

Prefatory Note

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Class II FOMC – Restricted (FR)

Report to the FOMC on Economic Conditions and Monetary Policy



Book A

Economic and Financial Conditions: Current Situation and Outlook

July 24, 2013

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

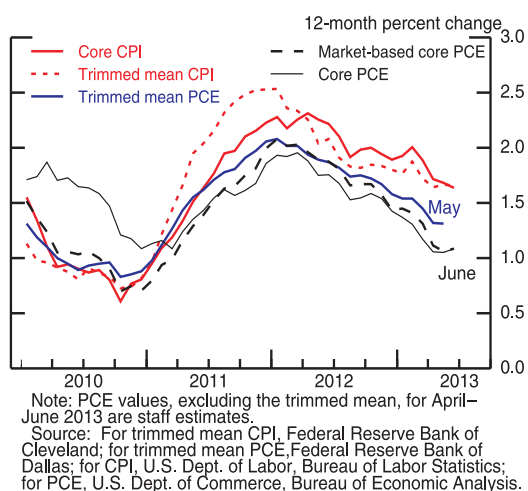
What Is behind the Surprisingly Low Rate of Inflation?

Readings on PCE inflation have been quite low recently. Over the 12 months ending in June, headline PCE prices are estimated to have risen about 1¼ percent, while core PCE prices are estimated to have risen only about 1 percent. As can be seen in the lower-left figure, many different measures of underlying inflation have moved down over the past year; however, the decline in core PCE inflation has been especially noticeable. In evaluating how transitory we should expect the recent low PCE inflation to be, we find it instructive to compare recent inflation performance with our earlier expectations.

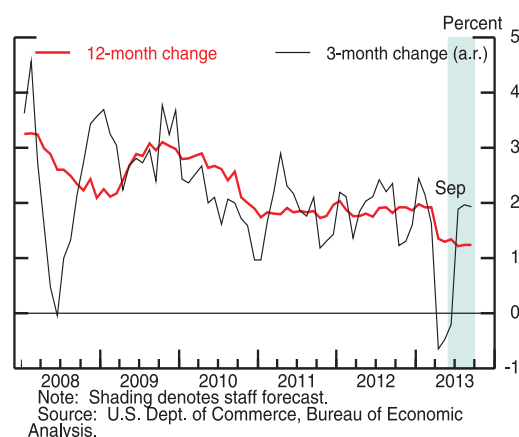
Following the low readings on core PCE inflation over the second half of 2012, we projected in January that core inflation would pick up in the first half of this year. However, as shown in the table on the next page, both total and core PCE inflation have come in lower than we projected. Nevertheless, we have not changed our view that inflation will eventually and gradually move back up toward the Committee's 2 percent goal, as we see this year's lower-than-expected readings on headline and core inflation as being largely attributable to a few factors that we expect to be transitory.

First, the nonmarket component of PCE prices was much softer in the first quarter than we expected in January. This component is erratic and susceptible to significant revisions, and, as a result, we take very little forecasting signal from recent readings.¹ Indeed, with the most recent data, nonmarket prices now look to have increased in the second quarter by about as much as we had projected in the January Tealbook; nevertheless, the average rate of increase over the first half is still below our January projection.

Measures of Underlying Inflation



PCE Medical Services Price Inflation



¹ In its upcoming comprehensive revisions, the BEA will bring in new data that could result in historical revisions to nonmarket prices. In addition, the BEA will adjust the methodology used to compute imputed financial services charges—an important component of nonmarket prices.

Market-based core PCE inflation rebounded in the first quarter by a bit more than we had expected but was subsequently held down by two factors that we had not anticipated. First, as shown in the lower-right figure on the previous page, a one-time decrease in Medicare reimbursements (related to the federal spending sequestration) temporarily led the PCE measure of medical services prices to drop sharply in April. In May and June, these prices appear to have returned to a more normal rate of increase. Second, prices of core imports, which we estimate to pass through fairly quickly into consumer goods prices, have been much softer over the first half of the year than we anticipated in January.

Finally, consumer energy prices, which are of course volatile, declined more rapidly over the first half than we projected. In all, headline PCE prices edged up at an annual rate of only ½ percent in the first half—well below what we projected in January.

As noted, the very soft readings on medical prices are probably already behind us, and nonmarket prices, while quite uncertain, also appear to be rising at a more typical rate. In the second half of this year, consumer energy prices are projected to edge up on net; we also expect core import prices to flatten out after having declined in the second quarter, although if this occurred, it would still leave them much softer than we had anticipated in January.² Thus, as these specific influences holding down inflation in the first half recede, we project headline and core inflation to rise from their recent low rates to a pace of just under 1½ percent in the second half—a pace we think is more reflective of underlying conditions than are the especially low rates observed over the past 6 or 12 months.

The Staff Inflation Forecast Compared with the January Tealbook
(Percent change, annual rate)

Category	2012	2013			
	H2	Q1	Q2 ^e	H1 ^e	H2 ^f
Total PCE	1.6	1.0	-.1	.5	1.4
<i>January TB</i>	<i>1.4</i>	<i>.9</i>	<i>1.9</i>	<i>1.4</i>	<i>1.4</i>
Energy	10.2	-3.7	-13.1	-8.5	.8
<i>January TB</i>	<i>8.0</i>	<i>-11.0</i>	<i>3.6</i>	<i>-3.9</i>	<i>-2.4</i>
Core PCE	1.1	1.3	.8	1.1	1.5
<i>January TB</i>	<i>1.0</i>	<i>1.6</i>	<i>1.7</i>	<i>1.7</i>	<i>1.6</i>
Market-based core	1.1	1.6	.6	1.1	1.3
<i>January TB</i>	<i>1.1</i>	<i>1.4</i>	<i>1.6</i>	<i>1.5</i>	<i>1.5</i>
Nonmarket-based core	.8	-.4	2.5	1.0	2.3
<i>January TB</i>	<i>.2</i>	<i>2.3</i>	<i>2.5</i>	<i>2.4</i>	<i>2.5</i>
Memo: Core imports	-.3	.2	-2.0	-.9	.1
<i>January TB</i>	<i>-.5</i>	<i>2.5</i>	<i>1.6</i>	<i>2.0</i>	<i>1.3</i>

^e Staff estimate.

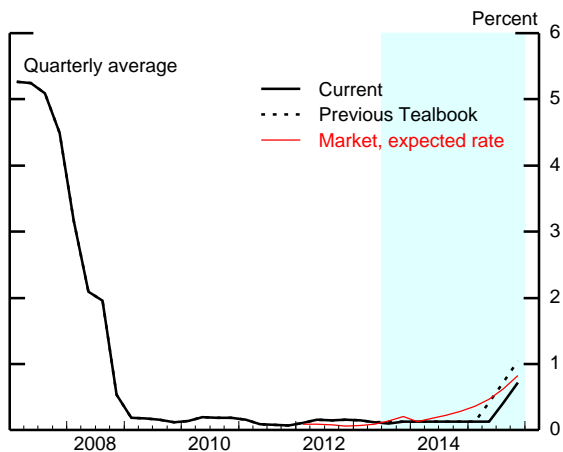
^f Staff forecast.

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

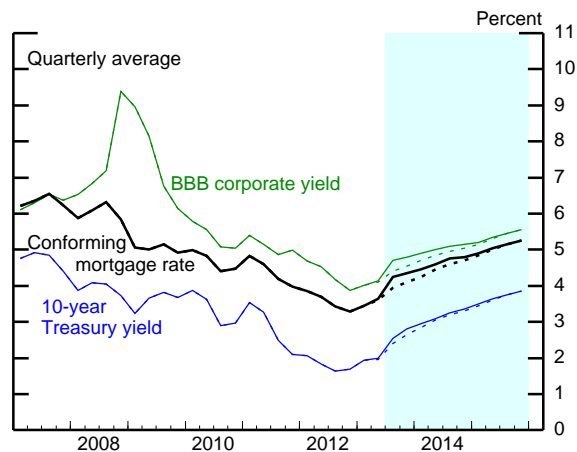
² Our projection of core import prices depends importantly on the staff's assumed paths for exchange rates and commodity prices, around which there is considerable uncertainty.

Key Background Factors underlying the Baseline Staff Projection

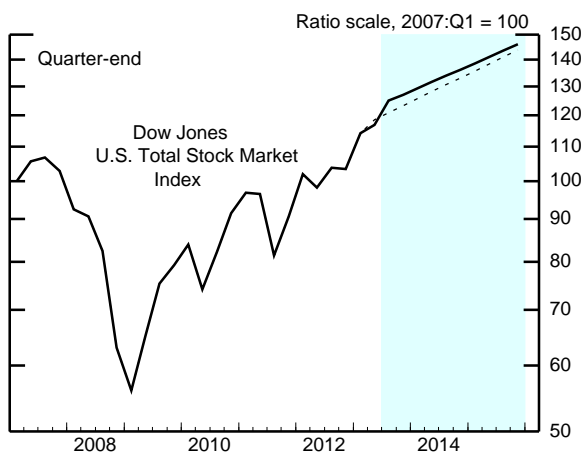
Federal Funds Rate



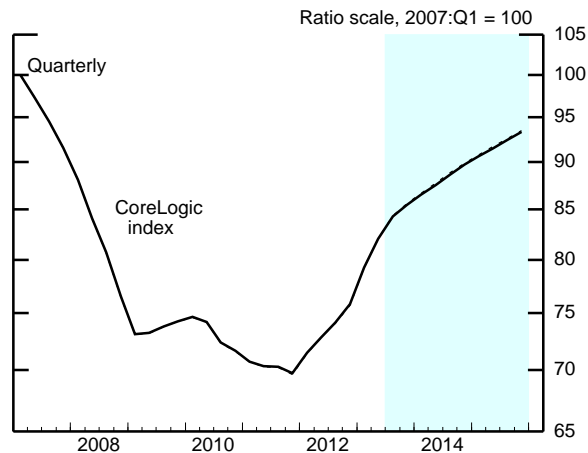
Long-Term Interest Rates



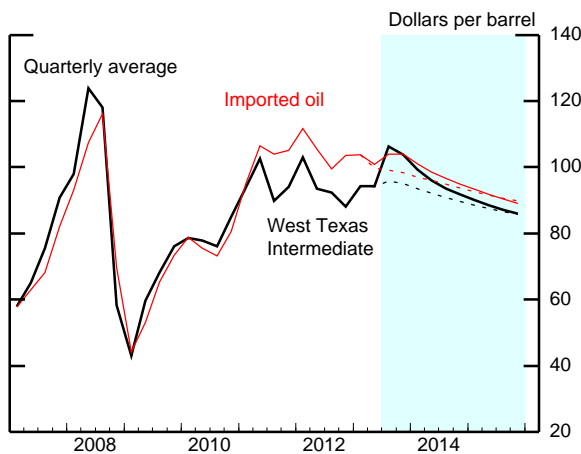
Equity Prices



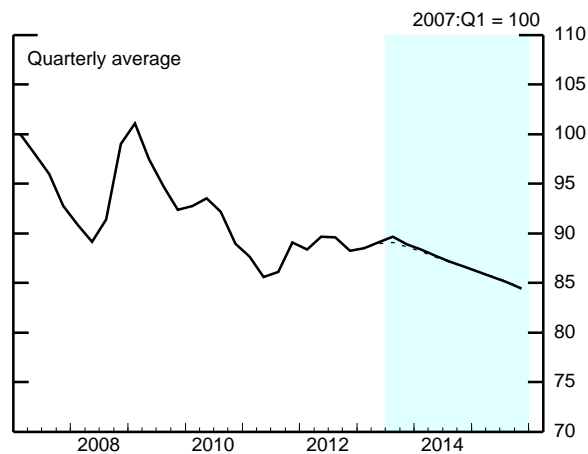
House Prices



Crude Oil Prices



Broad Real Dollar



Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

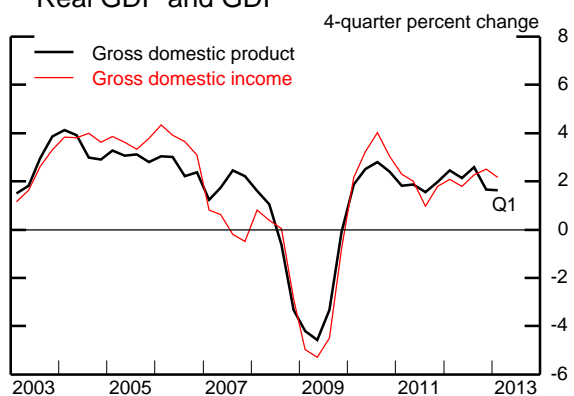
Measure	2013:Q2		2013:Q3		2013:Q4	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
Real GDP	1.8	1.1	2.5	2.3	3.3	3.3
Private domestic final purchases	2.6	2.5	3.7	2.8	4.2	4.0
Personal consumption expenditures	2.1	1.5	3.1	2.6	3.6	3.5
Residential investment	18.6	9.8	13.9	4.2	15.3	17.3
Business fixed investment	2.4	7.2	5.7	3.7	6.0	4.0
Government purchases	-3.4	-3.7	-3.8	-3.2	-2.0	-2.0
<i>Contributions to change in real GDP</i>						
Inventory investment ¹	.0	-.1	.1	.2	.3	.6
Net exports ¹	.2	-.2	.0	.4	-.2	-.2
Unemployment rate²	7.5	7.5	7.4	7.5	7.3	7.4
PCE chain price index	-.1	-.1	1.2	1.8	1.3	1.0
Ex. food and energy	.8	.8	1.3	1.5	1.5	1.4

1. Percentage points.

2. Percent.

Recent Nonfinancial Developments (1)

Real GDP and GDI



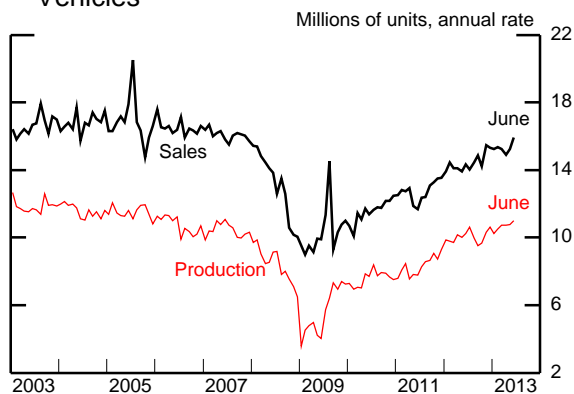
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Manufacturing IP ex. Motor Vehicles and Parts



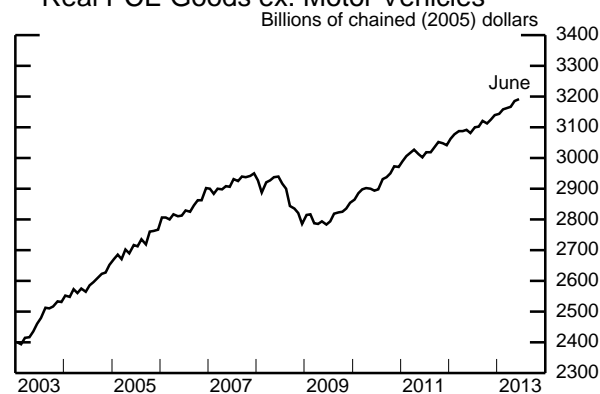
Source: Federal Reserve Board, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

Sales and Production of Light Motor Vehicles



Source: Ward's Auto Infobank.

