	3.9	5.0
Gov't. cons. & invest. <i>Previous Tealbook</i>	.7 .7	1.5 1.5	1.9 1.9	2.7 2.7	4.0 4.0	-1.3 -1.3	-3.3 -3.3	-1.2 -1.6	-1.5 -1.5	-1.1 -1.1
Federal	1.2	2.2	3.1	8.8	5.1	2.3	-4.2	-1.8	-4.2	-4.2
Defense	.4	4.4	2.6	9.8	4.1	1.0	-4.0	-2.3	-4.9	-4.9
Nondefense	2.6	-2.3	4.2	6.8	7.2	5.2	-4.6	-9	-2.7	-2.9
State & local	.4	1.2	1.2	-9	3.3	-3.6	-2.7	-8	.3	.9
Change in bus. inventories <sup>1</sup> <i>Previous Tealbook</i> <sup>1</sup>	50 50	59 59	28 28	-36 -36	-139 -139	51 51	31 31	49 53	69 92	78 107
Nonfarm <sup>1</sup>	50	63	29	-38	-138	58	36	63	62	73
Farm <sup>1</sup>	0	-4	-1	1	-1	-6	-4	-12	7	5

1. Billions of chained (2005) dollars.

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

Item	2011			2012				2013				2011 <sup>1</sup>	2012 <sup>1</sup>	2013 <sup>1</sup>	2014 <sup>1</sup>
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Real GDP <i>Previous Tealbook</i>	2.5	1.3	4.1	2.0	1.3	2.0	2.0	1.8	2.5	3.0	3.1	2.0	1.8	2.6	3.5
	2.5	1.3	4.1	2.0	1.7	1.3	1.7	2.0	2.3	2.6	2.8	2.0	1.6	2.4	3.2
Final sales <i>Previous Tealbook</i>	2.5	2.3	1.6	2.4	1.7	1.9	2.1	1.0	2.7	3.1	3.0	1.7	2.0	2.5	3.4
	2.5	2.3	1.6	2.4	1.9	1.4	1.4	.8	2.4	2.7	2.5	1.7	1.8	2.1	3.1
Priv. dom. final purch. <i>Previous Tealbook</i>	2.1	2.9	2.7	2.9	1.6	1.7	2.6	1.2	2.9	3.3	3.4	2.4	2.2	2.7	3.6
	2.1	2.9	2.7	2.9	1.7	1.8	1.9	1.1	2.7	2.9	3.0	2.4	2.1	2.5	3.3
Personal cons. expend. <i>Previous Tealbook</i>	.7	1.2	1.5	1.7	1.1	1.7	2.2	.8	2.2	2.4	2.5	1.4	1.7	2.0	2.7
	.7	1.2	1.5	1.7	1.2	1.7	1.6	.8	2.0	2.0	2.1	1.4	1.5	1.7	2.4
Durables	-2	.4	1.0	.9	.0	.6	.9	.2	.8	.8	.8	.4	.6	.6	.8
Nondurables	-1	-1	.3	.3	.1	.5	.4	.1	.3	.4	.4	.2	.3	.3	.5
Services	.9	.9	.2	.6	1.0	.6	.8	.5	1.1	1.3	1.3	.7	.8	1.0	1.4
Residential investment <i>Previous Tealbook</i>	.1	.0	.3	.4	.2	.3	.3	.3	.4	.4	.4	.1	.3	.4	.4
	.1	.0	.3	.4	.2	.2	.1	.2	.3	.3	.3	.1	.2	.3	.3
Business fixed invest. <i>Previous Tealbook</i>	1.3	1.7	.9	.7	.4	-.3	.1	.1	.4	.5	.5	1.0	.2	.4	.6
	1.3	1.7	.9	.7	.3	-.1	.2	.1	.5	.6	.6	1.0	.3	.4	.6
Equipment & software	.5	1.2	.6	.4	.4	-.1	.1	.1	.3	.4	.4	.8	.2	.3	.5
<i>Previous Tealbook</i>	.5	1.2	.6	.4	.3	.0	.1	.0	.4	.5	.5	.8	.2	.4	.5
Nonres. structures	.8	.5	.3	.4	.0	-.2	-.1	.0	.1	.1	.1	.2	.0	.1	.1
<i>Previous Tealbook</i>	.8	.5	.3	.4	.0	-.1	.0	.0	.1	.1	.1	.2	.1	.1	.1
Net exports <i>Previous Tealbook</i>	.5	.0	-.6	.1	.2	.0	-.2	.1	.1	.1	-.2	.0	.0	.0	.0
	.5	.0	-.6	.1	.3	.0	-.2	.0	-.1	.0	-.3	.0	.0	-.1	.0
Exports	.6	.8	.2	.6	.7	-.2	.5	.7	.7	.7	.7	.6	.4	.7	.9
Imports	.0	-.8	-.9	-.5	-.5	.2	-.7	-.5	-.7	-.6	-.9	-.6	-.4	-.7	-.9
Gov't. cons. & invest. <i>Previous Tealbook</i>	-.2	-.6	-.4	-.6	-.1	.1	-.3	-.3	-.3	-.3	-.3	-.7	-.2	-.3	-.2
	-.2	-.6	-.4	-.6	-.1	-.3	-.2	-.3	-.3	-.3	-.3	-.7	-.3	-.3	-.2
Federal	.2	-.4	-.4	-.3	.0	.1	-.3	-.3	-.3	-.3	-.3	-.4	-.1	-.3	-.3
Defense	.5	.2	-.6	-.4	.0	.2	-.3	-.2	-.3	-.2	-.2	-.2	-.1	-.2	-.2
Nondefense	-.2	-.5	.3	.1	.0	-.1	-.1	-.1	-.1	-.1	-.1	-.1	.0	-.1	-.1
State & local	-.4	-.2	-.1	-.3	-.1	.0	.0	.0	.0	.0	.1	-.3	-.1	.0	.1
Change in bus. inventories <i>Previous Tealbook</i>	.0	-1.1	2.5	-.4	-.5	.1	.0	.8	-.2	-.1	.2	.3	-.2	.2	.0
	.0	-1.1	2.5	-.4	-.2	-.1	.2	1.2	-.1	-.1	.3	.3	-.1	.3	.1
Nonfarm	.0	-1.2	2.5	-.4	-.3	.5	.0	.0	-.2	-.1	.2	.1	-.1	.0	.1
Farm	.0	.1	.1	.0	-.2	-.3	.0	.7	.0	.0	.0	.1	-.1	.2	.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	2011			2012				2013				2011 <sup>1</sup>	2012 <sup>1</sup>	2013 <sup>1</sup>	2014 <sup>1</sup>
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
GDP chain-wt. price index <i>Previous Tealbook</i>	2.6 2.6	3.0 3.0	.4 .4	2.0 2.0	1.6 1.6	3.0 2.9	2.1 1.4	1.0 1.4	1.4 1.5	1.3 1.5	1.3 1.4	2.0 2.0	2.2 2.0	1.3 1.5	1.4 1.5
PCE chain-wt. price index <i>Previous Tealbook</i>	3.6 3.6	2.3 2.3	1.1 1.1	2.5 2.5	.7 .7	1.7 1.9	2.1 1.7	.9 1.2	1.4 1.5	1.4 1.4	1.3 1.3	2.5 2.5	1.7 1.7	1.3 1.4	1.4 1.4
Energy <i>Previous Tealbook</i>	20.5 20.5	4.7 4.7	-5.0 -5.0	8.1 8.1	-13.6 -13.5	10.5 10.3	11.6 2.5	-10.7 -6.5	-3.0 -2.4	-2.6 -2.5	-2.4 -2.2	11.9 11.9	3.6 1.4	-4.7 -3.4	-2.3 -2.2
Food <i>Previous Tealbook</i>	6.0 6.0	5.1 5.1	3.3 3.3	1.3 1.3	.7 .7	.6 1.4	2.6 3.4	3.5 3.6	2.9 3.4	2.2 2.5	1.0 .8	5.1 5.1	1.3 1.7	2.4 2.6	1.0 .9
Ex. food & energy <i>Previous Tealbook</i>	2.3 2.3	1.9 1.9	1.3 1.3	2.2 2.2	1.7 1.8	1.2 1.3	1.4 1.5	1.6 1.6	1.6 1.6	1.6 1.6	1.6 1.6	1.7 1.7	1.6 1.7	1.6 1.6	1.7 1.6
Ex. food & energy, market based <i>Previous Tealbook</i>	2.3 2.3	2.1 2.1	1.5 1.5	2.2 2.2	1.8 1.7	1.3 1.4	1.2 1.4	1.5 1.5	1.5 1.5	1.5 1.5	1.5 1.5	1.9 1.9	1.6 1.7	1.5 1.5	1.6 1.5
CPI <i>Previous Tealbook</i>	4.4 4.4	3.1 3.1	1.3 1.3	2.5 2.5	.8 .8	2.3 2.5	2.9 2.1	.8 1.2	1.5 1.6	1.4 1.4	1.3 1.3	3.3 3.3	2.1 2.0	1.2 1.4	1.4 1.3
Ex. food & energy <i>Previous Tealbook</i>	2.4 2.4	2.5 2.5	1.9 1.9	2.1 2.1	2.6 2.6	1.5 1.8	1.7 1.8	1.7 1.7	1.7 1.7	1.7 1.7	1.7 1.7	2.2 2.2	2.0 2.1	1.7 1.7	1.8 1.7
ECI, hourly compensation <sup>2</sup> <i>Previous Tealbook</i> <sup>2</sup>	3.2 3.2	1.4 1.4	2.1 2.1	1.7 1.7	2.1 2.1	2.3 2.3	2.4 2.4	2.5 2.5	2.6 2.6	2.7 2.6	2.7 2.7	2.2 2.2	2.1 2.1	2.6 2.6	2.9 2.9
Nonfarm business sector Output per hour <i>Previous Tealbook</i>	1.2 1.2	.6 .6	2.8 2.8	-.5 -.5	1.9 2.2	1.6 1.0	.7 .8	.4 .9	1.7 1.8	1.7 1.3	1.2 1.2	.6 .6	.9 .8	1.3 1.3	1.6 1.6
Compensation per hour <i>Previous Tealbook</i>	-.2 -.2	.0 .0	-.7 -.7	5.8 5.8	3.5 3.7	2.2 2.3	2.4 2.3	2.6 2.5	2.7 2.6	2.8 2.7	2.9 2.8	2.0 2.0	3.5 3.5	2.8 2.7	3.1 3.0
Unit labor costs <i>Previous Tealbook</i>	-1.3 -1.3	-.6 -.6	-3.3 -3.3	6.4 6.4	1.6 1.5	.6 1.3	1.7 1.5	2.2 1.6	1.0 .8	1.1 1.5	1.6 1.6	1.4 1.4	2.6 2.6	1.5 1.4	1.5 1.4
Core goods imports chain-wt. price index <sup>3</sup> <i>Previous Tealbook</i> <sup>3</sup>	7.2 7.2	2.3 2.3	-.6 -.6	-.2 -.2	1.2 1.2	-3.4 -2.6	1.6 .4	1.8 .9	1.1 1.0	1.4 1.2	1.3 1.3	4.3 4.3	-.2 -.3	1.4 1.1	1.5 1.4

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	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GDP chain-wt. price index <i>Previous Tealbook</i>	3.5	2.9	2.6	2.1	.5	1.8	2.0	2.2	1.3	1.4
PCE chain-wt. price index <i>Previous Tealbook</i>	3.5	2.9	2.6	2.1	.5	1.8	2.0	2.0	1.5	1.5
Energy <i>Previous Tealbook</i>	3.2	1.9	3.5	1.7	1.4	1.5	2.5	1.7	1.3	1.4
Food <i>Previous Tealbook</i>	3.2	1.9	3.5	1.7	1.4	1.5	2.5	1.7	1.4	1.4
Ex. food & energy <i>Previous Tealbook</i>	21.5	-3.7	19.3	-8.8	2.7	6.5	11.9	3.6	-4.7	-2.3
Ex. food & energy, market based <i>Previous Tealbook</i>	21.5	-3.7	19.3	-8.8	2.7	6.5	11.9	1.4	-3.4	-2.2
	1.5	1.7	4.7	7.0	-1.7	1.3	5.1	1.3	2.4	1.0
	1.5	1.7	4.7	7.0	-1.7	1.3	5.1	1.7	2.6	.9
	2.3	2.3	2.4	2.0	1.6	1.2	1.7	1.6	1.6	1.7
	2.3	2.3	2.4	2.0	1.6	1.2	1.7	1.7	1.6	1.6
	2.0	2.2	2.1	2.2	1.7	.7	1.9	1.6	1.5	1.6
	2.0	2.2	2.1	2.2	1.7	.7	1.9	1.7	1.5	1.5
CPI <i>Previous Tealbook</i>	3.7	2.0	4.0	1.6	1.5	1.2	3.3	2.1	1.2	1.4
Ex. food & energy <i>Previous Tealbook</i>	3.7	2.0	4.0	1.6	1.5	1.2	3.3	2.0	1.4	1.3
	2.1	2.7	2.3	2.0	1.7	.6	2.2	2.0	1.7	1.8
	2.1	2.7	2.3	2.0	1.7	.6	2.2	2.1	1.7	1.7
ECL, hourly compensation <sup>1</sup> <i>Previous Tealbook</i> <sup>1</sup>	2.9	3.2	3.0	2.4	1.2	2.1	2.2	2.1	2.6	2.9
	2.9	3.2	3.0	2.4	1.2	2.1	2.2	2.1	2.6	2.9
Nonfarm business sector Output per hour <i>Previous Tealbook</i>	1.6	.8	2.5	-1.1	5.6	1.8	.6	.9	1.3	1.6
Compensation per hour <i>Previous Tealbook</i>	1.6	.8	2.5	-1.1	5.6	1.8	.6	.8	1.3	1.6
Unit labor costs <i>Previous Tealbook</i>	3.5	4.5	3.6	2.5	1.5	1.6	2.0	3.5	2.8	3.1
	3.5	4.5	3.6	2.5	1.5	1.6	2.0	3.5	2.7	3.0
	1.9	3.6	1.1	3.7	-3.9	-2	1.4	2.6	1.5	1.5
	1.9	3.6	1.1	3.7	-3.9	-2	1.4	2.6	1.4	1.4
Core goods imports chain-wt. price index <sup>2</sup> <i>Previous Tealbook</i> <sup>2</sup>	2.2	2.5	2.9	3.7	-1.7	2.7	4.3	-2	1.4	1.5
	2.2	2.5	2.9	3.7	-1.7	2.7	4.3	-3	1.1	1.4

1. Private-industry workers.

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

## Other Macroeconomic Indicators

Item	2011			2012				2013				2011 <sup>1</sup>	2012 <sup>1</sup>	2013 <sup>1</sup>	2014 <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>	.6	.3	.5	.7	.3	.4	.4	.4	.4	.4	.5	.6	1.8	1.8	2.0	2.9
Unemployment rate <sup>3</sup>	9.1	9.1	8.7	8.2	8.2	8.1	8.0	8.0	8.0	7.9	7.8	7.8	8.7	8.0	7.8	7.2
<i>Previous Tealbook<sup>3</sup></i>	9.1	9.1	8.7	8.2	8.2	8.3	8.3	8.2	8.2	8.1	8.0	8.0	8.7	8.3	8.0	7.6
Natural rate of unemployment <sup>3</sup>	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
<i>Previous Tealbook<sup>3</sup></i>	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
GDP gap <sup>4</sup>	-4.6	-4.6	-4.0	-4.0	-4.1	-4.1	-4.0	-4.1	-3.9	-3.7	-3.4	-3.4	-4.0	-4.0	-3.4	-2.0
<i>Previous Tealbook<sup>4</sup></i>	-4.9	-5.0	-4.4	-4.4	-4.4	-4.5	-4.6	-4.6	-4.5	-4.3	-4.1	-4.1	-4.4	-4.6	-4.1	-3.1
Industrial production <sup>5</sup>	1.2	5.6	5.1	5.9	2.6	-4	2.8	5.0	3.7	3.4	3.6	3.6	4.1	2.7	4.0	3.9
<i>Previous Tealbook<sup>5</sup></i>	1.2	5.6	5.1	5.8	2.5	1.2	4.8	4.1	2.9	3.0	3.1	3.1	4.1	3.5	3.3	3.5
Manufacturing industr. prod. <sup>5</sup>	.2	5.1	5.6	9.8	1.0	-9	1.6	4.0	3.7	3.6	4.0	4.2	4.2	2.8	3.8	4.3
<i>Previous Tealbook<sup>5</sup></i>	.2	5.1	5.6	9.7	1.0	1.9	2.8	2.6	2.7	3.1	3.5	3.5	4.2	3.8	3.0	3.9
Capacity utilization rate - mfg. <sup>3</sup>	74.4	75.2	76.1	77.6	77.5	77.1	77.1	77.5	77.9	78.2	78.7	78.7	76.1	77.1	78.7	80.1
<i>Previous Tealbook<sup>3</sup></i>	74.4	75.2	76.1	77.6	77.5	77.6	77.8	78.0	78.2	78.4	78.7	78.7	76.1	77.8	78.7	79.9
Housing starts <sup>6</sup>	.6	.6	.7	.7	.7	.8	.9	.9	1.0	1.0	1.1	1.1	.6	.8	1.0	1.2
Light motor vehicle sales <sup>6</sup>	12.2	12.6	13.4	14.2	14.1	14.5	14.7	14.9	15.1	15.3	15.5	15.5	12.7	14.4	15.2	16.1
<i>Income and saving</i>																
Nominal GDP <sup>5</sup>	5.2	4.3	4.2	4.2	2.8	5.2	4.3	2.8	4.0	4.4	4.5	4.5	4.0	4.1	3.9	5.0
Real disposable pers. income <sup>5</sup>	-1.5	-1.3	-2	3.7	3.1	2.0	2.1	-1.6	3.0	3.6	3.7	3.7	.3	2.7	2.2	4.2
<i>Previous Tealbook<sup>5</sup></i>	-1.5	-1.3	-2	3.7	3.1	1.9	2.8	-1.3	2.9	3.6	3.5	3.5	.3	2.9	2.2	3.5
Personal saving rate <sup>3</sup>	4.6	3.9	3.4	3.6	4.0	4.0	3.8	3.1	3.1	3.1	3.1	3.1	3.4	3.8	3.1	3.5
<i>Previous Tealbook<sup>3</sup></i>	4.6	3.9	3.4	3.6	4.0	3.9	4.1	3.5	3.5	3.6	3.7	3.7	3.4	4.1	3.7	3.8
Corporate profits <sup>7</sup>	19.3	6.7	29.6	-10.4	4.7	4.2	-7	-5.1	-3.6	-8	-7	-7	9.2	-8	-2.5	-6
Profit share of GNP <sup>3</sup>	11.8	11.9	12.5	12.1	12.1	12.1	12.0	11.7	11.5	11.4	11.3	11.3	12.5	12.0	11.3	10.7
Net federal saving <sup>8</sup>	-1,308	-1,232	-1,183	-1,059	-1,106	-1,053	-1,084	-826	-795	-772	-750	-750	-1,237	-1,075	-786	-665
Net state & local savings <sup>8</sup>	-75	-118	-117	-128	-124	-117	-110	-100	-80	-72	-62	-62	-102	-120	-79	-44
Gross national saving rate <sup>3</sup>	11.8	11.8	12.4	12.4	12.5	12.8	12.2	12.6	12.7	12.7	12.8	12.8	12.4	12.2	12.8	13.3
Net national saving rate <sup>3</sup>	-1.0	-1.0	-3	-3	-1	.4	-2	.3	.3	.4	.4	.4	-3	-2	.4	1.1