Real PCE Goods ex. Motor Vehicles



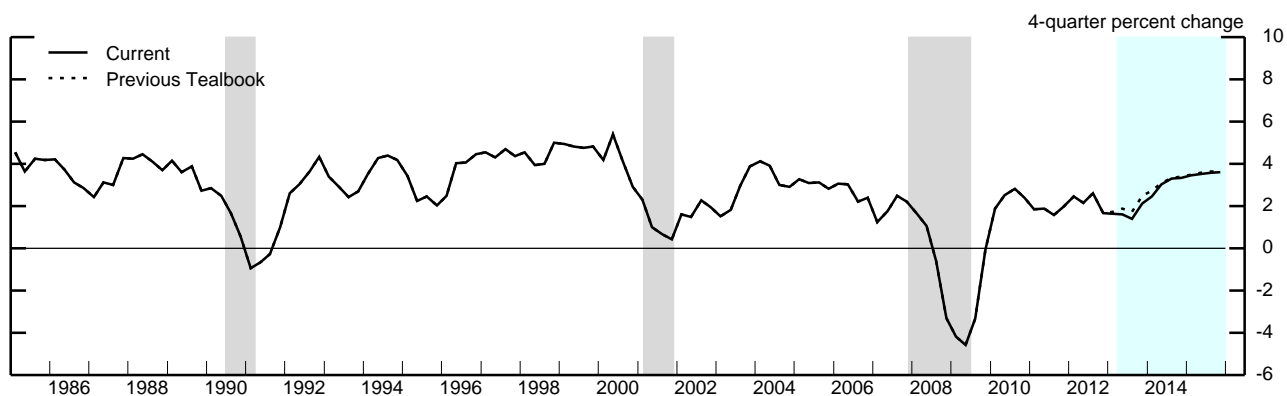
Note: Figures for April, May, and June 2013 are staff estimates based on available source data.

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	2012	2013	2013		2014	2015
			H1	H2		
Real GDP	1.7	2.1	1.4	2.8	3.3	3.6
Previous Tealbook	1.7	2.5	2.0	2.9	3.4	3.6
Final sales	2.1	1.8	1.2	2.4	3.2	3.8
Previous Tealbook	2.1	2.2	1.6	2.7	3.3	3.8
Personal consumption expenditures	1.8	2.5	2.1	3.0	3.7	3.9
Previous Tealbook	1.8	3.0	2.6	3.3	3.8	3.9
Residential investment	14.9	11.2	11.9	10.6	18.9	16.0
Previous Tealbook	14.9	15.3	15.9	14.6	17.8	15.2
Nonresidential structures	7.3	1.3	-1.2	3.9	2.5	3.1
Previous Tealbook	7.3	1.3	-1.9	4.5	3.4	3.4
Equipment and software	4.7	4.8	5.8	3.8	5.7	6.2
Previous Tealbook	4.7	4.7	3.1	6.4	6.3	6.4
Federal purchases	-2.8	-7.6	-8.9	-6.3	-5.5	-3.8
Previous Tealbook	-2.8	-7.6	-8.3	-6.9	-5.5	-3.8
State and local purchases	-1.1	-.7	-1.1	-.3	.0	1.0
Previous Tealbook	-1.1	-.8	-1.3	-.3	.0	1.0
Exports	2.1	3.4	3.0	3.8	4.8	6.4
Previous Tealbook	2.1	3.1	2.2	4.0	5.1	6.5
Imports	.2	2.9	3.2	2.7	4.7	5.4
Previous Tealbook	.2	2.7	1.6	3.8	4.7	5.4
Contributions to change in real GDP (percentage points)						
Inventory change	-.4	.3	.3	.4	.1	-.2
Previous Tealbook	-.4	.3	.4	.2	.1	-.2
Net exports	.3	.0	-.1	.1	-.1	.0
Previous Tealbook	.3	.0	.0	-.1	-.1	.0

Real GDP

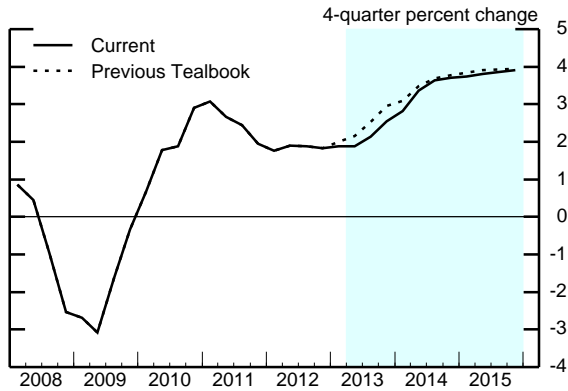


Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research.

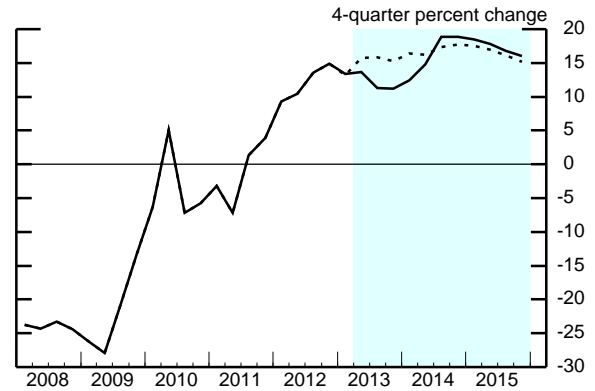
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Components of Final Demand

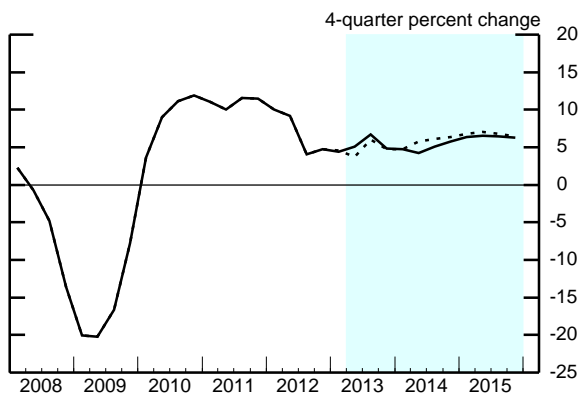
Personal Consumption Expenditures



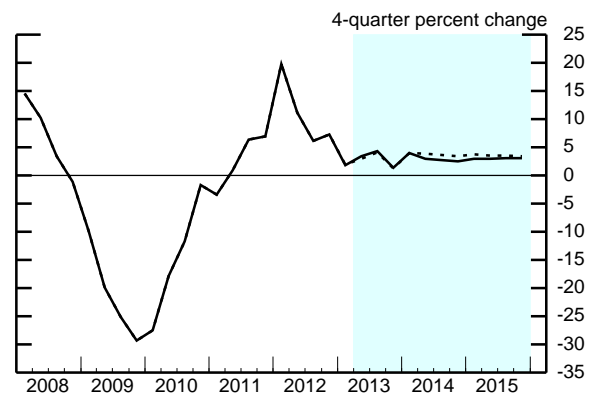
Residential Investment



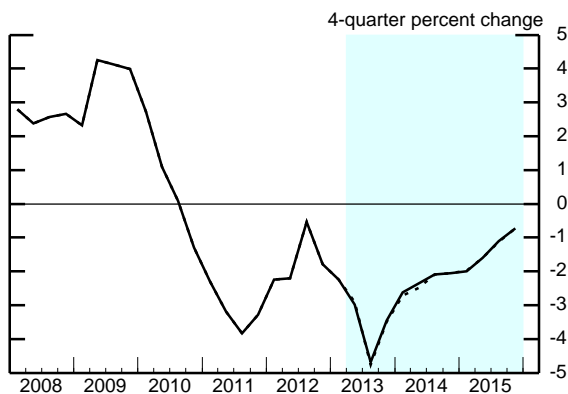
Equipment and Software



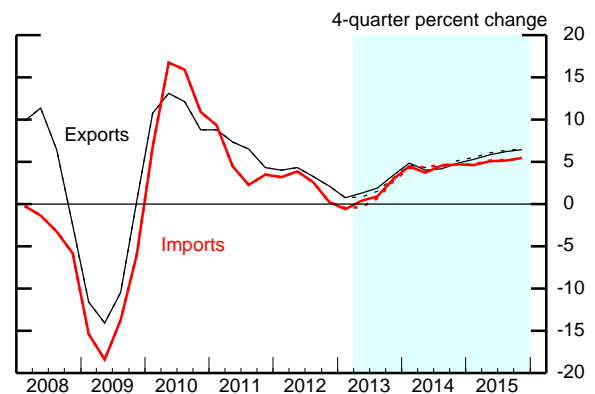
Nonresidential Structures



Government Consumption & Investment



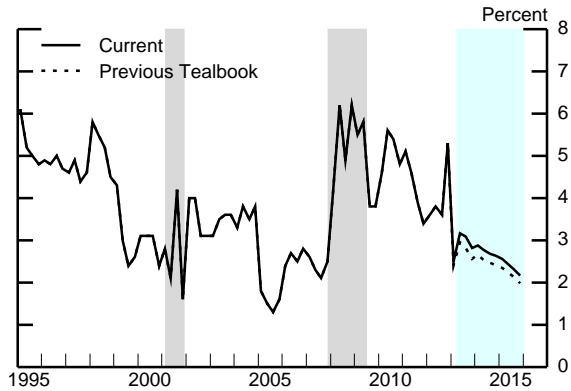
Exports and Imports



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

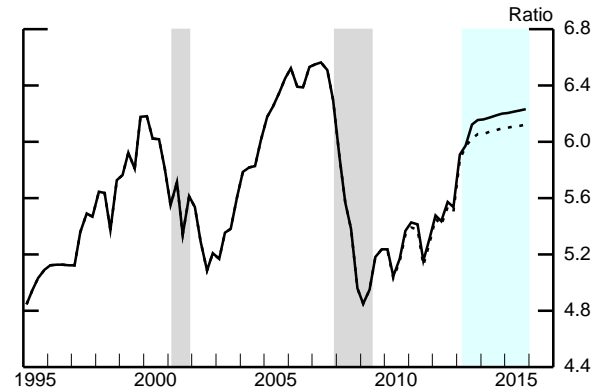
Aspects of the Medium-Term Projection

Personal Saving Rate



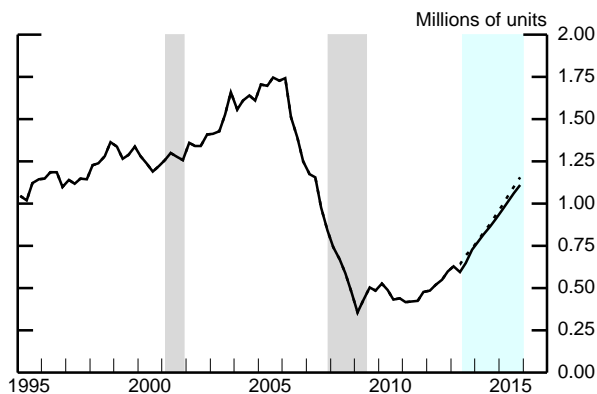
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Wealth-to-Income Ratio



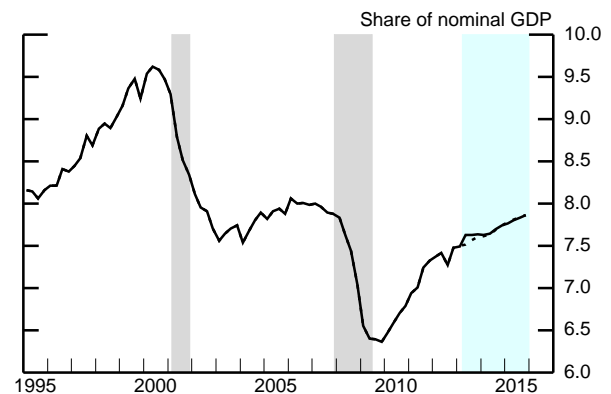
Note: Household net worth as a ratio to disposable personal income.
Source: For net worth, Federal Reserve Board, flow of funds data; for income, U.S. Dept. of Commerce, Bureau of Economic Analysis.

Single-Family Housing Starts



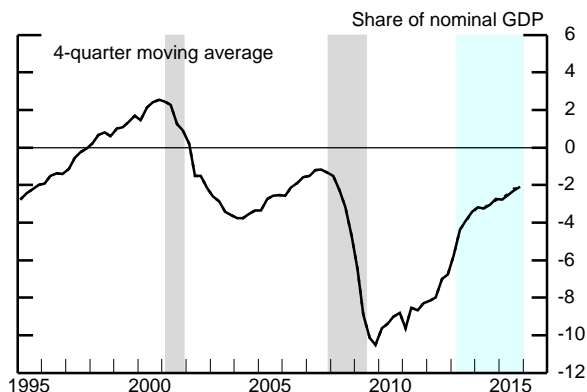
Source: U.S. Census Bureau.

Equipment and Software Spending



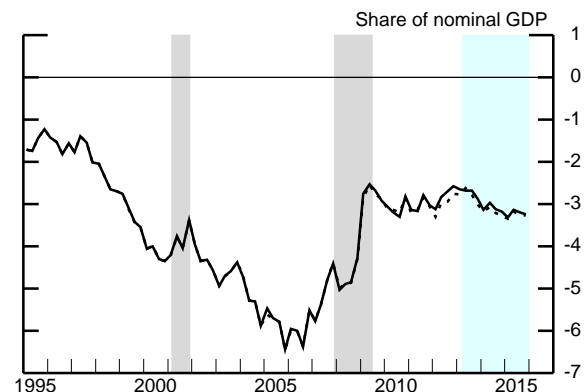
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

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)

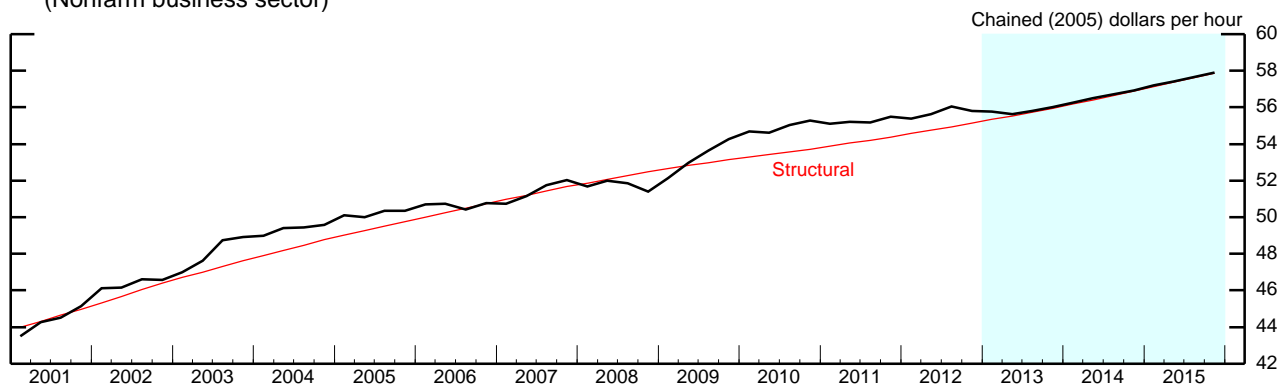
Measure	1974-95	1996-2000	2001-10	2011	2012	2013	2014	2015
Potential real GDP	3.0	3.4	2.1	1.6	1.9	2.0	2.1	2.1
Previous Tealbook	3.0	3.4	2.1	1.6	1.9	2.0	2.1	2.1
<i>Selected contributions¹</i>								
Structural labor productivity	1.4	2.6	2.1	1.3	1.4	1.5	1.7	1.7
Previous Tealbook	1.4	2.6	2.1	1.3	1.4	1.5	1.7	1.7
Capital deepening	.7	1.5	.7	.2	.4	.5	.6	.7
Previous Tealbook	.7	1.5	.7	.2	.4	.5	.6	.7
Multifactor productivity	.5	.8	1.2	.9	.9	.9	.9	.9
Previous Tealbook	.5	.8	1.2	.9	.9	.9	.9	.9
Structural hours	1.5	1.0	.6	.6	.7	.7	.6	.6
Previous Tealbook	1.5	1.0	.6	.6	.7	.7	.6	.6
Labor force participation	.4	.0	-.3	-.4	-.3	-.4	-.3	-.3
Previous Tealbook	.4	.0	-.3	-.4	-.3	-.4	-.3	-.3
Memo:								
GDP gap ²	-2.4	1.9	-4.0	-3.6	-3.9	-3.8	-2.6	-1.2
Previous Tealbook	-2.4	1.9	-4.0	-3.6	-3.9	-3.4	-2.2	-.8

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.