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	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<i>Employment and production</i>										
Nonfarm payroll employment <sup>1</sup>	2.4	2.1	1.2	-2.8	-5.6	.8	1.8	1.8	2.0	2.9
Unemployment rate <sup>2</sup>	5.0	4.5	4.8	6.9	9.9	9.6	8.7	8.0	7.8	7.2
<i>Previous Tealbook<sup>2</sup></i>	5.0	4.5	4.8	6.9	9.9	9.6	8.7	8.3	8.0	7.6
Natural rate of unemployment <sup>2</sup>	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0	6.0	6.0
<i>Previous Tealbook<sup>2</sup></i>	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0	6.0	6.0
GDP gap <sup>3</sup>	.6	.8	.8	-4.4	-5.5	-4.4	-4.0	-4.0	-3.4	-2.0
<i>Previous Tealbook<sup>3</sup></i>	.6	.8	.8	-4.5	-5.7	-4.7	-4.4	-4.6	-4.1	-3.1
Industrial production <sup>4</sup>	2.3	2.1	2.5	-9.0	-5.7	6.3	4.1	2.7	4.0	3.9
<i>Previous Tealbook<sup>4</sup></i>	2.3	2.1	2.5	-9.0	-5.7	6.3	4.1	3.5	3.3	3.5
Manufacturing industr. prod. <sup>4</sup>	3.4	1.8	2.8	-11.8	-6.5	6.5	4.2	2.8	3.8	4.3
<i>Previous Tealbook<sup>4</sup></i>	3.4	1.8	2.8	-11.8	-6.5	6.5	4.2	3.8	3.0	3.9
Capacity utilization rate - mfg. <sup>2</sup>	78.4	78.2	78.2	69.7	67.0	73.1	76.1	77.1	78.7	80.1
<i>Previous Tealbook<sup>2</sup></i>	78.4	78.2	78.2	69.7	67.0	73.1	76.1	77.8	78.7	79.9
Housing starts <sup>5</sup>	2.1	1.8	1.4	.9	.6	.6	.6	.8	1.0	1.2
Light motor vehicle sales <sup>5</sup>	16.9	16.5	16.1	13.1	10.4	11.5	12.7	14.4	15.2	16.1
<i>Income and saving</i>										
Nominal GDP <sup>4</sup>	6.4	5.3	4.9	-1.2	.4	4.3	4.0	4.1	3.9	5.0
Real disposable pers. income <sup>4</sup>	.6	4.6	1.6	1.0	-3.0	3.5	.3	2.7	2.2	4.2
<i>Previous Tealbook<sup>4</sup></i>	.6	4.6	1.6	1.0	-3.0	3.5	.3	2.9	2.2	3.5
Personal saving rate <sup>2</sup>	1.6	2.8	2.5	6.2	3.8	4.8	3.4	3.8	3.1	3.5
<i>Previous Tealbook<sup>2</sup></i>	1.6	2.8	2.5	6.2	3.8	4.8	3.4	4.1	3.7	3.8
Corporate profits <sup>6</sup>	19.6	3.7	-8.1	-33.5	57.0	17.3	9.2	-8	-2.5	-6
Profit share of GNP <sup>2</sup>	11.8	11.6	10.1	6.8	10.7	12.0	12.5	12.0	11.3	10.7
Net federal saving <sup>7</sup>	-283	-204	-245	-613	-1229	-1308	-1237	-1075	-786	-665
Net state & local saving <sup>7</sup>	26	51	12	-72	-113	-90	-102	-120	-79	-44
Gross national saving rate <sup>2</sup>	15.6	16.5	13.9	12.6	11.0	12.1	12.4	12.2	12.8	13.3
Net national saving rate <sup>2</sup>	3.6	4.4	1.7	-6	-2.3	-6	-3	-2	.4	1.1

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	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Unified budget</b>																
Receipts <sup>1</sup>	2,449	2,705	2,981	3,230	509	760	625	587	570	837	712	677	626	922	756	726
Outlays <sup>1</sup>	3,538	3,501	3,598	3,784	966	885	810	912	886	863	840	910	920	894	874	963
Surplus/deficit <sup>1</sup>	-1,089	-795	-617	-554	-457	-125	-185	-324	-317	-26	-128	-233	-294	28	-118	-237
<i>Previous Tealbook</i>	-1,106	-837	-638	-597	-457	-125	-202	-331	-328	-34	-144	-232	-291	17	-131	-239
On-budget	-1,151	-798	-627	-556	-458	-187	-160	-330	-298	-73	-96	-255	-272	-17	-82	-256
Off-budget	62	3	10	2	1	62	-25	6	-19	47	-32	23	-22	45	-36	19
Means of financing																
Borrowing	1,152	832	697	634	398	198	230	275	307	101	148	253	314	-8	138	257
Cash decrease	-27	15	0	0	42	-48	6	40	30	-55	0	0	0	0	0	0
Other <sup>2</sup>	-36	-52	-80	-80	17	-25	-51	9	-21	-20	-20	-20	-20	-20	-20	-20
Cash operating balance, end of period	85	70	70	70	43	91	85	45	15	70	70	70	70	70	70	70
<b>NIPA federal sector</b>																
Receipts	2,637	2,911	3,164	3,400	2,665	2,669	2,681	2,713	2,943	2,976	3,014	3,052	3,159	3,199	3,246	3,288
Expenditures	3,737	3,780	3,852	3,993	3,724	3,775	3,734	3,797	3,768	3,770	3,786	3,803	3,837	3,865	3,902	3,945
Consumption expenditures	1,056	1,047	1,021	1,001	1,056	1,055	1,060	1,054	1,052	1,045	1,038	1,031	1,025	1,018	1,011	1,004
Defense	704	697	675	660	703	701	707	702	700	694	689	684	678	673	667	662
Nondefense	352	351	346	340	352	354	353	352	352	351	349	348	347	345	343	342
Other spending	2,682	2,733	2,831	2,992	2,668	2,720	2,674	2,743	2,716	2,725	2,747	2,772	2,813	2,847	2,892	2,941
Current account surplus	-1,100	-869	-688	-593	-1,059	-1,106	-1,053	-1,084	-826	-795	-772	-750	-678	-666	-656	-657
Gross investment	156	153	144	137	152	156	158	156	154	151	149	147	145	142	140	138
Gross saving less gross investment <sup>3</sup>	-1,116	-876	-681	-575	-1,071	-1,121	-1,068	-1,096	-835	-800	-774	-749	-674	-658	-645	-643
<b>Fiscal indicators<sup>4</sup></b>																
High-employment (HEB) surplus/deficit	-892.5	-647.0	-508.7	-482.3	-851.2	-899.2	-853.1	-877.9	-596.1	-565.2	-548.9	-536.1	-496.1	-498.5	-503.9	-521.9
Change in HEB, percent of potential GDP	-1.1	-1.7	-9.9	-2	-8	3	-3	1	-1.7	-2	-1	-1	-3	0	0	1
Fiscal impetus (FI), percent of GDP	-6	-1.2	-5	-3	-7	-7	-3	-6	-2.0	-1.1	-9	-8	-6	-6	-5	-4
<i>Previous Tealbook</i>	-6	-1.2	-5	-2	-7	-7	-6	-5	-2.0	-1.1	-9	-8	-6	-6	-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.

**Change in Debt of the Domestic Nonfinancial Sectors**  
(Percent)

Period <sup>1</sup>	Total	Households			Business	State and local governments	Federal government	Memo: Nominal GDP
		Total	Home mortgages	Consumer credit				
<i>Year</i>								
2008	5.9	-2	-5	.8	6.1	.7	24.2	-1.2
2009	3.1	-1.7	-1.4	-4.5	-2.3	3.9	22.7	.4
2010	4.1	-2.2	-2.9	-1.2	.8	2.2	20.2	4.3
2011	3.6	-1.6	-2.3	3.4	4.7	-1.9	11.4	4.0
2012	4.4	.6	-1.6	5.8	4.3	-2	10.7	4.1
2013	4.0	2.3	.9	6.7	3.9	.6	7.0	3.9
2014	3.8	2.5	.9	7.5	4.0	.9	5.7	5.0
2015	3.7	2.8	1.2	7.5	4.0	1.0	4.8	5.3
<i>Quarter</i>								
2011:1	2.5	-2.0	-2.6	2.6	3.7	-2.8	9.1	2.2
2	2.6	-2.7	-2.4	3.1	5.2	-2.6	8.2	5.2
3	4.3	-1.7	-1.8	1.9	4.2	-.2	13.7	4.3
4	4.9	.1	-2.5	5.9	5.3	-2.1	12.7	4.2
2012:1	4.5	-.9	-3.3	5.7	3.8	-1.2	13.7	4.2
2	4.8	1.3	-2.1	6.5	3.9	.8	10.9	2.8
3	3.6	.5	-.9	4.5	5.1	-.9	6.7	5.2
4	4.7	1.5	.0	6.0	4.3	.3	9.9	4.3
2013:1	4.3	2.0	.9	5.4	4.1	.6	8.0	2.8
2	4.1	2.4	1.0	6.6	3.8	.6	7.3	4.0
3	3.0	2.4	.9	7.0	3.7	.6	3.5	4.4
4	4.5	2.4	.8	7.2	3.8	.6	8.5	4.5
2014:1	4.3	2.4	.7	7.3	3.9	.9	7.7	4.9
2	3.1	2.4	.8	7.3	3.9	.9	3.3	5.0
3	3.0	2.5	.9	7.3	4.0	.9	3.0	5.0
4	4.6	2.6	1.0	7.3	4.1	.9	8.1	5.1

Note: Quarterly data are at seasonally adjusted annual rates.

1. Data after 2012:Q1 are staff projections. Changes are measured from end of the preceding period to end of period indicated except for annual nominal GDP growth, which is calculated from Q4 to Q4.

**Flow of Funds Projections: Highlights**  
(Billions of dollars at seasonally adjusted annual rates except as noted)

Category	2012	2013	2014	2015	2012				2013				2014			
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<i>Domestic nonfinancial sectors</i>																
Net funds raised																
Total	1296.4	1266.4	1216.3	1221.0	958.5	1481.3	1376.3	1312.5	875.0	1501.8	1433.9	920.3	911.8	1599.1	1599.1	1599.1
Net equity issuance	-398.1	-340.0	-360.0	-360.0	-431.4	-360.0	-340.0	-340.0	-340.0	-340.0	-360.0	-360.0	-360.0	-360.0	-360.0	-360.0
Net debt issuance	1694.5	1606.4	1576.3	1581.0	1389.8	1841.3	1716.3	1652.5	1215.0	1841.8	1793.9	1280.3	1271.8	1959.1	1959.1	1959.1
<i>Borrowing indicators</i>																
Debt (percent of GDP) <sup>1</sup>	248.5	249.3	247.3	243.8	248.5	248.4	249.5	249.7	249.2	248.8	248.5	247.8	246.6	245.9	245.9	245.9
Borrowing (percent of GDP)	10.8	9.8	9.2	8.8	8.8	11.5	10.7	10.2	7.4	11.1	10.7	7.5	7.4	11.3	11.3	11.3
<i>Households</i>																
Net borrowing <sup>2</sup>	74.2	300.4	334.8	387.5	62.1	192.2	264.7	308.0	314.1	314.9	312.9	327.4	342.0	356.8	356.8	356.8
Home mortgages	-153.7	86.4	82.3	117.4	-86.3	0.0	86.1	95.9	86.5	77.1	67.6	77.4	87.2	97.1	97.1	97.1
Consumer credit	152.5	186.1	221.6	238.1	122.6	165.7	151.2	184.8	199.5	208.9	215.6	219.6	223.5	227.6	227.6	227.6
Debt/DPI (percent) <sup>3</sup>	108.6	106.9	103.7	101.6	108.0	107.1	107.8	107.2	106.5	105.8	104.8	104.1	103.3	102.7	102.7	102.7
<i>Business</i>																
Financing gap <sup>4</sup>	-106.1	49.1	223.1	263.0	-146.8	-119.4	2.3	32.7	61.4	99.9	195.1	222.9	237.5	236.9	236.9	236.9
Net equity issuance	-398.1	-340.0	-360.0	-360.0	-431.4	-360.0	-340.0	-340.0	-340.0	-340.0	-360.0	-360.0	-360.0	-360.0	-360.0	-360.0
Credit market borrowing	508.8	479.1	514.9	533.0	607.9	520.6	503.2	468.5	464.2	480.6	498.1	504.7	524.9	531.9	531.9	531.9
<i>State and local governments</i>																
Net borrowing	-7.3	17.9	25.9	29.9	-25.6	9.9	17.9	17.9	17.9	17.9	25.9	25.9	25.9	25.9	25.9	25.9
Current surplus <sup>5</sup>	146.3	168.8	211.7	262.1	123.6	133.0	144.3	166.4	176.1	188.3	187.4	209.7	219.2	230.7	230.7	230.7
<i>Federal government</i>																
Net borrowing	1101.6	809.0	700.7	630.6	745.5	1118.7	930.6	858.1	418.8	1028.5	957.0	422.3	378.9	1044.6	1044.6	1044.6
Net borrowing (n.s.a.)	1101.6	809.0	700.7	630.6	229.8	275.3	307.5	100.6	148.1	252.8	314.1	-8.3	138.1	256.8	256.8	256.8
Unified deficit (n.s.a.)	1091.9	703.6	620.7	550.6	185.1	324.3	316.9	25.8	128.1	232.8	294.1	-28.3	118.1	236.8	236.8	236.8
<i>Depository institutions</i>																
Funds supplied	426.2	562.7	642.7	699.0	547.1	527.0	552.8	547.4	565.0	585.7	608.2	632.1	645.3	685.1	685.1	685.1

Note: Data after 2012:Q1 are staff projections.

1. Average debt levels in the period (computed as the average of period-end debt positions) divided by nominal GDP.

2. Includes change in liabilities not shown in home mortgages and consumer credit.

3. Average debt levels in the period (computed as the average of period-end debt positions) divided by disposable personal income.

4. For corporations, excess of capital expenditures over U.S. internal funds.

5. NIPA state and local government saving plus consumption of fixed capital and net capital transfers.

n.s.a. Not seasonally adjusted.

**Foreign Real GDP and Consumer Prices: Selected Countries**  
(Quarterly percent changes at an annual rate)

Measure and country	2011				2012				Projected-----2013			
	-----				-----				-----			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Real GDP</b> <sup>1</sup>												
Total foreign	3.5	2.4	3.8	1.6	3.2	2.2	2.0	2.1	2.4	2.7	3.0	3.2
<i>Previous Tealbook</i>	3.5	2.3	3.9	1.6	3.2	2.3	2.3	2.3	2.5	2.7	2.9	3.1
Advanced foreign economies	1.6	.0	3.1	.4	1.5	.6	.7	.6	.9	1.1	1.5	1.8
Canada	3.6	-1.0	4.5	1.9	1.8	1.8	1.9	1.8	1.7	1.8	2.2	2.5
Japan	-7.9	-1.3	6.9	.3	5.3	.7	-1.0	.4	.9	1.2	1.3	1.6
United Kingdom	2.0	.3	2.1	-1.4	-1.2	-1.5	2.4	.3	1.1	1.5	2.0	2.1
Euro area	2.6	.9	.3	-1.3	.0	-7	-8	-1.0	-5	.0	.4	.8
Germany	5.0	1.8	1.5	-6	2.0	1.1	.0	-.3	.0	.5	.8	1.4
Emerging market economies	5.6	4.9	4.6	2.8	5.0	3.9	3.4	3.6	4.1	4.5	4.6	4.7
Asia	7.6	5.1	5.0	2.5	5.7	4.5	4.2	4.2	4.7	5.3	5.6	5.7
Korea	5.3	3.4	3.4	1.3	3.5	1.1	2.2	2.3	2.8	3.6	3.8	4.0
China	9.1	10.0	9.5	7.8	6.6	7.4	7.0	7.1	7.4	7.6	7.8	8.0
Latin America	3.3	4.8	4.0	3.0	4.2	3.2	2.6	3.0	3.5	3.6	3.7	3.7
Mexico	2.1	5.5	4.9	3.0	4.9	3.5	2.4	2.9	3.6	3.7	3.7	3.7
Brazil	3.3	2.3	-6	.5	.5	1.6	2.8	3.3	3.4	3.5	3.8	3.8
<b>Consumer prices</b> <sup>2</sup>												
Total foreign	4.1	3.5	3.1	2.7	2.6	1.9	2.2	2.7	2.3	2.2	2.2	2.3
<i>Previous Tealbook</i>	4.1	3.5	3.1	2.7	2.6	1.9	1.8	2.6	2.3	2.3	2.2	2.2
Advanced foreign economies	3.0	2.3	1.3	2.4	2.1	.6	.7	1.8	1.3	1.2	1.2	1.2
Canada	3.3	3.4	1.0	2.9	2.1	.1	.1	2.1	1.6	1.5	1.6	1.7
Japan	.0	-.7	.1	-.7	2.3	-9	-2.0	.5	.0	-2	-1	-1
United Kingdom	6.7	4.0	3.9	4.0	1.9	1.2	2.6	3.8	2.0	1.5	1.5	2.0
Euro Area	3.4	2.9	1.9	3.6	2.4	2.0	2.3	2.1	1.6	1.6	1.4	1.4
Germany	3.3	2.5	1.9	2.8	2.4	1.4	1.8	2.2	2.2	2.1	1.7	1.7
Emerging market economies	5.1	4.5	4.5	3.0	2.9	3.0	3.3	3.3	3.1	3.1	3.1	3.0
Asia	5.5	5.2	4.9	2.1	2.3	3.2	2.1	3.0	2.9	2.9	2.9	2.9
Korea	5.5	3.4	4.4	2.6	1.6	1.2	1.0	2.3	2.8	2.8	2.8	2.8
China	5.1	6.1	5.7	1.4	2.0	2.5	1.7	2.5	2.7	2.8	2.8	2.8
Latin America	3.7	2.9	3.9	5.2	4.6	2.6	6.3	3.9	3.6	3.6	3.5	3.5
Mexico	3.2	2.4	3.5	4.9	4.5	2.5	6.5	3.6	3.4	3.3	3.2	3.2
Brazil	7.8	6.8	6.2	6.0	4.0	3.8	7.3	6.1	5.2	5.4	5.6	5.6