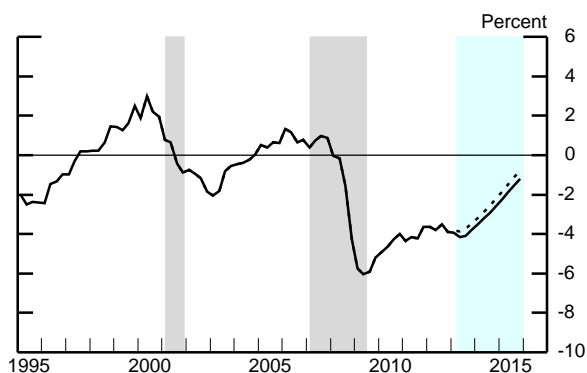
2. Percent difference between actual and potential GDP in the final quarter of the period indicated. A negative number indicates that the economy is operating below potential.

Structural and Actual Labor Productivity
(Nonfarm business sector)



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

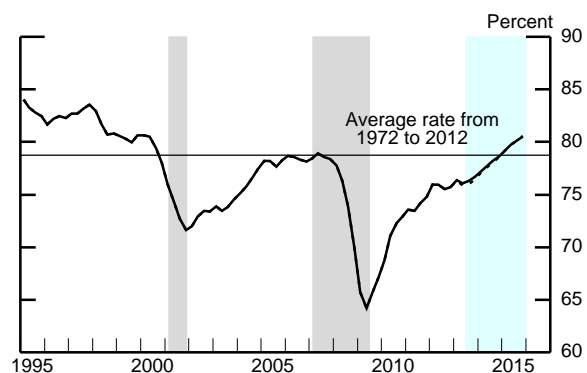
GDP Gap



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.

The Outlook for the Labor Market

Measure	2012	2013	2013		2014	2015
			H1	H2		
Output per hour, nonfarm business ¹	.6	.3	-.7	1.4	1.6	1.7
Previous Tealbook	.6	.9	.3	1.5	1.6	1.6
Nonfarm private employment ²	189	198	206	190	209	250
Previous Tealbook	189	183	190	175	218	265
Labor force participation rate ³	63.7	63.4	63.4	63.4	63.3	63.3
Previous Tealbook	63.7	63.4	63.4	63.4	63.3	63.3
Civilian unemployment rate ³	7.8	7.4	7.5	7.4	6.8	6.0
Previous Tealbook	7.8	7.3	7.5	7.3	6.6	5.8

1. Percent change from final quarter of preceding period at annual rate.

2. Thousands, average monthly changes.

3. 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)

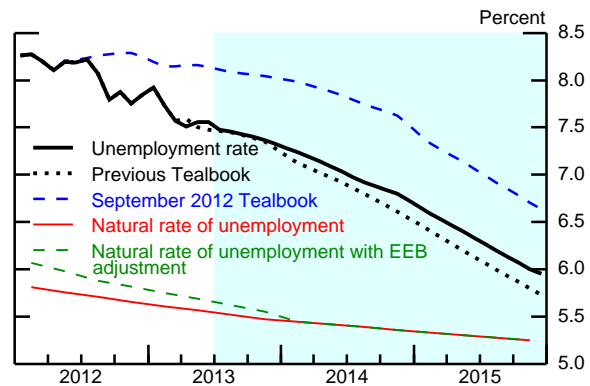
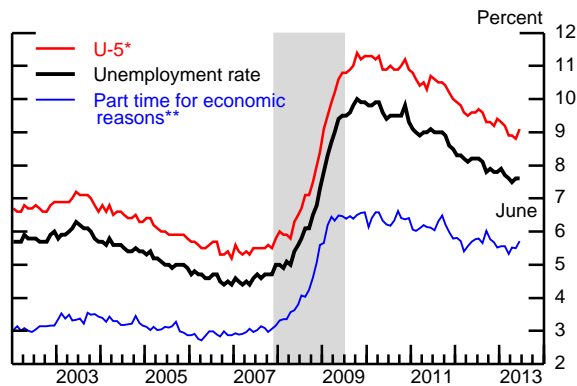
Measure	2012	2013	2013		2014	2015
			H1	H2		
PCE chain-weighted price index	1.6	.9	.5	1.4	1.3	1.5
Previous Tealbook	1.6	.9	.4	1.3	1.4	1.6
Food and beverages	1.1	1.0	.9	1.1	.8	1.3
Previous Tealbook	1.1	1.2	1.2	1.1	.9	1.4
Energy	3.2	-4.0	-8.5	.8	-2.4	-1.6
Previous Tealbook	3.2	-5.0	-9.1	-.8	-.9	-.9
Excluding food and energy	1.5	1.3	1.1	1.5	1.6	1.7
Previous Tealbook	1.5	1.2	1.0	1.4	1.6	1.8
Prices of core goods imports ¹	.1	-.4	-.9	.1	1.4	1.5
Previous Tealbook	.1	-.1	-.4	.2	1.4	1.5

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

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

Labor Market Developments and Outlook

Measures of Labor Underutilization



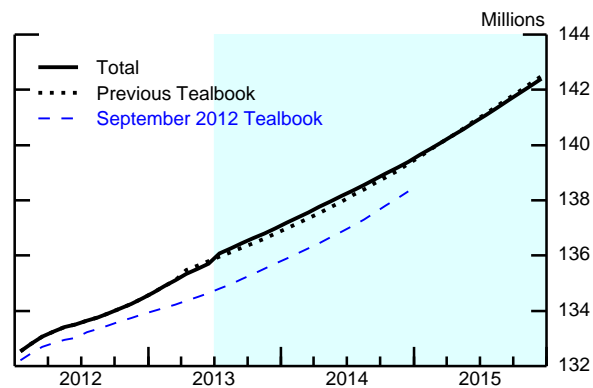
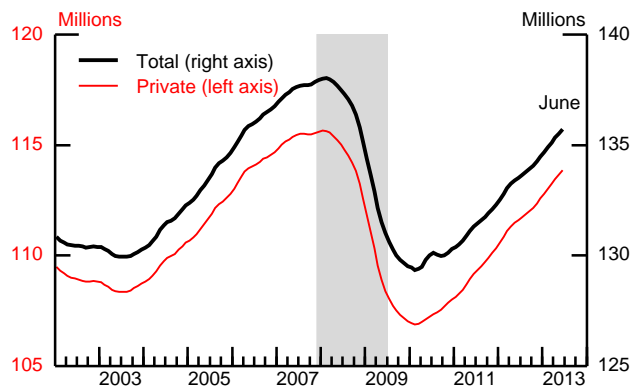
* U-5 measures total unemployed plus all marginally attached to the labor force, as a percent of the labor force plus persons marginally attached to the labor force.

** Percent of Current Population Survey employment.

EEB Extended and emergency unemployment benefits.

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

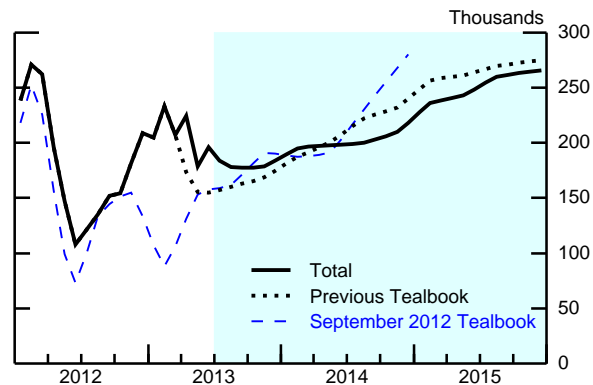
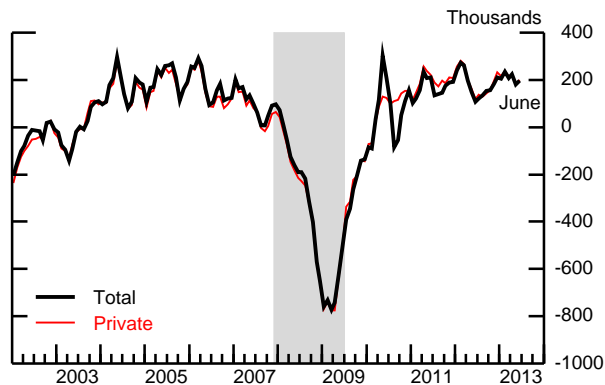
Level of Payroll Employment*



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

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

Change in Payroll Employment*



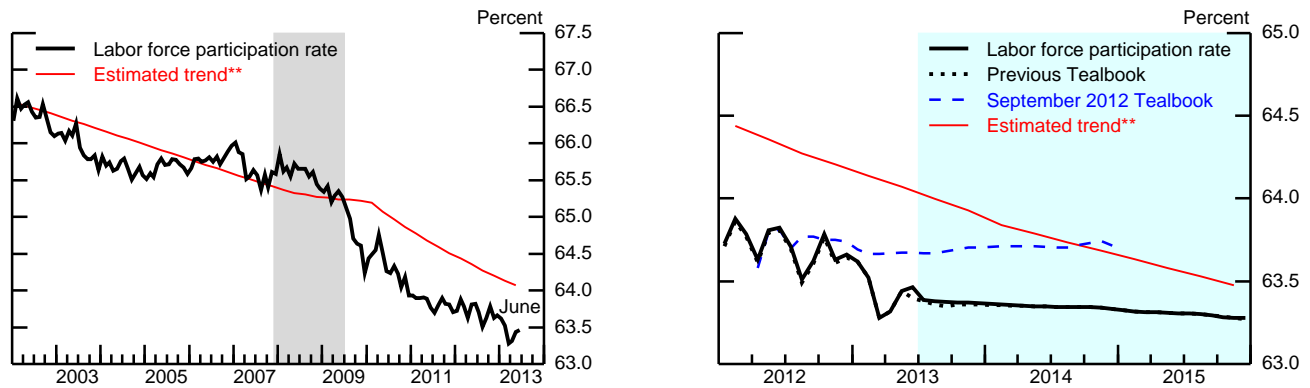
* 3-month moving averages in history; average monthly changes in each quarter during the forecast period.

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

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.

Labor Market Developments and Outlook (2)

Labor Force Participation Rate*

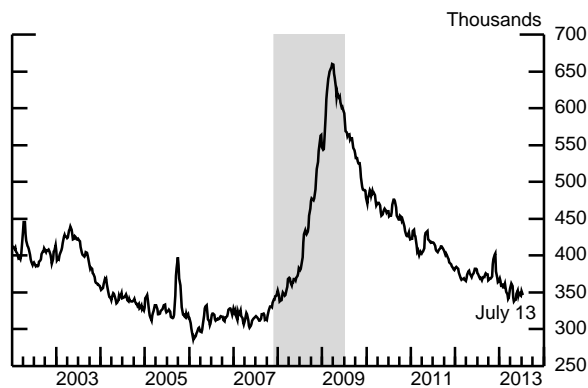


* Published data adjusted by staff to account for changes in population weights.

** Includes staff estimate of the effect of extended and emergency unemployment benefits.

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

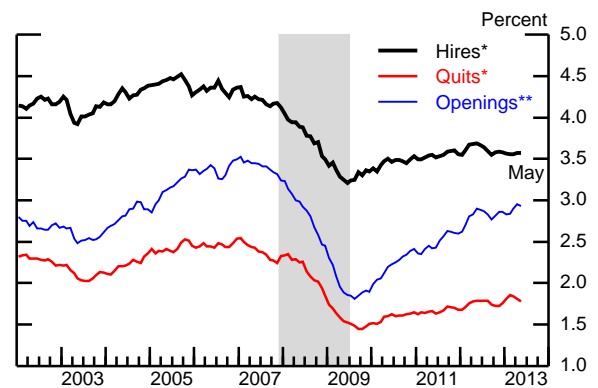
Initial Unemployment Insurance Claims*



* 4-week moving average.

Source: U.S. Department of Labor, Employment and Training Administration.

Private Hires, Quits, and Job Openings

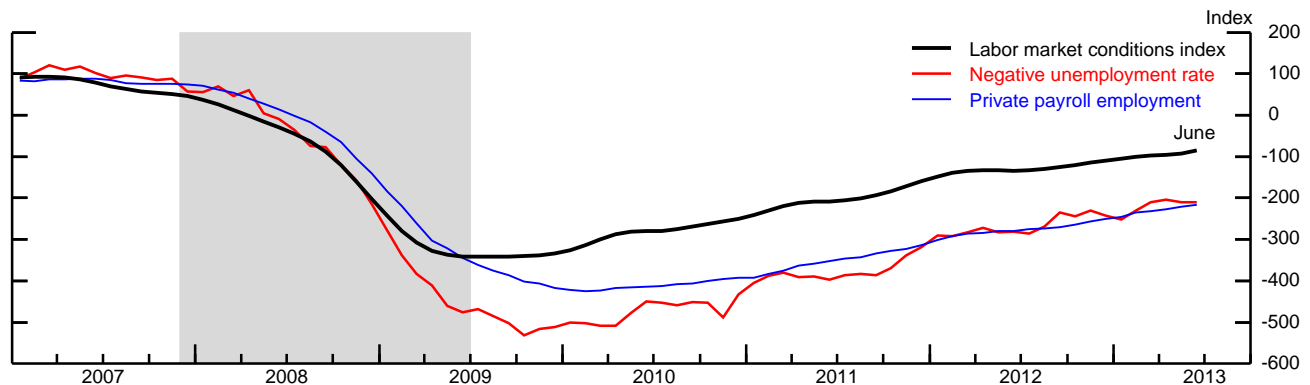


* Percent of private nonfarm payroll employment, 3-month moving average.

** Percent of private nonfarm payroll employment plus unfilled jobs, 3-month moving average.

Source: Job Openings and Labor Turnover Survey.

Indexes of Selected Labor Market Indicators



Note: Labor market conditions index estimated by staff; indexes for unemployment rate and private payroll employment are deviation from estimated trend normalized to have mean zero and unit standard deviation over the period July 1976 to September 2008, multiplied by 100.

Labor Market Data and Projections

Indicator	Aug. 2012 ¹	Projection for mid-2014 ² in the Tealbook dated:			
		Sept. 2012	Dec. 2012	June 2013 ³	July 2013 ³
Unemployment rate (percent)	8.1	7.8	7.6	6.9	7.0
Labor force participation rate (percent)	63.5	63.7	63.7	63.3	63.3
<i>Monthly change in payroll employment (thousands, three-month averages)</i>					
Total	94	212	197	211	199
Private	109	210	195	219	207
Level of total payroll employment (millions)	133.3	137.0	137.1	138.1	138.3
Total hours worked (percent change) ⁴	1.0	2.3	2.0	2.6	2.5
Total hours worked (billions) ⁴	184.6	190.3	190.8	193.2	193.3

1. The figures for August 2012 refer to data as originally published in the September employment situation release along with the staff's real-time translation of those data into hours worked. These were the latest available data at the time of the September FOMC meeting.

2. Calculated as the mean of the 2014:Q2 and 2014:Q3 projections.

3. Projections of payrolls and hours worked include the effects of the benchmark revision to the payroll survey.

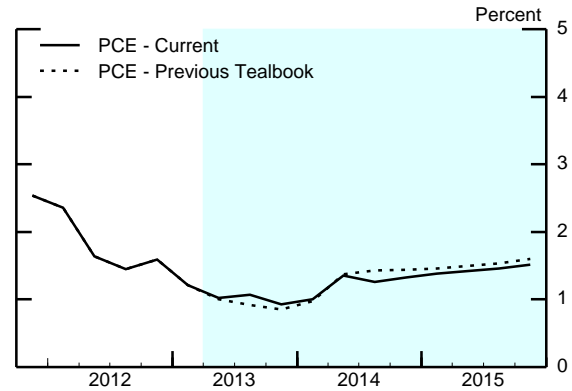
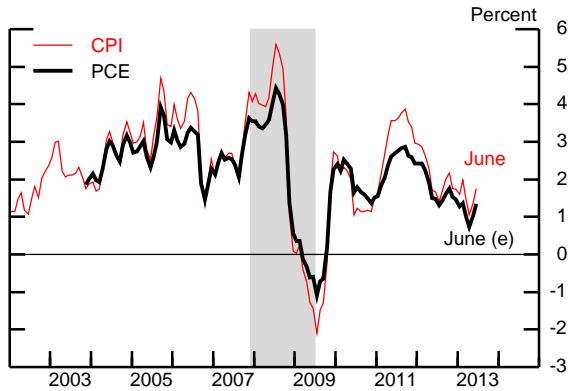
4. Total hours worked are aggregate hours in the nonfarm business sector. Because that series is available only on a quarterly basis, the August 2012 figures refer to the quarterly percent change and level in 2012:Q3. The percent changes and levels in hours are at annual rates.