<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	2006	2007	2008	2009	2010	2011	-----Projected-----			
							2012	2013	2014	
<b>Real GDP</b> <sup>1</sup>										
Total foreign	4.2	4.3	-9	.9	4.5	2.8	2.4	2.8	3.4	
<i>Previous Tealbook</i>	4.2	4.3	-9	.9	4.5	2.8	2.5	2.8	3.3	
Advanced foreign economies	2.6	2.6	-1.9	-1.4	2.9	1.3	.9	1.3	2.0	
Canada	1.9	2.5	-7	-1.4	3.3	2.2	1.8	2.0	2.7	
Japan	2.1	1.6	-4.8	-6	3.4	-6	1.3	1.2	.8	
United Kingdom	2.0	3.8	-4.6	-9	1.5	.7	.0	1.7	2.3	
Euro area	3.8	2.3	-2.1	-2.3	2.2	.6	-6	.2	1.3	
Germany	4.9	2.4	-1.9	-2.2	4.2	1.9	.7	.7	1.8	
Emerging market economies	6.3	6.7	.4	3.6	6.2	4.5	4.0	4.5	4.8	
Asia	7.8	8.8	.8	8.0	7.7	5.0	4.7	5.3	5.8	
Korea	4.6	5.8	-3.2	6.3	5.0	3.4	2.3	3.5	4.2	
China	12.8	13.7	7.7	11.3	9.7	9.1	7.0	7.7	8.1	
Latin America	4.8	4.4	-2	-7	4.6	3.8	3.3	3.6	3.7	
Mexico	4.1	3.5	-1.1	-2.1	4.3	3.9	3.4	3.7	3.7	
Brazil	4.9	6.6	.9	5.3	5.3	1.4	2.1	3.6	4.0	
<b>Consumer prices</b> <sup>2</sup>										
Total foreign	2.2	3.7	3.3	1.3	3.2	3.4	2.3	2.3	2.5	
<i>Previous Tealbook</i>	2.2	3.7	3.3	1.3	3.2	3.4	2.2	2.3	2.5	
Advanced foreign economies	1.4	2.2	2.0	.2	1.7	2.2	1.3	1.2	1.7	
Canada	1.4	2.5	1.8	.8	2.2	2.7	1.1	1.6	1.9	
Japan	.3	.5	1.1	-2.0	-.3	-.3	.0	-.1	1.7	
United Kingdom	2.7	2.1	3.9	2.2	3.4	4.7	2.4	1.7	1.6	
Euro Area	1.8	2.9	2.3	.4	2.0	2.9	2.2	1.5	1.5	
Germany	1.3	3.1	1.7	.3	1.6	2.6	1.9	1.9	1.8	
Emerging market economies	2.9	5.1	4.6	2.1	4.3	4.3	3.1	3.1	3.2	
Asia	2.4	5.5	3.6	1.3	4.3	4.4	2.6	2.9	3.1	
Korea	2.1	3.4	4.5	2.4	3.2	4.0	1.5	2.8	3.0	
China	2.1	6.7	2.5	.6	4.6	4.6	2.2	2.8	3.0	
Latin America	4.1	4.2	6.7	3.9	4.4	3.9	4.3	3.5	3.6	
Mexico	4.1	3.8	6.2	4.0	4.3	3.5	4.3	3.3	3.3	
Brazil	3.1	4.3	6.3	4.3	5.6	6.7	5.3	5.4	5.6	

<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.

## U.S. Current Account

## Quarterly Data

	2011				2012				Projected-----2013			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Billions of dollars, s.a.a.r.											
<b>U.S. current account balance</b>	<b>-480.0</b>	<b>-476.5</b>	<b>-432.6</b>	<b>-474.6</b>	<b>-534.5</b>	<b>-469.6</b>	<b>-436.6</b>	<b>-449.4</b>	<b>-465.7</b>	<b>-442.9</b>	<b>-455.3</b>	<b>-490.0</b>
<i>Previous Tealbook</i>	-480.0	-476.5	-432.6	-474.6	-549.3	-493.3	-455.5	-491.7	-514.4	-496.7	-509.4	-547.0
Current account as percent of GDP	-3.2	-3.2	-2.9	-3.1	-3.5	-3.0	-2.8	-2.8	-2.9	-2.7	-2.8	-3.0
<i>Previous Tealbook</i>	-3.2	-3.2	-2.9	-3.1	-3.5	-3.2	-2.9	-3.1	-3.2	-3.1	-3.1	-3.3
Net goods & services	-548.9	-566.2	-539.3	-585.1	-593.5	-557.3	-515.9	-528.7	-546.0	-517.4	-516.3	-538.8
Investment income, net	217.9	232.8	241.9	247.4	197.4	229.7	220.1	222.1	221.7	211.9	201.8	191.6
Direct, net	314.9	318.2	323.4	330.2	282.9	305.5	281.7	276.6	275.2	267.7	265.8	266.7
Portfolio, net	-97.1	-85.4	-81.4	-82.8	-85.6	-75.8	-61.7	-54.5	-53.5	-55.7	-64.0	-75.0
Other income and transfers, net	-148.9	-143.1	-135.3	-136.9	-138.4	-142.0	-140.8	-142.9	-141.4	-137.5	-140.8	-142.9

## Annual Data

	Billions of dollars										Projected-----2013			
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	Billions of dollars													
<b>U.S. current account balance</b>	<b>-800.6</b>	<b>-710.3</b>	<b>-677.1</b>	<b>-381.9</b>	<b>-442.0</b>	<b>-465.9</b>	<b>-472.5</b>	<b>-463.5</b>	<b>-506.9</b>					
<i>Previous Tealbook</i>	-800.6	-710.3	-677.1	-381.9	-442.0	-465.9	-472.5	-463.5	-506.9					
Current account as percent of GDP	-6.0	-5.1	-4.7	-2.7	-3.0	-3.1	-3.0	-2.8	-3.0					
<i>Previous Tealbook</i>	-6.0	-5.1	-4.7	-2.7	-3.0	-3.1	-3.2	-3.2	-3.4					
Net goods & services	-753.3	-696.7	-698.3	-379.2	-494.7	-559.9	-548.8	-529.6	-542.1					
Investment income, net	54.7	111.1	157.8	127.6	191.0	235.0	217.3	206.8	175.8					
Direct, net	174.0	244.6	284.3	253.0	297.9	321.7	286.7	268.8	276.9					
Portfolio, net	-119.4	-133.5	-126.5	-125.4	-106.9	-86.7	-69.4	-62.1	-101.1					
Other income and transfers, net	-102.0	-124.7	-136.6	-130.3	-138.2	-141.1	-141.0	-140.6	-140.6					

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

October 18, 2012

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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

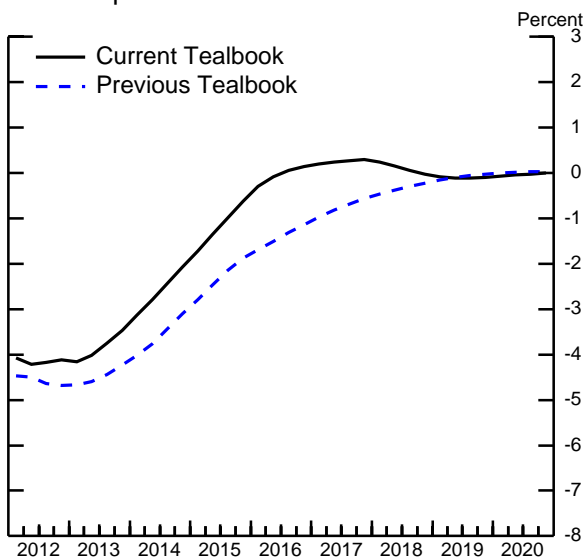
	Constrained Policy		Unconstrained Policy	
	2012Q4	2013Q1	2012Q4	2013Q1
Taylor (1993) rule	<b>1.65</b>	<b>1.40</b>	<b>1.65</b>	<b>1.40</b>
<i>Previous Tealbook</i>	1.53	1.30	1.53	1.30
Taylor (1999) rule	<b>0.13</b>	<b>0.13</b>	<b>-0.36</b>	<b>-0.63</b>
<i>Previous Tealbook</i>	0.13	0.13	-0.76	-0.98
Inertial Taylor (1999) rule	<b>0.13</b>	<b>0.13</b>	<b>0.07</b>	<b>-0.04</b>
<i>Previous Tealbook</i>	0.13	0.13	0.01	-0.14
Outcome-based rule	<b>0.13</b>	<b>0.13</b>	<b>0.10</b>	<b>-0.05</b>
<i>Previous Tealbook</i>	0.13	0.13	-0.02	-0.23
First-difference rule	<b>0.13</b>	<b>0.23</b>	<b>0.11</b>	<b>0.23</b>
<i>Previous Tealbook</i>	0.13	0.13	0.03	0.04
Nominal income targeting rule	<b>0.13</b>	<b>0.13</b>	<b>-0.21</b>	<b>-0.55</b>
<i>Previous Tealbook</i>	0.13	0.13	-0.41	-0.86

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

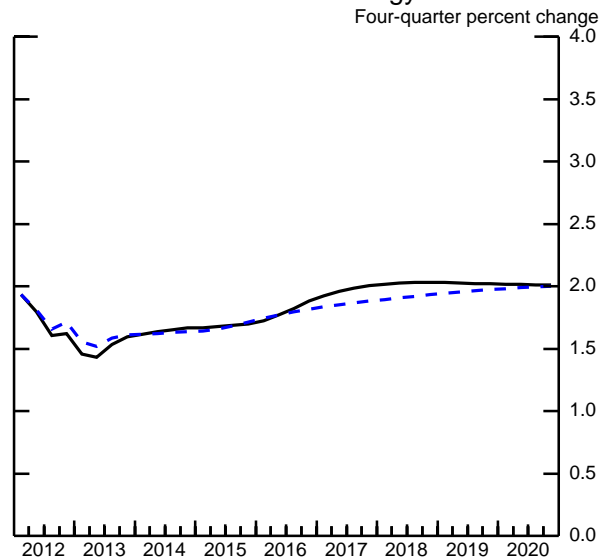
	Current Tealbook	Current Quarter Estimate as of Previous Tealbook	Previous Tealbook
Tealbook-consistent FRB/US $r^*$ estimate	-1.90	-2.11	-2.39
Actual real federal funds rate	-1.47		-1.67

## Key Elements of the Staff Projection

GDP Gap



PCE Prices ex. Food and Energy



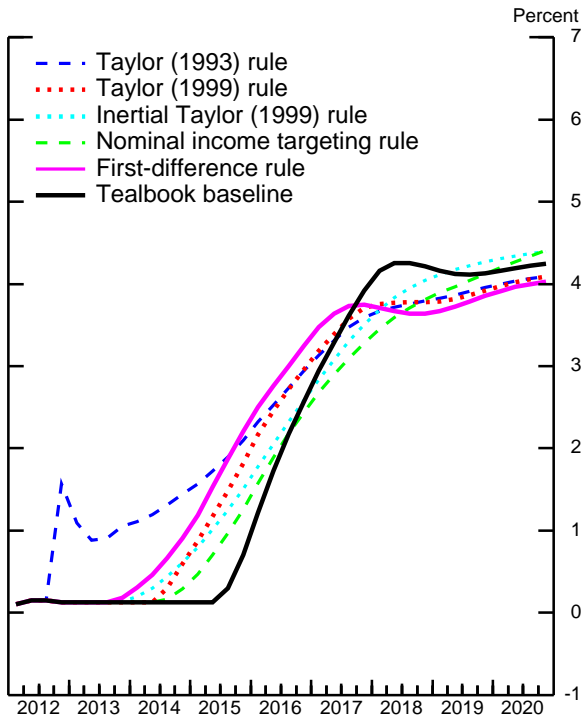
Note: Estimates of  $r^*$  may change at the beginning of a quarter even when the staff outlook is unchanged because the twelve-quarter horizon covered by the calculation has rolled forward one quarter. Therefore, whenever the Tealbook is published early in the quarter, the memo includes a third column labeled "Current Quarter Estimate as of Previous Tealbook."



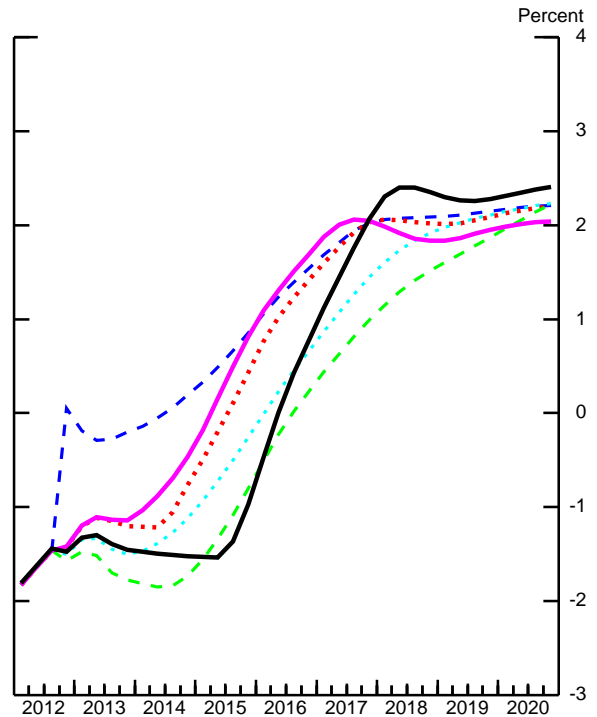
# Policy Rule Simulations

Strategies

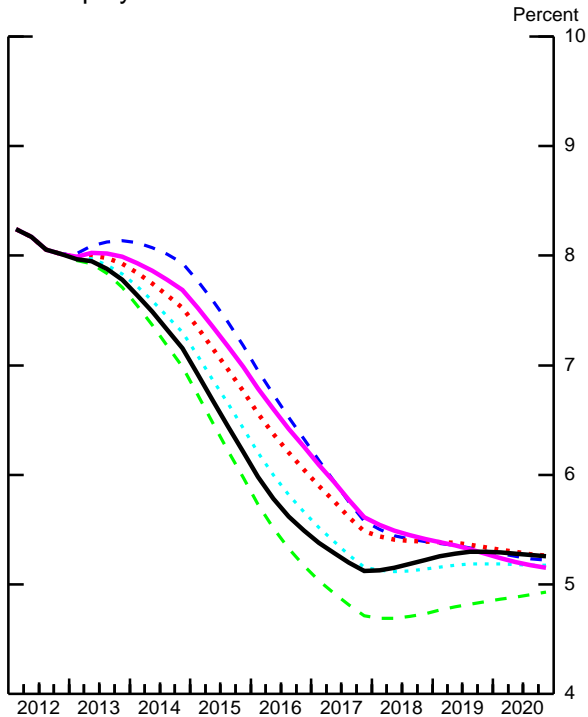
Nominal Federal Funds Rate



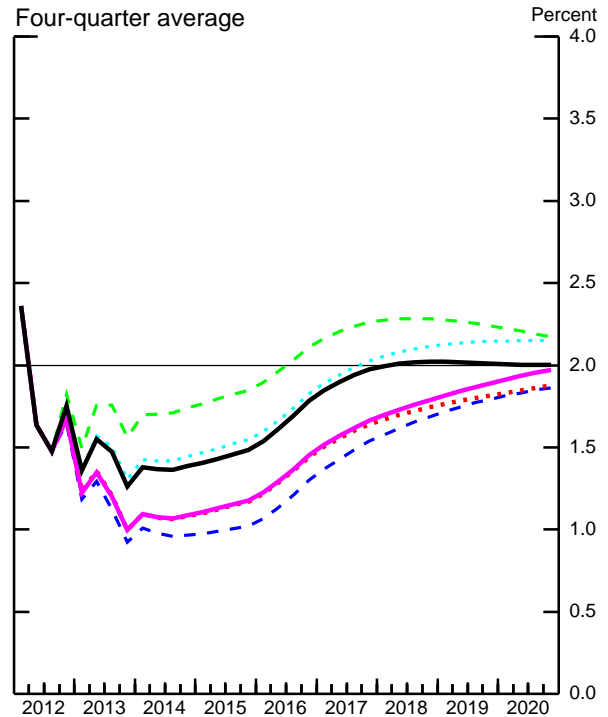
Real Federal Funds Rate



Unemployment Rate



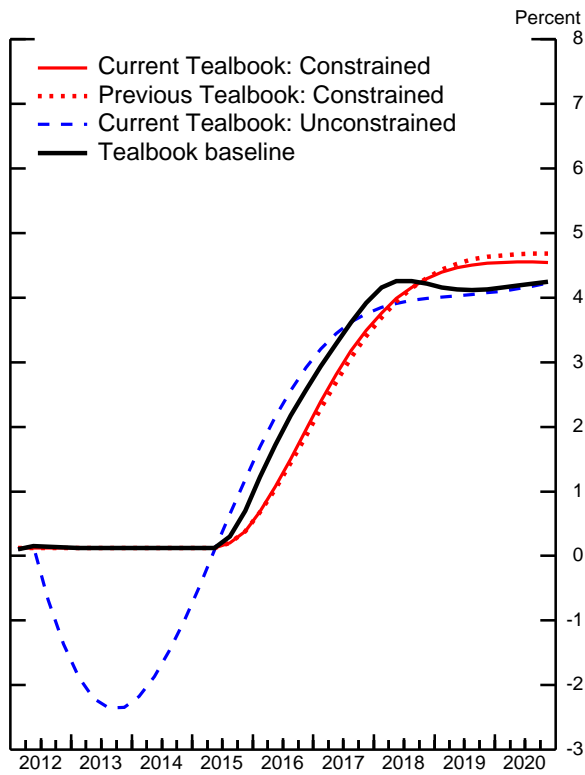
PCE Inflation  
Four-quarter average



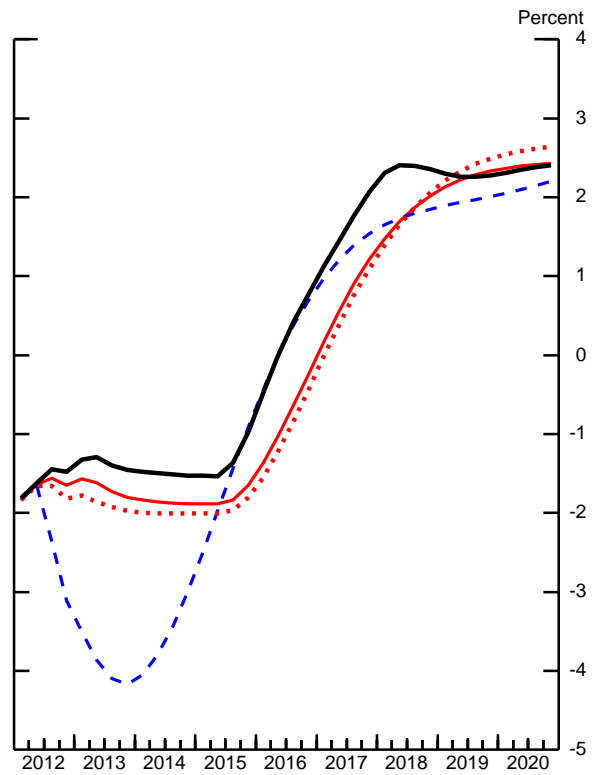
Note: The policy rule simulations in this exhibit are based on rules that respond to core inflation. This choice of rule specification was made in light of the tendency for current and near-term core inflation rates to outperform headline inflation rates as predictors of the medium-term behavior of headline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