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

Inflation Developments and Outlook

(Percent change from year-earlier period)

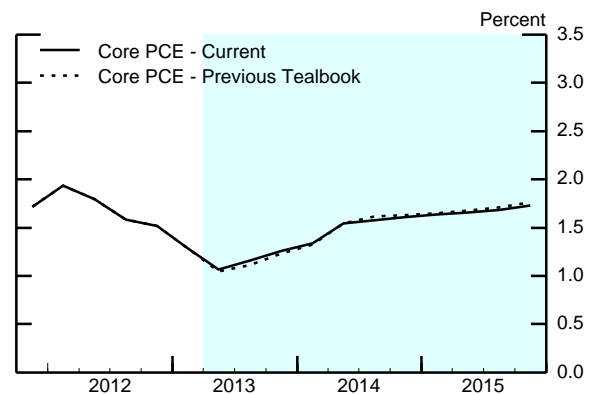
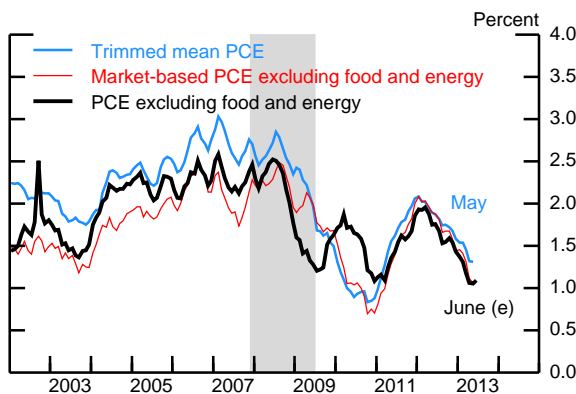
Headline Consumer Price Inflation



Note: PCE prices from April to June 2013 are staff estimates.

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

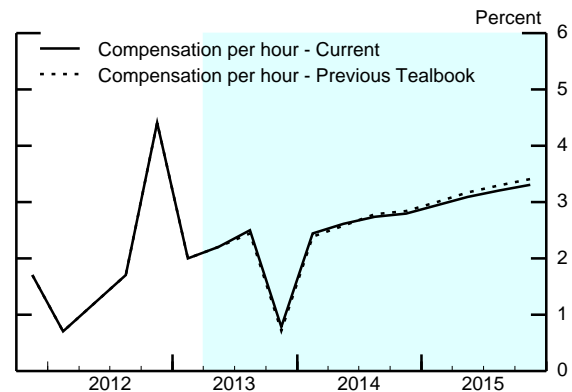
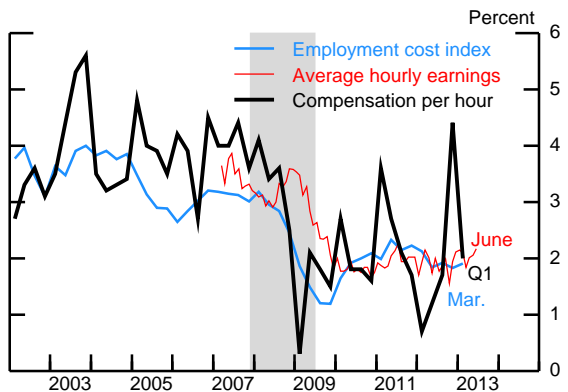
Measures of Underlying PCE Price Inflation



Note: Core PCE prices from April to June 2013 are staff estimates.

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

Labor Cost Growth (Private Industry)



Note: The compensation per hour value for 2013:Q1 is a staff estimate.

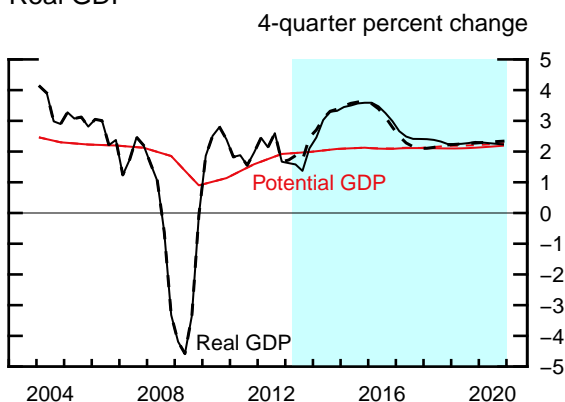
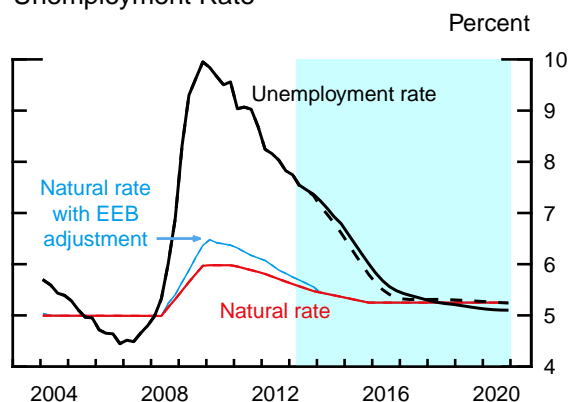
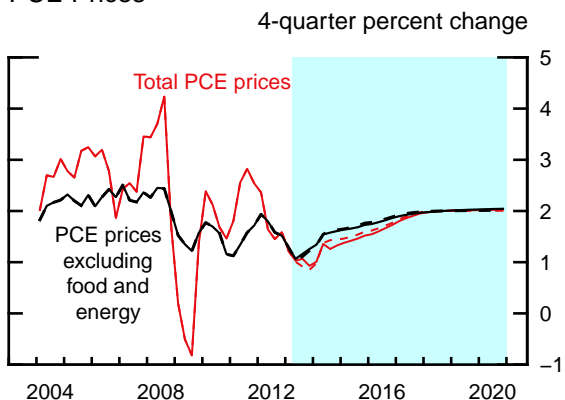
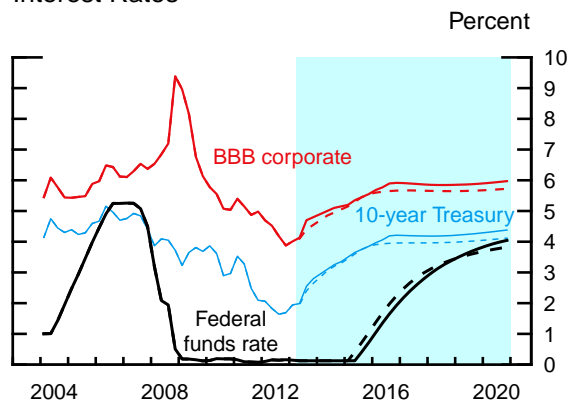
Source: U.S. Department of Labor, Bureau of Labor Statistics.

The Long-Term Outlook

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

Measure	2013	2014	2015	2016	2017	Longer run
Real GDP	2.1	3.3	3.6	3.0	2.4	2.3
Previous Tealbook	2.5	3.4	3.6	2.8	2.1	2.3
Civilian unemployment rate ¹	7.4	6.8	6.0	5.5	5.3	5.2
Previous Tealbook	7.3	6.6	5.8	5.3	5.3	5.2
PCE prices, total	.9	1.3	1.5	1.7	2.0	2.0
Previous Tealbook	.9	1.4	1.6	1.8	2.0	2.0
Core PCE prices	1.3	1.6	1.7	1.9	2.0	2.0
Previous Tealbook	1.2	1.6	1.8	1.9	2.0	2.0
Federal funds rate ¹	.1	.1	.7	1.9	2.8	4.0
Previous Tealbook	.1	.1	1.0	2.2	3.0	4.0
10-year Treasury yield ¹	2.8	3.4	3.9	4.2	4.2	4.8
Previous Tealbook	2.7	3.3	3.9	4.0	4.0	4.8

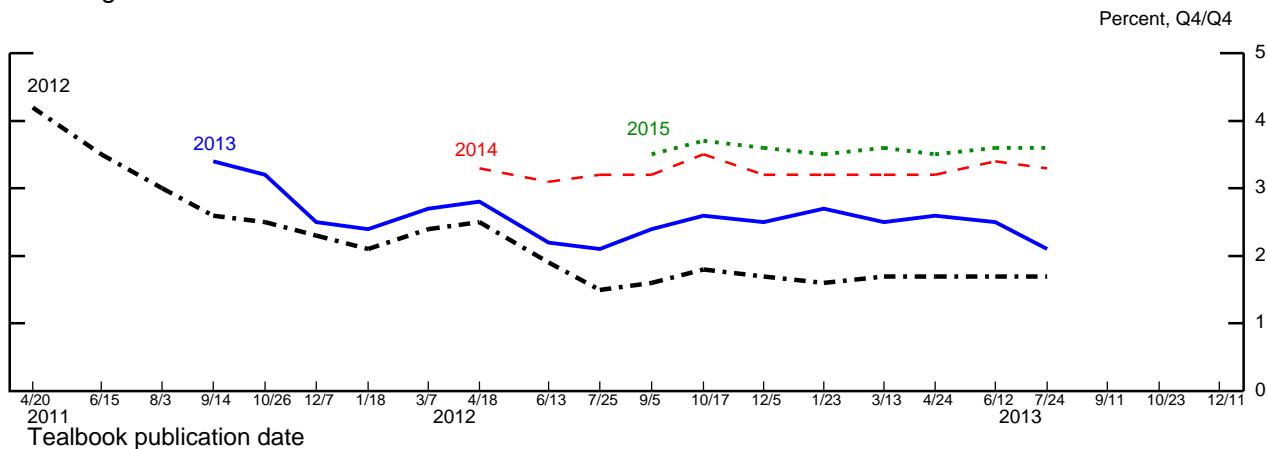
1. Percent, average for the final quarter of the period.

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

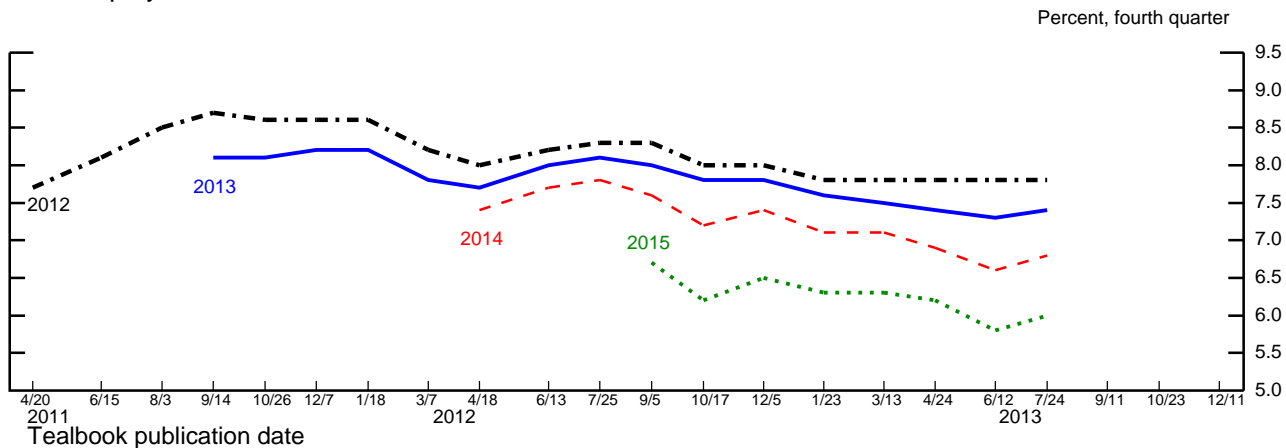
Note: In each panel, shading represents the projection period, and dashed lines are the previous Tealbook.

Evolution of the Staff Forecast

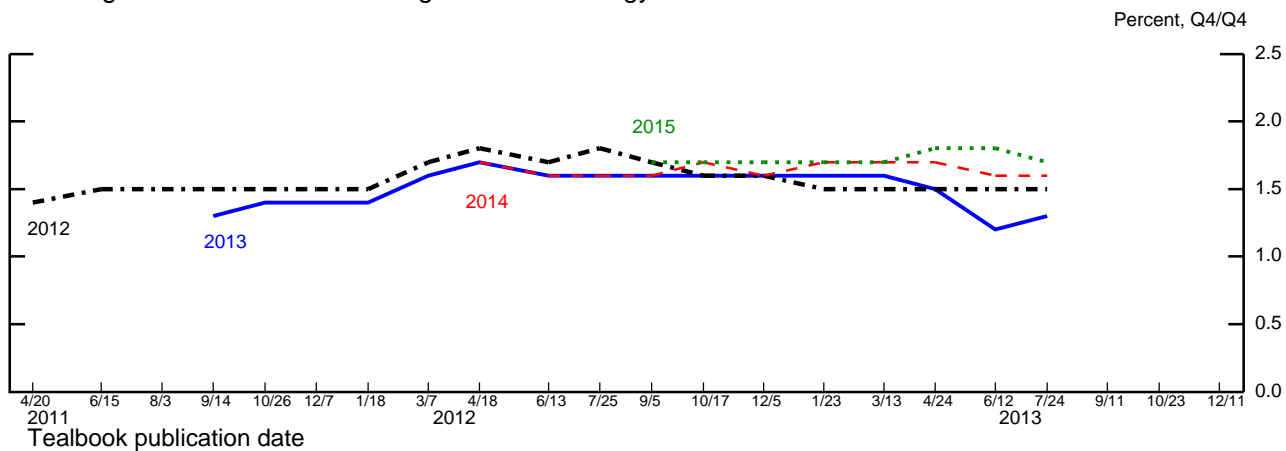
Change in Real GDP



Unemployment Rate



Change in PCE Prices excluding Food and Energy



The Foreign GDP Outlook

Real GDP*

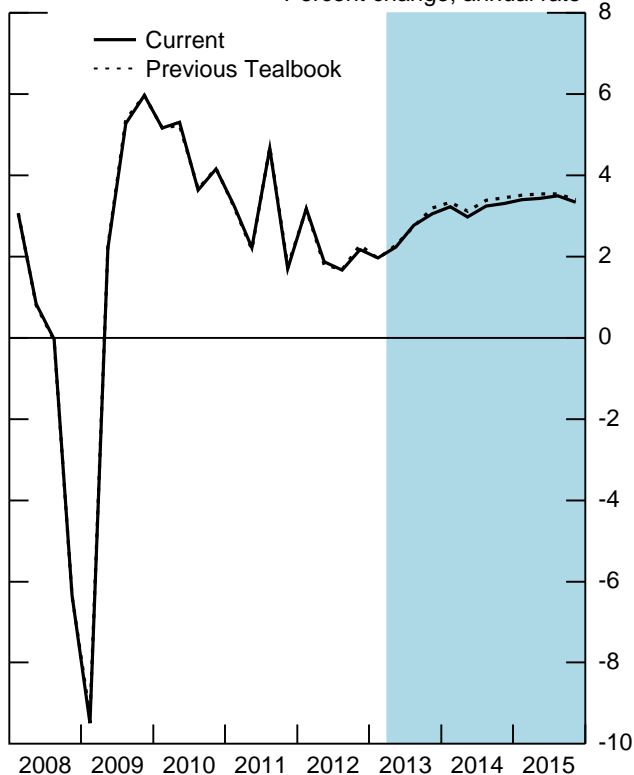
Percent change, annual rate

	2012 Q4	2013 Q1	2013 Q2	H2	2014	2015
1. Total Foreign	2.2	2.0	2.2	2.9	3.2	3.4
<i>Previous Tealbook</i>	2.3	2.0	2.3	3.0	3.3	3.5
2. Advanced Foreign Economies	-0.1	1.4	1.4	1.8	1.9	2.2
<i>Previous Tealbook</i>	-0.2	1.5	1.3	1.7	2.0	2.3
3. Canada	0.9	2.5	1.7	2.4	2.5	2.6
4. Euro Area	-2.4	-1.1	-0.1	0.4	1.1	1.9
5. Japan	1.2	4.1	3.8	3.1	0.9	1.0
6. United Kingdom	-0.9	1.1	2.4	2.0	2.2	2.6
7. Emerging Market Economies	4.6	2.5	3.1	4.1	4.5	4.6
<i>Previous Tealbook</i>	4.8	2.4	3.3	4.3	4.7	4.8
8. China	8.1	7.0	6.9	7.5	7.8	7.7
9. Emerging Asia ex. China	4.9	1.4	2.9	3.7	4.2	4.5
10. Mexico	2.7	1.8	1.7	3.2	3.7	3.7
11. Brazil	2.6	2.2	2.5	3.1	3.4	3.8

* GDP aggregates weighted by shares of U.S. merchandise exports.