## Constrained vs. Unconstrained Optimal Control Policy

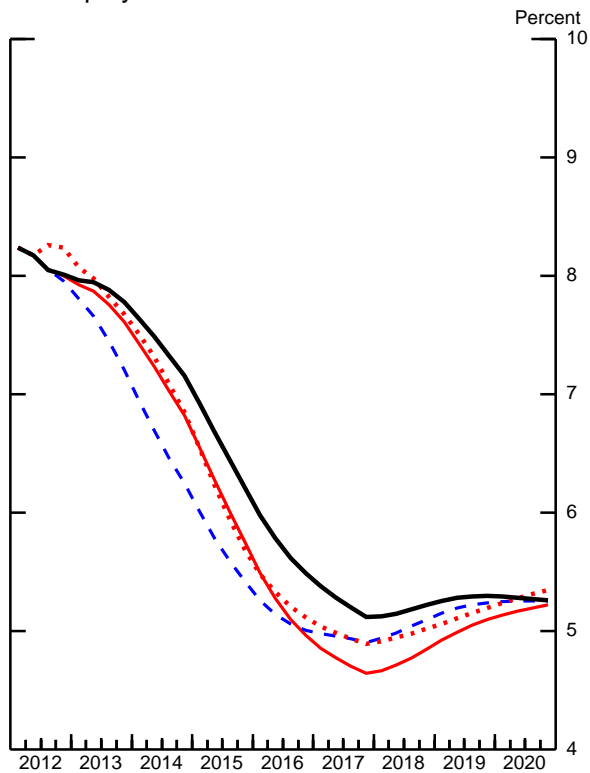
Nominal Federal Funds Rate



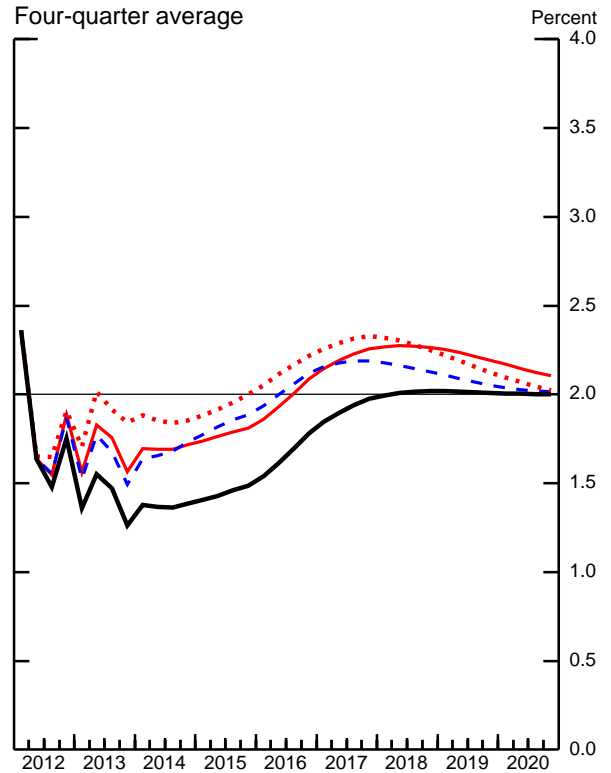
Real Federal Funds Rate



Unemployment Rate



PCE Inflation  
Four-quarter average



**Outcomes under Alternative Policies**

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

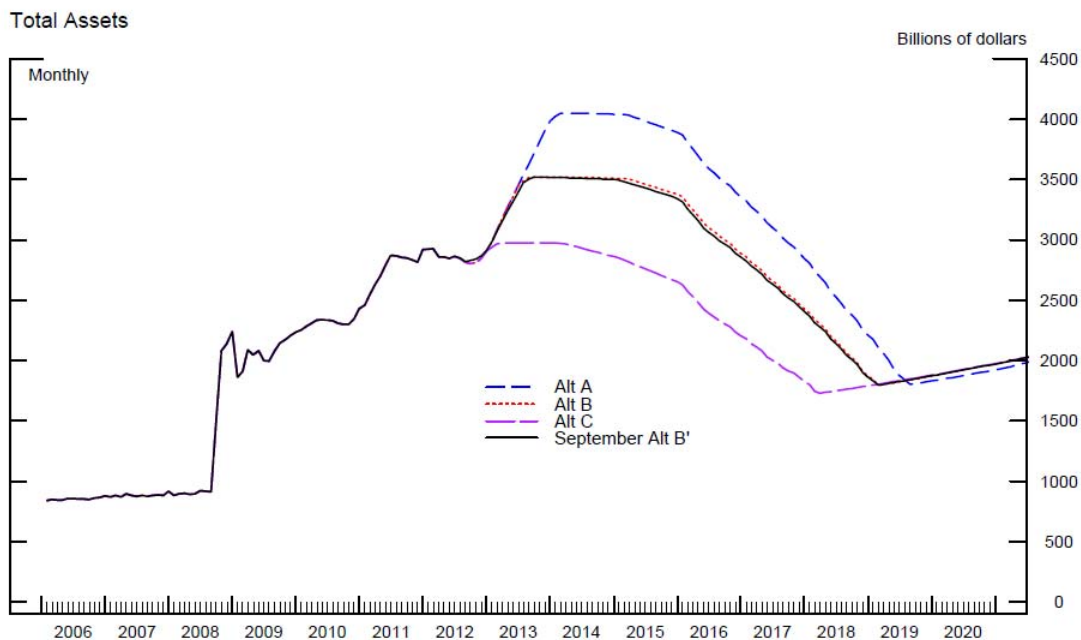
Measure and scenario	2012		2013	2014	2015	2016
	H1	H2				
<i>Real GDP</i>						
Extended Tealbook baseline	1.6	2.0	2.6	3.5	3.7	3.1
Taylor (1993)	1.6	2.0	1.6	2.8	3.5	3.5
Taylor (1999)	1.6	2.0	2.2	3.1	3.4	3.2
Inertial Taylor (1999)	1.6	2.0	2.5	3.3	3.6	3.2
First-difference	1.6	2.0	2.0	2.9	3.3	3.2
Nominal income targeting	1.6	2.0	2.8	3.7	3.8	3.3
Constrained optimal control	1.6	2.2	3.0	3.8	4.0	3.2
<i>Unemployment rate<sup>1</sup></i>						
Extended Tealbook baseline	8.2	8.0	7.8	7.2	6.2	5.5
Taylor (1993)	8.2	8.0	8.1	7.9	7.2	6.3
Taylor (1999)	8.2	8.0	7.9	7.5	6.8	6.0
Inertial Taylor (1999)	8.2	8.0	7.8	7.3	6.4	5.7
First-difference	8.2	8.0	8.0	7.7	7.0	6.3
Nominal income targeting	8.2	8.0	7.7	7.0	6.0	5.2
Constrained optimal control	8.2	8.0	7.6	6.8	5.7	5.0
<i>Total PCE prices</i>						
Extended Tealbook baseline	1.6	1.9	1.3	1.4	1.5	1.8
Taylor (1993)	1.6	1.7	0.9	1.0	1.0	1.3
Taylor (1999)	1.6	1.8	1.0	1.1	1.2	1.4
Inertial Taylor (1999)	1.6	1.9	1.3	1.4	1.5	1.8
First-difference	1.6	1.8	1.0	1.1	1.2	1.5
Nominal income targeting	1.6	2.1	1.6	1.7	1.8	2.1
Constrained optimal control	1.6	2.2	1.6	1.7	1.8	2.1
<i>Core PCE prices</i>						
Extended Tealbook baseline	2.0	1.3	1.6	1.7	1.7	1.9
Taylor (1993)	2.0	1.1	1.3	1.2	1.2	1.4
Taylor (1999)	2.0	1.1	1.3	1.4	1.4	1.5
Inertial Taylor (1999)	2.0	1.3	1.6	1.7	1.8	1.9
First-difference	2.0	1.1	1.3	1.4	1.4	1.6
Nominal income targeting	2.0	1.4	1.9	2.0	2.1	2.2
Constrained optimal control	2.0	1.5	1.9	2.0	2.0	2.2
<i>Federal funds rate<sup>1</sup></i>						
Extended Tealbook baseline	0.2	0.1	0.1	0.1	0.7	2.6
Taylor (1993)	0.2	1.6	1.1	1.4	2.1	2.9
Taylor (1999)	0.2	0.1	0.1	0.6	1.8	3.0
Inertial Taylor (1999)	0.2	0.1	0.1	0.6	1.5	2.6
First-difference	0.2	0.1	0.2	0.9	2.2	3.2
Nominal income targeting	0.2	0.1	0.1	0.3	1.3	2.4
Constrained optimal control	0.2	0.1	0.1	0.1	0.4	2.0

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

## LONG-RUN PROJECTIONS OF THE BALANCE SHEET AND MONETARY BASE

The staff has prepared three scenarios for the Federal Reserve's balance sheet that correspond to the policy alternatives A, B, and C. Alternatives A and B include asset purchases that continue beyond the end of the maturity extension program (MEP) and assume that the Committee maintains an exceptionally low federal funds rate until August 2015. In contrast, Alternative C ends purchases of MBS at the same time as the MEP, at the end of this year, and has the federal funds rate lift off from its lower bound in August 2014. Projections under each scenario are based on assumptions about the trajectory of various components of the balance sheet. Details of these assumptions, as well as projections for each major component of the balance sheet, can be found in Explanatory Note D.