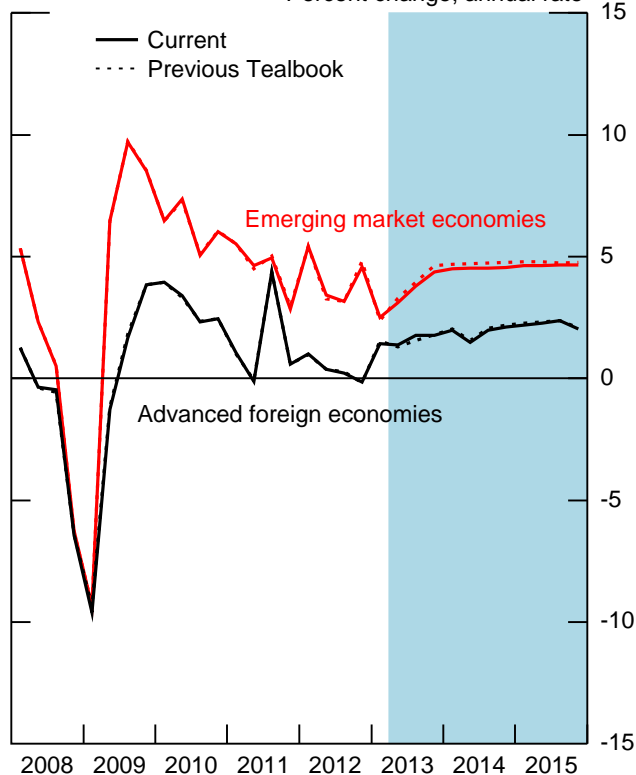
Total Foreign GDP

Percent change, annual rate



Foreign GDP

Percent change, annual rate



The Foreign Inflation Outlook

Consumer Prices*

Percent change, annual rate

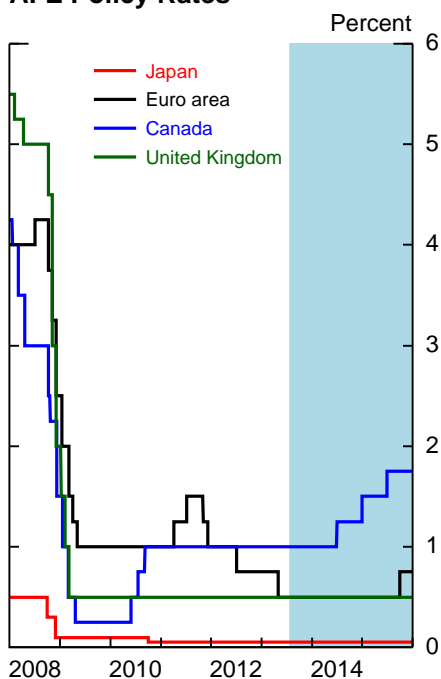
	2012 Q4	Q1	2013 Q2	H2	2014	2015
1. Total Foreign	2.4	2.3	1.9	2.3	2.6	2.7
<i>Previous Tealbook</i>	2.3	2.3	1.9	2.2	2.6	2.7
2. Advanced Foreign Economies	1.6	0.9	0.5	1.3	1.7	1.8
<i>Previous Tealbook</i>	1.6	0.8	0.6	1.2	1.7	1.9
3. Canada	1.4	1.6	0.1	1.7	1.7	1.8
4. Euro Area	2.3	0.7	0.6	1.4	1.4	1.6
5. Japan	0.0	-0.4	0.6	0.4	2.6	2.5
6. United Kingdom	4.1	2.3	1.4	2.4	1.9	2.0
7. Emerging Market Economies	3.0	3.4	3.0	3.1	3.3	3.3
<i>Previous Tealbook</i>	2.8	3.5	2.9	2.9	3.3	3.3
8. China	2.6	3.2	2.1	2.6	3.0	3.0
9. Emerging Asia ex. China	3.0	3.5	1.7	3.5	3.4	3.4
10. Mexico	3.1	3.5	5.5	3.0	3.4	3.4
11. Brazil	7.0	7.0	5.8	5.7	5.3	5.3

* CPI aggregates weighted by shares of U.S. non-oil imports.

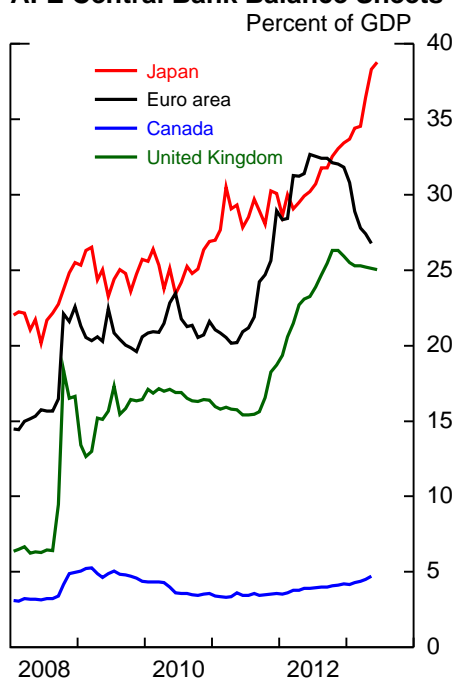
Int'l Econ Devel & Outlook

Foreign Monetary Policy

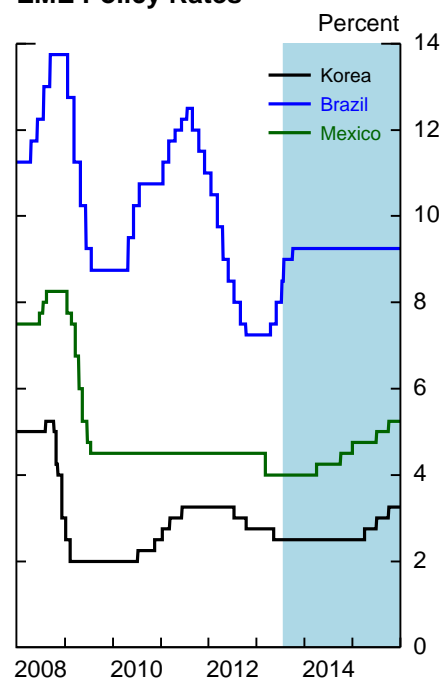
AFE Policy Rates



AFE Central Bank Balance Sheets

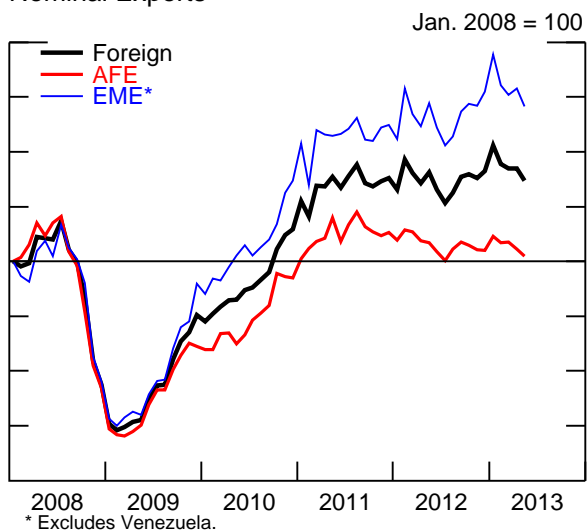


EME Policy Rates

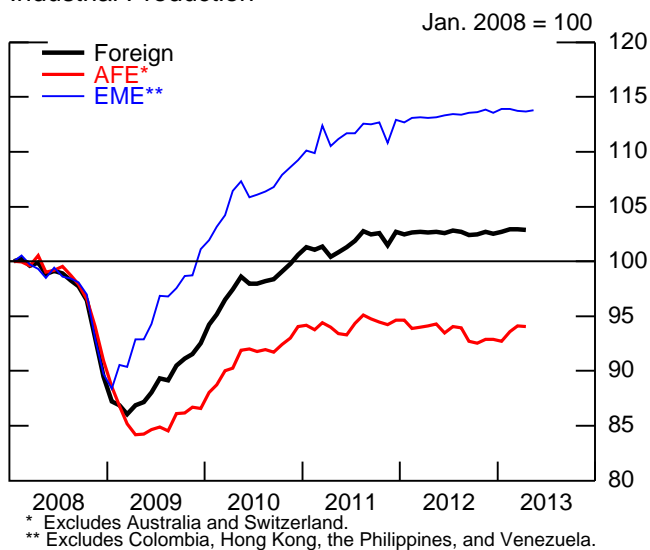


Recent Foreign Indicators

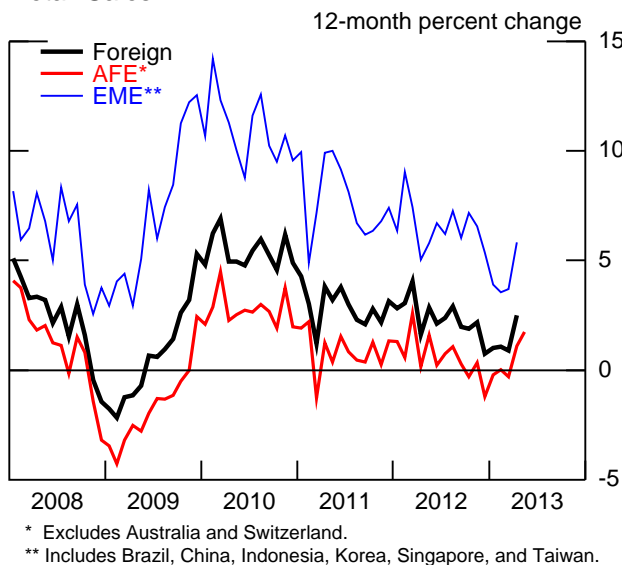
Nominal Exports



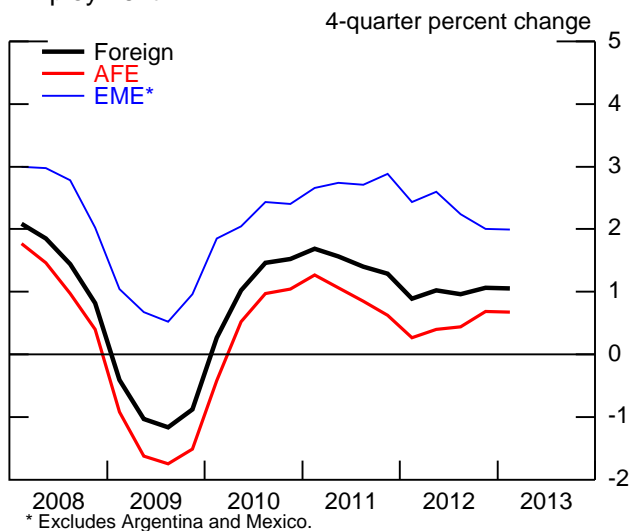
Industrial Production



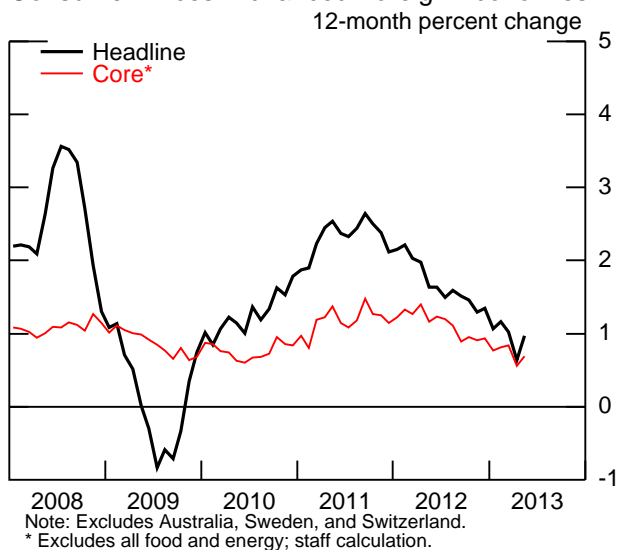
Retail Sales



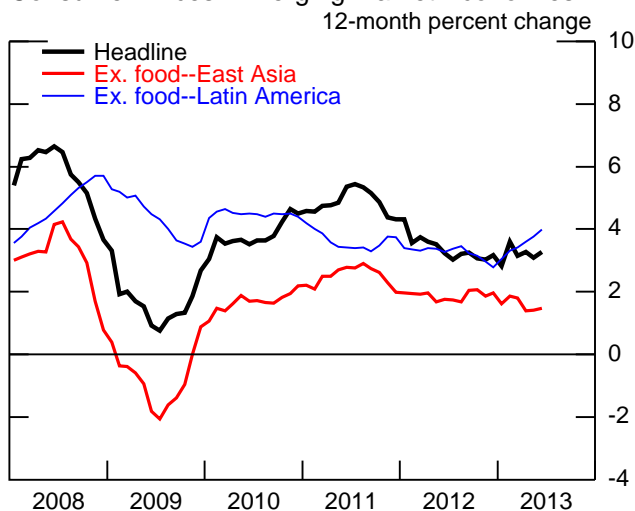
Employment



Consumer Prices: Advanced Foreign Economies

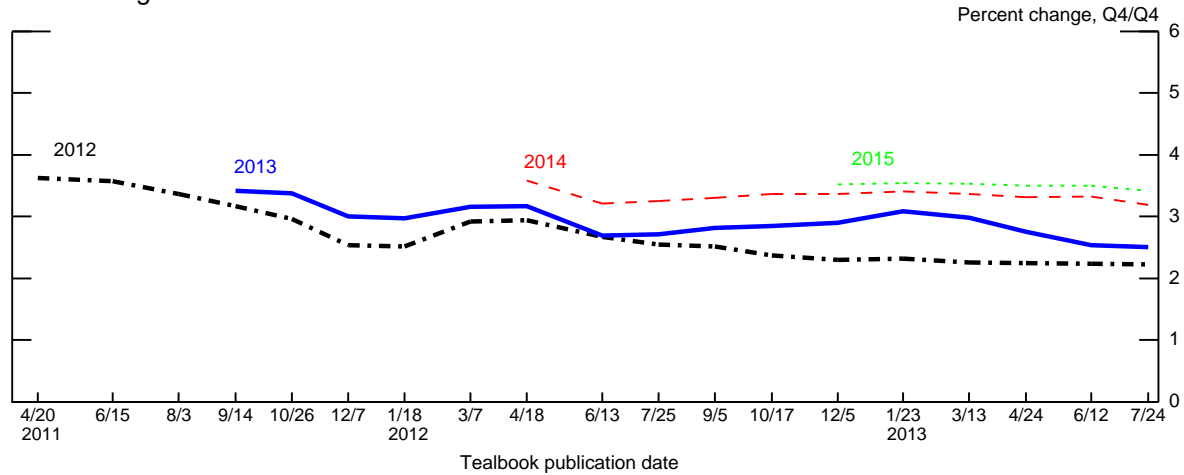


Consumer Prices: Emerging Market Economies

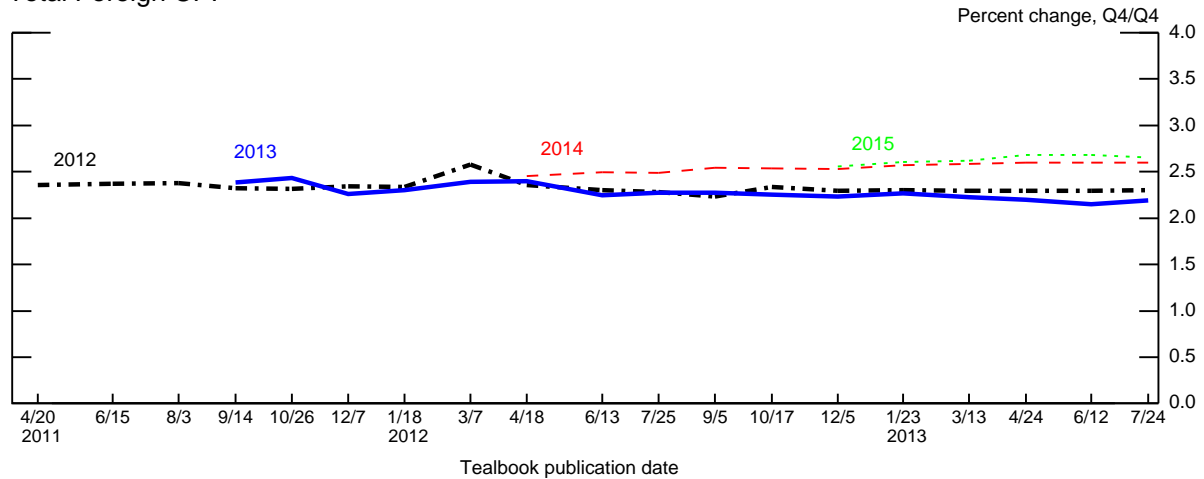


Evolution of Staff's International Forecast

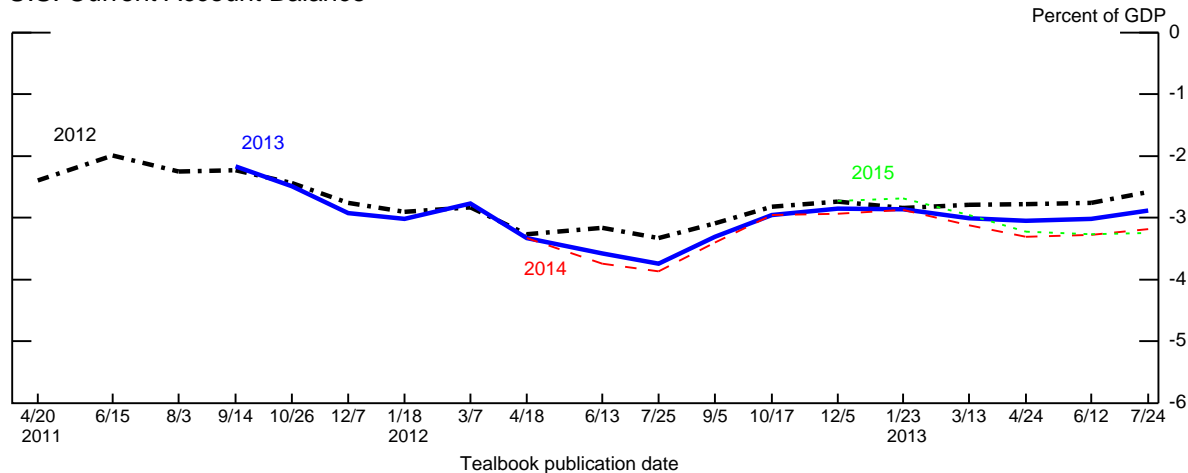
Total Foreign GDP



Total Foreign CPI

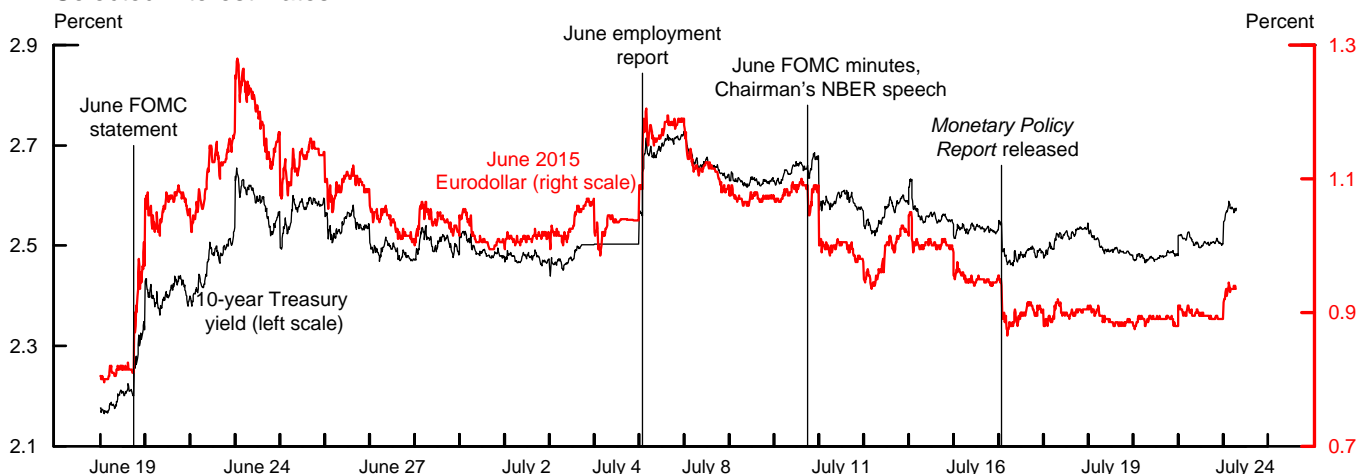


U.S. Current Account Balance



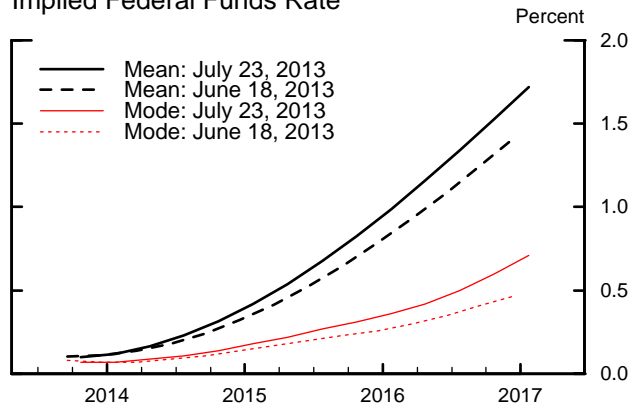
Policy Expectations and Treasury Yields

Selected Interest Rates



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

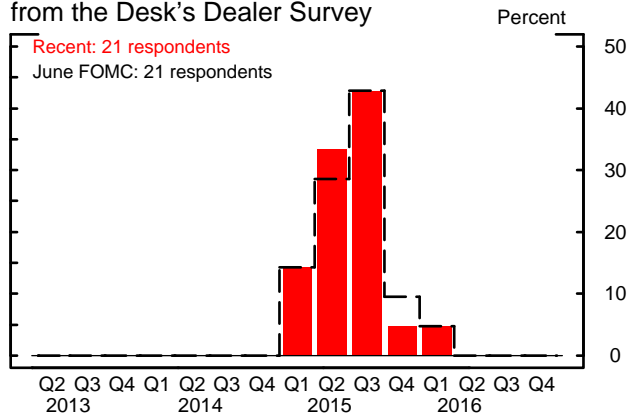
Implied Federal Funds Rate



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.

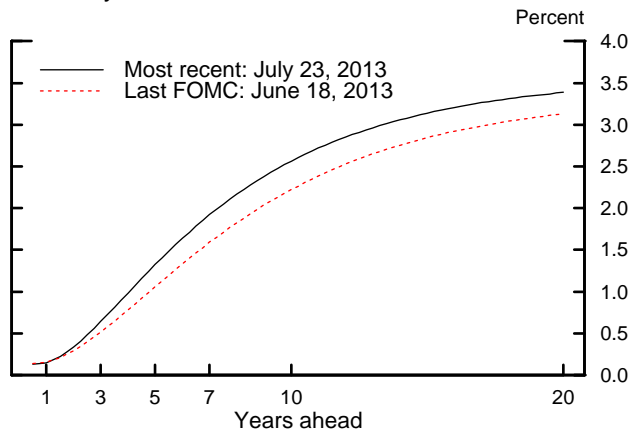
Source: Bloomberg and CME Group.

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



Source: Desk's dealer survey from July 22, 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 lagged indexation of Treasury inflation-protected securities (carry effect).

Source: Barclays PLC and staff estimates.

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	1.4	2.8	3.3	3.6	2.7
Higher long-term interest rates	1.4	2.7	2.4	2.8	2.9
Increased risk appetite	1.4	3.8	4.9	3.9	1.7
Low inflation	1.4	2.5	2.5	2.7	3.3
Consumer restraint	1.4	1.9	2.0	2.7	3.0
Supply-side damage	1.4	2.5	2.6	2.2	1.3
Weaker growth in China	1.4	2.2	2.5	3.7	3.1
Stronger dollar	1.4	2.6	2.5	3.5	2.9
<i>Unemployment rate¹</i>					
Extended Tealbook baseline	7.5	7.4	6.8	6.0	5.3
Higher long-term interest rates	7.5	7.4	7.1	6.8	5.9
Increased risk appetite	7.5	7.3	6.0	4.9	5.4
Low inflation	7.5	7.4	7.1	6.7	5.6
Consumer restraint	7.5	7.5	7.6	7.3	6.5
Supply-side damage	7.5	7.3	6.2	5.2	5.5
Weaker growth in China	7.5	7.5	7.2	6.5	5.5
Stronger dollar	7.5	7.4	7.1	6.5	5.6
<i>Total PCE prices</i>					
Extended Tealbook baseline	.5	1.4	1.3	1.5	1.8
Higher long-term interest rates	.5	1.4	1.3	1.4	1.6
Increased risk appetite	.5	1.4	1.4	1.7	2.1
Low inflation	.5	.7	.2	.1	.1
Consumer restraint	.5	1.4	1.2	1.2	1.2
Supply-side damage	.5	1.4	1.4	1.5	1.7
Weaker growth in China	.5	.6	.6	1.4	1.9
Stronger dollar	.5	.6	.6	1.3	1.7
<i>Core PCE prices</i>					
Extended Tealbook baseline	1.1	1.5	1.6	1.7	1.9
Higher long-term interest rates	1.1	1.5	1.6	1.6	1.7
Increased risk appetite	1.1	1.5	1.7	1.9	2.2
Low inflation	1.1	.8	.5	.3	.2
Consumer restraint	1.1	1.5	1.5	1.4	1.3
Supply-side damage	1.1	1.5	1.7	1.7	1.8
Weaker growth in China	1.1	1.3	1.2	1.5	1.9
Stronger dollar	1.1	1.2	1.0	1.4	1.8
<i>Federal funds rate¹</i>					
Extended Tealbook baseline	.1	.1	.1	.7	2.8
Higher long-term interest rates	.1	.1	.1	.1	1.3
Increased risk appetite	.1	.1	.6	2.4	3.6
Low inflation	.1	.1	.1	.1	.5
Consumer restraint	.1	.1	.1	.1	.1
Supply-side damage	.1	.1	.5	2.1	3.1
Weaker growth in China	.1	.1	.1	.1	2.4
Stronger dollar	.1	.1	.1	.1	2.3

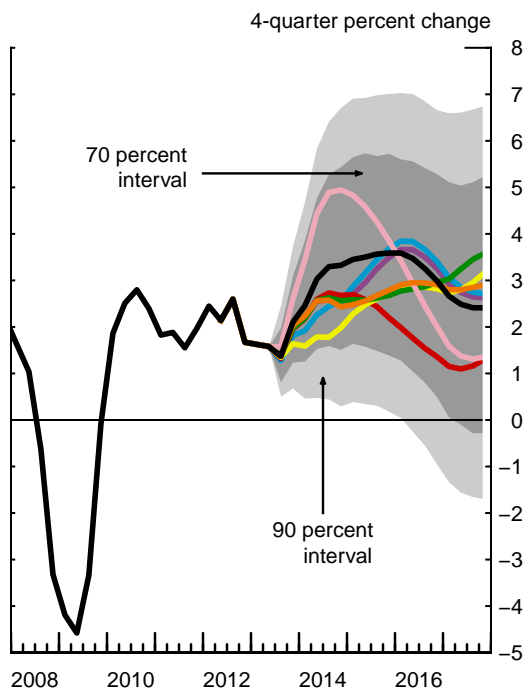
1. Percent, average for the final quarter of the period.

Forecast Confidence Intervals and Alternative Scenarios

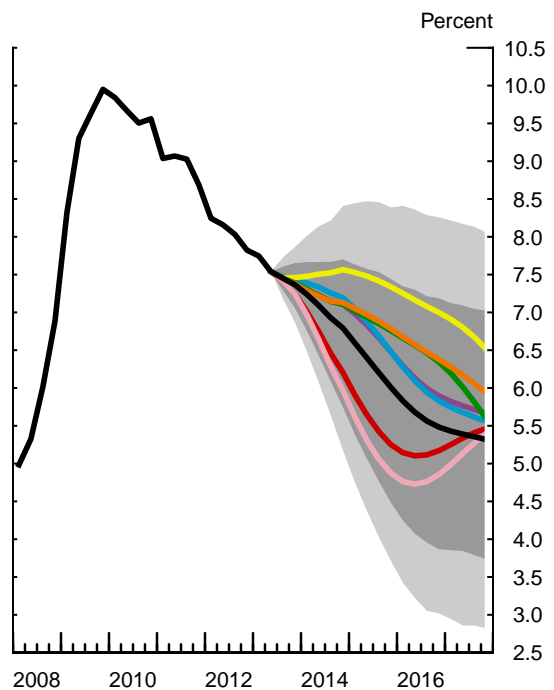
Confidence Intervals Based on FRB/US Stochastic Simulations

- Extended Tealbook baseline
- Higher long-term interest rates
- Increased risk appetite
- Low inflation
- Consumer restraint
- Supply-side damage
- Weaker growth in China
- Stronger dollar

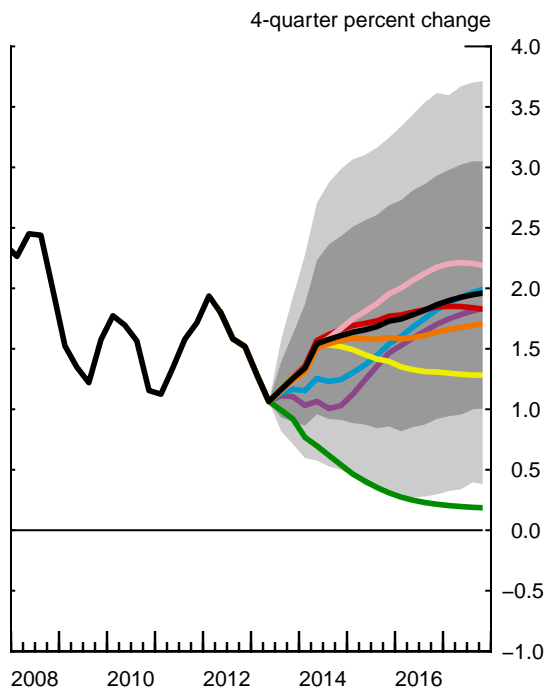
Real GDP



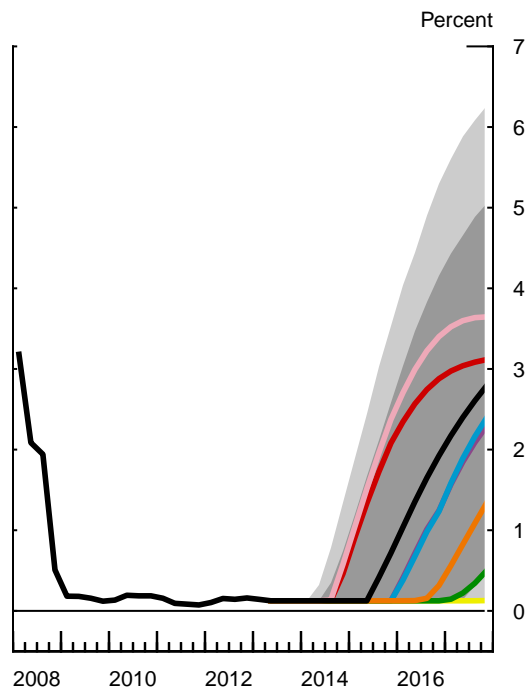
Unemployment Rate



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> (percent change, Q4 to Q4)					
Projection	2.1	3.3	3.6	3.0	2.4
Confidence interval					
Tealbook forecast errors	1.3–2.9	1.4–5.2	1.5–5.7	...	...
FRB/US stochastic simulations	1.2–3.1	1.5–5.4	1.4–5.7	.5–5.3	-.3–5.2
<i>Civilian unemployment rate</i> (percent, Q4)					
Projection	7.4	6.8	6.0	5.5	5.3
Confidence interval					
Tealbook forecast errors	7.0–7.7	6.0–7.6	4.7–7.4	...	...
FRB/US stochastic simulations	7.1–7.7	5.7–7.7	4.5–7.4	3.9–7.2	3.7–7.0
<i>PCE prices, total</i> (percent change, Q4 to Q4)					
Projection	.9	1.3	1.5	1.7	2.0
Confidence interval					
Tealbook forecast errors	.5–1.4	.2–2.5	.3–2.7	...	...
FRB/US stochastic simulations	.3–1.6	.4–2.4	.4–2.7	.6–3.0	.8–3.2
<i>PCE prices excluding food and energy</i> (percent change, Q4 to Q4)					
Projection	1.3	1.6	1.7	1.9	2.0
Confidence interval					
Tealbook forecast errors	.9–1.6	.9–2.3	.7–2.7	...	...
FRB/US stochastic simulations	.9–1.6	.9–2.4	.9–2.7	.9–2.9	1.0–3.0
<i>Federal funds rate</i> (percent, Q4)					
Projection	.1	.1	.7	1.9	2.8
Confidence interval					
FRB/US stochastic simulations	.1–.1	.1–.7	.1–2.6	.1–4.2	.5–5.1

Note: Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1969–2012 set of model equation residuals.