Alternatives



For the balance sheet scenario that corresponds to Alternative B, the Committee is assumed to continue its current purchases of MBS through the end of the year, when the MEP concludes, and then both continue MBS purchases and make additional purchases of Treasury securities through June 2013. These purchases from October 2012 through June 2013 expand the SOMA portfolio's holdings of longer-term securities by about

Growth Rates for the Monetary Base				
Date	Alternative B	Alternative A	Alternative C	Memo: September Alt B'
Percent, annual rate				
Monthly				
Apr-12	-12.3	-12.3	-12.3	-12.2
May-12	-8.7	-8.7	-8.7	-8.7
Jun-12	-5.1	-5.1	-5.1	-5.1
Jul-12	7.7	7.7	7.7	7.7
Aug-12	7.7	7.7	7.7	18.7
Sep-12	-12.4	-12.4	-12.4	6.0
Oct-12	1.1	1.2	-0.1	-1.1
Nov-12	28.9	29.1	27.6	16.0
Dec-12	23.1	23.1	23.6	17.3
Quarterly				
2011 Q3	21.0	21.0	21.0	21.0
2011 Q4	-5.9	-5.9	-5.9	-5.9
2012 Q1	5.5	5.5	5.5	5.5
2012 Q2	-3.9	-3.9	-3.9	-3.9
2012 Q3	0.8	0.8	0.8	5.3
2012 Q4	7.5	7.6	6.9	8.6
2013 Q1	28.3	28.3	15.9	22.8
2013 Q2	30.1	30.3	-4.8	25.3
Annual - Q4 to Q4				
2010	0.9	0.9	0.9	0.9
2011	32.9	32.9	32.9	32.9
2012	2.5	2.5	2.3	3.9
2013	25.1	37.4	4.9	23.6
2014	-0.6	4.9	-2.2	-0.7
2015	-2.4	-2.5	-7.7	-3.2
2016	-14.3	-13.5	-17.2	-14.5
2017	-16.9	-15.7	-18.9	-16.7
2018	-23.9	-22.6	-6.7	-23.9

Note: Not seasonally adjusted.

Growth Rates for M2

(Percent, seasonally adjusted annual rate)

Monthly Growth Rates	Tealbook Forecast*
Jan-12	16.2
Feb-12	3.7
Mar-12	4.2
Apr-12	5.5
May-12	3.9
Jun-12	5.1
Jul-12	9.0
Aug-12	4.5
Sep-12	10.1
Oct-12	6.6
Nov-12	4.0
Dec-12	3.6
Quarterly Growth Rates	
2012 Q1	8.7
2012 Q2	4.6
2012 Q3	6.7
2012 Q4	6.3
2013 Q1	-0.4
2013 Q2	1.9
2013 Q3	2.2
2013 Q4	2.2
2014 Q1	2.6
2014 Q2	2.7
2014 Q3	2.7
2014 Q4	2.8
Annual Growth Rates	
2012	6.7
2013	1.5
2014	2.7

\* This forecast is consistent with nominal GDP and interest rates in the Tealbook A forecast. Actual data through October 8, 2012; projections thereafter.

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10-Year Treasury Term Premium Effect				
Date	Alternative B	Alternative A	Alternative C	Memo: September Alt B'

Basis Points  
Quarterly Averages

2012 Q4	-93	-114	-66	-93
2013 Q1	-90	-111	-62	-89
2013 Q2	-86	-107	-58	-86
2013 Q3	-81	-103	-54	-81
2013 Q4	-76	-98	-50	-76
2014 Q1	-72	-93	-46	-71
2014 Q2	-67	-87	-42	-66
2014 Q3	-62	-81	-38	-61
2014 Q4	-57	-75	-35	-57
2015 Q1	-53	-70	-32	-52
2015 Q2	-49	-64	-29	-48
2015 Q3	-44	-59	-26	-43
2015 Q4	-40	-54	-23	-39
2016 Q1	-37	-49	-20	-35
2016 Q2	-33	-44	-18	-32
2016 Q3	-30	-40	-16	-29
2016 Q4	-27	-36	-14	-25
2017 Q1	-24	-32	-13	-23
2017 Q2	-21	-29	-11	-20
2017 Q3	-19	-25	-10	-17
2017 Q4	-17	-23	-9	-15
2018 Q1	-15	-20	-8	-13
2018 Q2	-13	-17	-7	-12
2018 Q3	-12	-15	-7	-10
2018 Q4	-10	-13	-6	-9
2019 Q1	-9	-12	-6	-8
2019 Q2	-8	-10	-6	-7
2019 Q3	-8	-9	-6	-6
2019 Q4	-7	-8	-5	-6
2020 Q1	-6	-7	-5	-5
2020 Q2	-6	-6	-5	-5
2020 Q3	-6	-6	-4	-5
2020 Q4	-5	-5	-4	-4

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

Billions of dollars

	<u>Sep 30, 2012</u>	<u>2012</u>	<u>2014</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>
Total assets	2,802	2,908	3,511	2,891	1,873	1,976
Selected assets						
Liquidity programs for financial firms	13	13	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	13	13	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	2	2	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	2	1	0	0	0	0
Securities held outright	2,564	2,650	3,258	2,685	1,710	1,848
U.S. Treasury securities	1,645	1,657	1,927	1,707	1,218	1,828
Agency debt securities	83	77	39	16	2	0
Agency mortgage-backed securities	835	916	1,292	961	490	20
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	221	241	252	206	162	128
Total liabilities	2,747	2,846	3,430	2,783	1,730	1,787
Selected liabilities						
Federal Reserve notes in circulation	1,086	1,108	1,249	1,402	1,530	1,671
Reverse repurchase agreements	70	70	70	70	70	70
Deposits with Federal Reserve Banks	1,578	1,658	2,099	1,300	127	36
Reserve balances held by depository institutions	1,464	1,607	2,048	1,290	116	25
U.S. Treasury, General Account	85	45	45	5	5	5
Other Deposits	29	6	6	6	6	6
Interest on Federal Reserve Notes due to U.S. Treasury	2	0	0	0	-8	0
Total capital	55	62	82	108	143	189

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>Sep 30, 2012</u>	<u>2012</u>	<u>2014</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>
Total assets	2,802	2,909	4,043	3,359	2,213	1,943
Selected assets						
Liquidity programs for financial firms	13	13	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	13	13	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	2	2	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	2	1	0	0	0	0
Securities held outright	2,564	2,649	3,765	3,134	2,038	1,808
U.S. Treasury securities	1,645	1,657	2,197	1,977	1,454	1,784
Agency debt securities	83	77	39	16	2	0
Agency mortgage-backed securities	835	915	1,530	1,141	582	23
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	221	243	276	224	175	135
Total liabilities	2,747	2,847	3,961	3,251	2,070	1,754
Selected liabilities						
Federal Reserve notes in circulation	1,086	1,108	1,249	1,402	1,530	1,671
Reverse repurchase agreements	70	70	70	70	70	70
Deposits with Federal Reserve Banks	1,578	1,658	2,626	1,764	483	36
Reserve balances held by depository institutions	1,464	1,608	2,575	1,754	473	25
U.S. Treasury, General Account	85	45	45	5	5	5
Other Deposits	29	6	6	6	6	6
Interest on Federal Reserve Notes due to U.S. Treasury	2	0	0	0	-31	-34
Total capital	55	62	82	108	143	189

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>Sep 30, 2012</u>	<u>2012</u>	<u>2014</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>
Total assets	2,802	2,907	2,862	2,206	1,790	1,976
Selected assets						
Liquidity programs for financial firms	13	13	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	13	13	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	2	2	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	2	1	0	0	0	0
Securities held outright	2,564	2,661	2,655	2,040	1,656	1,863
U.S. Treasury securities	1,645	1,657	1,657	1,437	1,448	1,863
Agency debt securities	83	77	39	16	2	0
Agency mortgage-backed securities	835	927	959	586	206	0
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	221	230	206	166	134	112
Total liabilities	2,747	2,845	2,780	2,098	1,647	1,786
Selected liabilities						
Federal Reserve notes in circulation	1,086	1,108	1,249	1,402	1,530	1,671
Reverse repurchase agreements	70	70	70	70	70	70
Deposits with Federal Reserve Banks	1,578	1,655	1,449	615	36	36
Reserve balances held by depository institutions	1,464	1,604	1,438	605	25	25
U.S. Treasury, General Account	85	45	5	5	5	5
Other Deposits	29	6	6	6	6	6
Interest on Federal Reserve Notes due to U.S. Treasury	2	0	0	0	0	0
Total capital	55	62	82	108	143	189

Explanatory Notes

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

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