Intervals derived from Tealbook forecast errors are based on projections made from 1979 to 2012, except for PCE prices excluding food and energy, where the sample is 1981–2012.

... 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	2013		2014		2015	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
<i>Real GDP</i>						
Staff	2.5	2.1	3.4	3.3	3.6	3.6
FRB/US	2.1	1.6	3.3	3.0	4.0	3.5
EDO	2.5	2.1	2.9	3.0	2.8	2.9
Blue Chip	2.3	2.1	2.8	2.8	...	...
<i>Unemployment rate¹</i>						
Staff	7.3	7.4	6.6	6.8	5.8	6.0
FRB/US	7.5	7.6	7.3	7.7	6.4	7.1
EDO	7.5	7.6	7.3	7.3	7.1	7.1
Blue Chip	7.4	7.3	6.9	6.9	...	...
<i>Total PCE prices</i>						
Staff	.9	.9	1.4	1.3	1.6	1.5
FRB/US	.8	.9	1.1	1.0	1.1	.9
EDO	.8	.9	1.4	1.5	1.5	1.5
Blue Chip ²	1.5	1.3	2.2	2.0	...	...
<i>Core PCE prices</i>						
Staff	1.2	1.3	1.6	1.6	1.8	1.7
FRB/US	1.2	1.2	1.3	1.2	1.3	1.1
EDO	1.1	1.2	1.4	1.5	1.5	1.5
Blue Chip	...	...	...	...	...	...
<i>Federal funds rate¹</i>						
Staff	.1	.1	.1	.1	1.0	.7
FRB/US	.1	.1	.1	.1	.1	.1
EDO	.7	.7	1.6	1.6	2.3	2.3
Blue Chip ³	.1	.1	.2	.2	...	...

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

1. Percent, average for Q4.

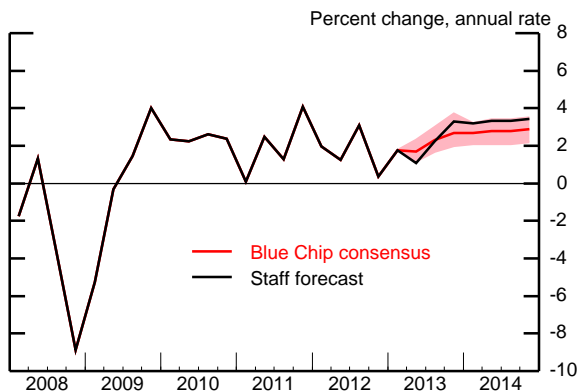
2. Consumer price index.

3. Treasury bill rate.

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

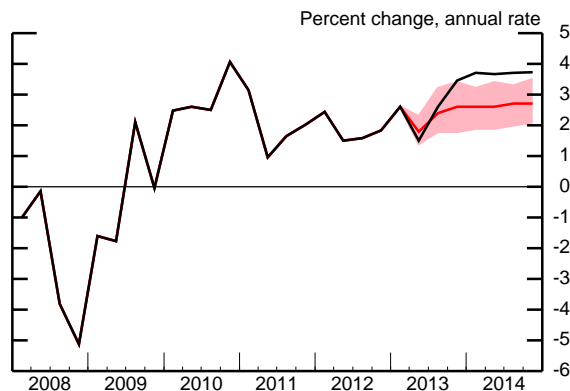
Tealbook Forecast Compared with Blue Chip (Blue Chip survey released July 10, 2013)

Real GDP

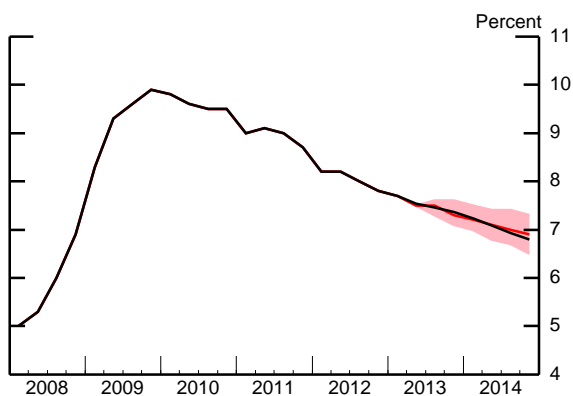


Note: The shaded area represents the area between the Blue Chip top 10 and bottom 10 averages.

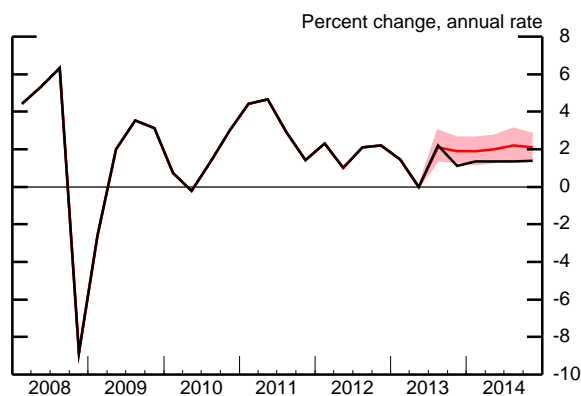
Real PCE



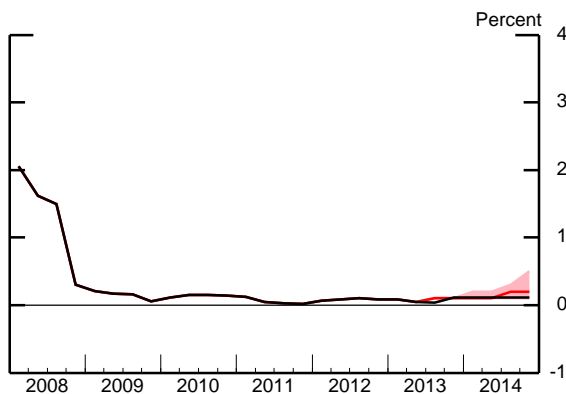
Unemployment Rate



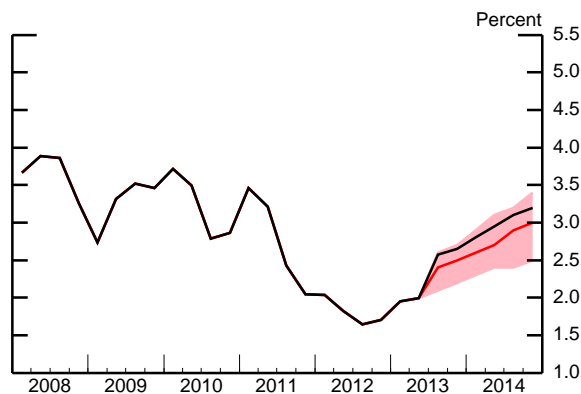
Consumer Price Index



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—2014:Q2)

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	.04	.10	.01
Previous Tealbook	.05	.04	.09	.01
<i>Less than 1 percent</i>				
Current Tealbook	.32	.41	.34	.45
Previous Tealbook	.31	.40	.36	.43

Probability of Unemployment Events

(4 quarters ahead—2014:Q2)

Probability that the unemployment rate will ...	Staff	FRB/US	EDO	BVAR
<i>Increase by 1 percentage point</i>				
Current Tealbook	.01	.09	.22	.02
Previous Tealbook	.01	.05	.19	.01
<i>Decrease by 1 percentage point</i>				
Current Tealbook	.19	.03	.21	.17
Previous Tealbook	.24	.06	.24	.22

Probability of Near-Term Recession

Probability that real GDP declines in each of 2013:Q3 and 2013:Q4	Staff	FRB/US	EDO	BVAR	Factor Model
Current Tealbook	.02	.04	.05	.09	.16
Previous Tealbook	.02	.03	.04	.04	.11

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. Data for the current quarter are taken from the staff estimate for the second Tealbook in each quarter; if the second Tealbook for the current quarter has not yet been published, 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 ¹	
	06/12/13	07/24/13	06/12/13	07/24/13	06/12/13	07/24/13	06/12/13	07/24/13	06/12/13	07/24/13
<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
Q2	2.8	2.8	1.3	1.3	.7	.7	1.7	1.7	8.2	8.2
Q3	5.9	5.9	3.1	3.1	1.6	1.6	1.1	1.1	8.0	8.0
Q4	1.3	1.3	.4	.4	1.6	1.6	1.0	1.0	7.8	7.8
2013:Q1	3.4	3.1	2.2	1.8	1.0	1.0	1.3	1.3	7.7	7.7
Q2	2.1	1.1	1.8	1.1	-1	-1	.8	.8	7.5	7.5
Q3	3.9	4.3	2.5	2.3	1.2	1.8	1.3	1.5	7.4	7.5
Q4	4.8	4.4	3.3	3.3	1.3	1.0	1.5	1.4	7.3	7.4
2014:Q1	4.8	4.9	3.2	3.2	1.5	1.3	1.7	1.6	7.1	7.2
Q2	4.9	5.0	3.3	3.3	1.4	1.3	1.6	1.6	7.0	7.1
Q3	5.0	4.9	3.5	3.3	1.4	1.3	1.6	1.6	6.8	6.9
Q4	5.2	5.0	3.6	3.4	1.4	1.3	1.6	1.6	6.6	6.8
<i>Two-quarter²</i>										
2012:Q2	3.5	3.5	1.6	1.6	1.6	1.6	2.0	2.0	-5	-5
Q4	3.6	3.6	1.7	1.7	1.6	1.6	1.1	1.1	-4	-4
2013:Q2	2.7	2.1	2.0	1.4	.4	.5	1.0	1.1	-3	-3
Q4	4.4	4.4	2.9	2.8	1.3	1.4	1.4	1.5	-2	-1
2014:Q2	4.9	4.9	3.2	3.3	1.5	1.3	1.7	1.6	-3	-3
Q4	5.1	4.9	3.5	3.4	1.4	1.3	1.6	1.6	-4	-3
<i>Four-quarter³</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	3.5	1.7	1.7	1.6	1.6	1.5	1.5	-9	-9
2013:Q4	3.5	3.2	2.5	2.1	.9	.9	1.2	1.3	-5	-4
2014:Q4	5.0	4.9	3.4	3.3	1.4	1.3	1.6	1.6	-7	-6
2015:Q4	5.4	5.3	3.6	3.6	1.6	1.5	1.8	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	4.0	2.2	2.2	1.8	1.8	1.7	1.7	8.1	8.1
2013	3.2	2.9	1.9	1.7	1.0	1.1	1.2	1.2	7.5	7.5
2014	4.6	4.5	3.1	3.0	1.3	1.2	1.5	1.5	6.9	7.0
2015	5.2	5.2	3.6	3.5	1.5	1.4	1.7	1.7	6.1	6.3

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 ¹	2013 ¹	2014 ¹	2015 ¹
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Real GDP <i>Previous Tealbook</i>	1.3 1.3	3.1 3.1	.4 .4	1.8 2.2	1.1 1.8	2.3 2.5	3.3 3.3	3.2 3.2	3.3 3.3	3.3 3.5	3.4 3.6	1.7 1.7	2.1 2.5	3.3 3.4	3.6 3.6
Final sales <i>Previous Tealbook</i>	1.7	2.4	1.9	1.2	1.1	2.1	2.7	2.9	3.1	3.3	3.5	2.1	1.8	3.2	3.8
Priv. dom. final purch. <i>Previous Tealbook</i>	1.7 1.9 1.9	2.4 1.5 1.5	1.9 3.6 3.6	1.5 2.7 3.1	1.8 2.5 2.6	2.4 2.8 3.7	3.0 4.0 4.2	2.8 4.1 4.2	3.2 4.3 4.4	3.5 4.5 4.7	3.8 4.5 4.7	2.1 2.6 2.6	2.2 3.0 3.4	3.3 4.4 4.5	3.8 4.6 4.6
Personal cons. expend. <i>Previous Tealbook</i>	1.5 1.5	1.6 1.6	1.8 1.8	2.6 3.1	1.5 2.1	2.6 3.1	3.5 3.6	3.7 3.6	3.7 3.7	3.7 3.8	3.7 3.9	1.8 1.8	2.5 3.0	3.7 3.8	3.9 3.9
Durables	-2	8.9	13.6	7.6	5.7	11.3	8.7	9.5	9.6	9.3	9.2	8.3	8.3	9.4	8.6
Nondurables	.6	1.2	.1	2.8	1.0	1.6	2.8	2.9	2.9	2.9	2.9	.9	2.0	2.9	3.2
Services	2.1	.6	.6	1.7	1.0	1.6	2.8	3.0	2.9	3.0	3.1	1.1	1.8	3.0	3.3
Residential investment <i>Previous Tealbook</i>	8.5 8.5	13.5 13.5	17.6 17.6	14.0 13.3	9.8 18.6	4.2 13.9	17.3 15.3	19.2 17.8	19.3 17.8	19.6 18.3	17.4 17.1	14.9 14.9	11.2 15.3	18.9 17.8	16.0 15.2
Business fixed invest. <i>Previous Tealbook</i>	3.6	-1.8	13.2	.4	7.2	3.7	4.0	3.1	4.7	5.7	5.6	5.4	3.8	4.8	5.3
Equipment & software <i>Previous Tealbook</i>	3.6	-1.8	13.2	.9	2.4	5.7	6.0	4.0	5.1	6.3	6.5	5.4	3.7	5.5	5.5
Nonres. structures <i>Previous Tealbook</i>	4.8	-2.6	11.8	4.1	7.4	3.6	4.1	3.8	5.5	6.9	6.7	4.7	4.8	5.7	6.2
Net exports ² <i>Previous Tealbook</i> ²	4.8 .6 .6	-2.6 .0 .0	11.8 16.7 16.7	4.6 -8.3 -7.9	1.6 6.6 4.5	6.2 3.8 4.4	6.6 3.9 4.7	4.7 1.4 2.2	5.6 2.9 4.1	7.4 2.8 3.7	7.6 2.7 3.8	4.7 7.3 7.3	4.7 1.3 1.3	6.3 2.5 3.4	6.4 3.1 3.4
Exports	-407	-395	-385	-388	-393	-381	-388	-399	-402	-405	-402	-401	-387	-402	-405
Imports	-407	-395	-385	-391	-382	-382	-388	-401	-401	-402	-399	-401	-386	-401	-401
Gov't. cons. & invest. <i>Previous Tealbook</i>	5.3 2.8	1.9 -6	-2.8 -4.2	-1.1 -4	7.2 7.0	4.5 1.5	3.1 3.9	4.4 5.6	4.1 4.0	5.1 4.8	5.7 4.3	2.1 .2	3.4 2.9	4.8 4.7	6.4 5.4
Federal	-7	3.9	-7.0	-4.8	-3.7	-3.2	-2.0	-1.5	-2.7	-2.2	-1.9	-1.8	-3.4	-2.1	-7
Defense	-7	3.9	-7.0	-4.8	-3.4	-3.8	-2.0	-1.6	-2.5	-2.3	-1.8	-1.8	-3.5	-2.1	-7
Nondefense	-2	9.5	-14.8	-8.7	-9.1	-7.6	-5.0	-3.8	-7.0	-6.0	-5.2	-2.8	-7.6	-5.5	-3.8
State & local	-2	12.9	-22.1	-12.0	-10.7	-7.9	-3.7	-3.8	-7.9	-6.5	-6.2	-5.0	-8.6	-6.1	-4.1
Change in bus. inventories ² <i>Previous Tealbook</i> ²	-4 -1.0	3.0 .3	1.7 -1.5	-2.1 -2.1	-6.2 -1	-7.1 -4	-7.3 -2	-3.8 .0	-5.1 .0	-5.0 .0	-3.3 .1	1.5 -1.1	-5.7 -7	-4.3 .0	-3.3 1.0
Nonfarm ²	41	60	13	37	32	38	56	67	75	76	73	43	41	73	66
Farm ²	41	60	13	37	38	42	52	63	66	64	59	43	42	63	49
	53	88	35	27	24	30	48	60	70	70	68	60	32	67	65
	-8	-19	-15	8	8	8	8	6	5	5	5	-11	8	6	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 <i>Previous Tealbook</i>	2.4 2.4	2.2 2.2	-3.3 -3.3	-1 -1	2.4 2.4	2.0 2.0	1.7 1.7	2.1 2.5	3.3 3.4	3.6 3.6
Final sales <i>Previous Tealbook</i>	2.8 2.8	2.4 2.4	-2.6 -2.6	-5 -5	1.7 1.7	1.7 1.7	2.1 2.1	1.8 2.2	3.2 3.3	3.8 3.8
Priv. dom. final purch. <i>Previous Tealbook</i>	2.4 2.4	1.2 1.2	-4.5 -4.5	-2.8 -2.8	3.2 3.2	2.9 2.9	2.6 2.6	3.0 3.4	4.4 4.5	4.6 4.6
Personal cons. expend. <i>Previous Tealbook</i>	3.2 3.2	1.7 1.7	-2.5 -2.5	-3 -3	2.9 2.9	1.9 1.9	1.8 1.8	2.5 3.0	3.7 3.8	3.9 3.9
Durables	7.0	4.6	-13.0	3.0	9.5	5.9	8.3	8.3	9.4	8.6
Nondurables	2.9	.8	-3.1	.4	3.0	1.4	.9	2.0	2.9	3.2
Services	2.6	1.4	-.5	-1.1	1.9	1.5	1.1	1.8	3.0	3.3
Residential investment <i>Previous Tealbook</i>	-15.7 -15.7	-20.7 -20.7	-24.4 -24.4	-13.3 -13.3	-5.7 -5.7	3.9 3.9	14.9 14.9	11.2 15.3	18.9 17.8	16.0 15.2
Business fixed invest. <i>Previous Tealbook</i>	7.8 7.8	7.9 7.9	-9.4 -9.4	-15.7 -15.7	7.7 7.7	10.2 10.2	5.4 5.4	3.8 3.7	4.8 5.5	5.3 5.5
Equipment & software <i>Previous Tealbook</i>	6.0 6.0	3.9 3.9	-13.6 -13.6	-7.8 -7.8	11.9 11.9	11.4 11.4	4.7 4.7	4.8 4.7	5.7 6.3	6.2 6.4
Nontres. structures <i>Previous Tealbook</i>	13.0 13.0	17.3 17.3	-1.2 -1.2	-29.4 -29.4	-1.8 -1.8	6.9 6.9	7.3 7.3	1.3 1.3	2.5 3.4	3.1 3.4
Net exports ¹ <i>Previous Tealbook</i> ¹	-729 -729	-649 -649	-495 -495	-355 -355	-420 -420	-408 -408	-401 -401	-387 -386	-402 -401	-405 -401
Exports	10.2	10.1	-2.5	.3	8.8	4.3	2.1	3.4	4.8	6.4
Imports	4.1	.8	-5.9	-6.1	10.9	3.5	.2	2.9	4.7	5.4
Gov't. cons. & invest. <i>Previous Tealbook</i>	1.5 1.5	1.9 1.9	2.7 2.7	4.0 4.0	-1.3 -1.3	-3.3 -3.3	-1.8 -1.8	-3.4 -3.5	-2.1 -2.1	-.7 -.7
Federal	2.2	3.1	8.8	5.1	2.3	-4.2	-2.8	-7.6	-5.5	-3.8
Defense	4.4	2.6	9.8	4.1	1.0	-4.0	-5.0	-8.6	-6.1	-4.1
Nondefense	-2.3	4.2	6.8	7.2	5.2	-4.6	1.5	-5.7	-4.3	-3.3
State & local	1.2	1.2	-.9	3.3	-3.6	-2.7	-1.1	-.7	.0	1.0
Change in bus. inventories ¹ <i>Previous Tealbook</i> ¹	59 59	28 28	-36 -36	-139 -139	51 51	31 31	43 43	41 42	73 63	66 49
Nonfarm ¹	63	29	-38	-138	58	36	60	32	67	65
Farm ¹	-4	-1	1	-1	-6	-4	-11	8	6	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 ¹	2013 ¹	2014 ¹	2015 ¹
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Real GDP <i>Previous Tealbook</i>	1.3 1.3	3.1 3.1	.4 .4	1.8 2.2	1.1 1.8	2.3 2.5	3.3 3.3	3.2 3.2	3.3 3.3	3.3 3.5	3.4 3.6	1.7 1.7	2.1 2.5	3.3 3.4	3.6 3.6
Final sales <i>Previous Tealbook</i>	1.7	2.4	1.9	1.2	1.1	2.1	2.7	2.9	3.1	3.3	3.5	2.1	1.8	3.2	3.7
Priv. dom. final purch. <i>Previous Tealbook</i>	1.7	2.4	1.9	1.5	1.8	2.4	3.0	2.8	3.2	3.5	3.8	2.1	2.2	3.3	3.8
	1.6	1.3	3.0	2.2	2.1	2.4	3.3	3.5	3.7	3.8	3.8	2.2	2.5	3.7	3.9
	1.6	1.3	3.0	2.6	2.2	3.1	3.6	3.5	3.7	4.0	4.0	2.2	2.9	3.8	3.9
Personal cons. expend. <i>Previous Tealbook</i>	1.1	1.1	1.3	1.8	1.1	1.9	2.5	2.6	2.6	2.6	2.7	1.3	1.8	2.6	2.8
Durables	1.1	1.1	1.3	2.2	1.5	2.2	2.5	2.6	2.6	2.7	2.8	1.3	2.1	2.7	2.8
Nondurables	.0	.7	1.0	.6	.4	.9	.7	.7	.8	.7	.7	.6	.6	.8	.7
Services	1.1	.2	.0	.5	.2	.3	.5	.5	.5	.5	.5	.1	.3	.5	.5
	1.0	.3	.3	.8	.5	.7	1.3	1.4	1.4	1.4	1.5	.5	.8	1.4	1.6
Residential investment <i>Previous Tealbook</i>	.2	.3	.4	.3	.3	.1	.5	.5	.6	.6	.5	.3	.3	.6	.5
	.2	.3	.4	.3	.5	.4	.4	.5	.5	.6	.5	.3	.4	.5	.5
Business fixed invest. <i>Previous Tealbook</i>	.4	-.2	1.3	.0	.7	.4	.4	.3	.5	.6	.6	.6	.4	.5	.6
Equipment & software	.4	-.2	1.3	.1	.3	.6	.6	.4	.5	.7	.7	.6	.4	.6	.6
<i>Previous Tealbook</i>	.4	-.2	.8	.3	.5	.3	.3	.3	.4	.5	.5	.3	.4	.4	.5
	.4	-.2	.8	.3	.1	.5	.5	.4	.4	.6	.6	.3	.4	.5	.5
Nonres. structures	.0	.0	.5	-.3	.2	.1	.1	.0	.1	.1	.1	.2	.0	.1	.1
<i>Previous Tealbook</i>	.0	.0	.5	-.2	.1	.1	.1	.1	.1	.1	.1	.2	.0	.1	.1
Net exports <i>Previous Tealbook</i>	.2	.4	.3	-.1	-.2	.4	-.2	-.3	-.1	-.1	.1	.3	.0	-.1	.0
Exports	.2	.4	.3	-.2	.2	.0	-.2	-.4	.0	.0	.1	.3	.0	-.1	.0
Imports	.7	.3	-.4	-.2	1.0	.6	.4	.6	.6	.7	.8	.3	.5	.7	.9
	-.5	.1	.7	.1	-.2	-.3	-.7	-.9	-.7	-.8	-.7	.0	-.5	-.8	-.9
Gov't. cons. & invest. <i>Previous Tealbook</i>	-.1	.8	-.1.4	-.9	-.7	-.6	-.4	-.3	-.5	-.4	-.3	-.4	-.7	-.4	-.1
Federal	-.1	.8	-.1.4	-.9	-.7	-.7	-.4	-.3	-.4	-.4	-.3	-.4	-.7	-.4	-.1
Defense	.0	.7	-.1.2	-.7	-.7	-.6	-.4	-.3	-.5	-.4	-.3	-.2	-.6	-.4	-.2
Nondefense	.0	.6	-.1.3	-.6	-.5	-.4	-.2	-.2	-.4	-.3	-.3	-.3	-.4	-.3	-.2
State & local	.0	.1	.0	-.1	-.2	-.2	-.2	-.1	-.1	-.1	-.1	.0	-.1	-.1	-.1
	-.1	.0	-.2	-.3	.0	.0	.0	.0	.0	.0	.0	-.1	-.1	.0	.1
Change in bus. inventories <i>Previous Tealbook</i>	-.5	.7	-.1.5	.6	-.1	.2	.6	.3	.3	.0	-.1	-.4	.3	.1	-.2
Nonfarm	-.5	.7	-.1.5	.7	.0	.1	.3	.3	.1	-.1	-.2	-.4	.3	.1	-.2
Farm	-.3	1.1	-.1.7	-.3	-.1	.2	.6	.4	.3	.0	-.1	-.3	.1	.2	-.1
	-.2	-.4	.1	.8	.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 ¹	2013 ¹	2014 ¹	2015 ¹
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
GDP chain-wt. price index <i>Previous Tealbook</i>	1.6	2.7	1.0	1.2	.0	2.0	1.1	1.6	1.6	1.5	1.5	1.8	1.1	1.5	1.6
PCE chain-wt. price index <i>Previous Tealbook</i>	1.6	2.7	1.0	1.2	.2	1.3	1.5	1.6	1.6	1.5	1.5	1.8	1.0	1.6	1.7
Energy <i>Previous Tealbook</i>	.7	1.6	1.6	1.0	-1	1.8	1.0	1.3	1.3	1.3	1.3	1.6	.9	1.3	1.5
Food <i>Previous Tealbook</i>	.7	1.6	1.6	1.0	-1	1.2	1.3	1.5	1.4	1.4	1.4	1.6	.9	1.4	1.6
Ex. food & energy <i>Previous Tealbook</i>	-13.6	10.5	9.9	-3.7	-13.1	6.6	-4.7	-2.7	-2.5	-2.2	-2.0	3.2	-4.0	-2.4	-1.6
Ex. food & energy, market based <i>Previous Tealbook</i>	-13.6	10.5	9.9	-3.7	-14.1	-9	-8	-4	-8	-1.1	-1.1	3.2	-5.0	-9	-9
CPI <i>Previous Tealbook</i>	.7	.6	1.8	1.3	.4	1.3	.9	.7	.8	.8	1.0	1.1	1.0	.8	1.3
Ex. food & energy <i>Previous Tealbook</i>	.7	.6	1.8	1.3	1.1	1.3	.9	.7	.8	1.0	1.2	1.1	1.2	.9	1.4
Ex. food & energy <i>Previous Tealbook</i>	1.7	1.1	1.0	1.3	.8	1.5	1.4	1.6	1.6	1.6	1.6	1.5	1.3	1.6	1.7
Ex. food & energy <i>Previous Tealbook</i>	1.7	1.1	1.0	1.3	.8	1.3	1.5	1.7	1.6	1.6	1.6	1.5	1.2	1.6	1.8
Ex. food & energy, market based <i>Previous Tealbook</i>	1.8	1.3	.9	1.6	.6	1.4	1.3	1.5	1.5	1.5	1.4	1.6	1.2	1.5	1.6
CPI <i>Previous Tealbook</i>	1.8	1.3	.9	1.6	.4	1.2	1.4	1.6	1.5	1.5	1.4	1.6	1.1	1.5	1.7
Ex. food & energy <i>Previous Tealbook</i>	1.0	2.1	2.2	1.4	.0	2.2	1.1	1.3	1.3	1.4	1.4	1.9	1.2	1.4	1.6
Ex. food & energy <i>Previous Tealbook</i>	1.0	2.1	2.2	1.4	-2	1.4	1.4	1.6	1.5	1.5	1.5	1.9	1.0	1.5	1.7
Ex. food & energy <i>Previous Tealbook</i>	2.4	1.6	1.7	2.1	1.4	1.8	1.7	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.9
Ex. food & energy <i>Previous Tealbook</i>	2.4	1.6	1.7	2.1	1.3	1.7	1.7	1.9	1.8	1.8	1.8	1.9	1.7	1.8	2.0
ECI, hourly compensation ² <i>Previous Tealbook</i> ²	2.1	1.7	1.7	1.7	2.4	2.5	2.5	2.6	2.6	2.7	2.7	1.8	2.3	2.6	2.9
ECI, hourly compensation ² <i>Previous Tealbook</i> ²	2.1	1.7	1.7	1.4	2.4	2.5	2.5	2.6	2.6	2.7	2.7	1.9	2.2	2.6	3.0
Nonfarm business sector Output per hour <i>Previous Tealbook</i>	1.7	3.1	-1.7	-3	-1.1	1.2	1.5	1.7	1.8	1.6	1.6	.6	.3	1.6	1.7
Output per hour <i>Previous Tealbook</i>	1.7	3.1	-1.7	.3	.2	1.5	1.6	1.6	1.6	1.6	1.5	.6	.9	1.6	1.6
Compensation per hour <i>Previous Tealbook</i>	1.2	1.2	9.9	-3.8	2.0	2.4	2.7	2.7	2.7	2.9	2.9	4.4	.8	2.8	3.3
Compensation per hour <i>Previous Tealbook</i>	1.2	1.2	9.9	-3.8	2.0	2.1	2.7	2.8	2.8	2.9	3.0	4.4	.7	2.8	3.4
Unit labor costs <i>Previous Tealbook</i>	-5	-1.9	11.8	-3.5	3.1	1.1	1.2	1.0	.9	1.3	1.3	3.8	.4	1.1	1.6
Unit labor costs <i>Previous Tealbook</i>	-5	-1.9	11.8	-4.1	1.8	.6	1.1	1.1	1.2	1.3	1.4	3.8	-2	1.3	1.7
Core goods imports chain-wt. price index ³ <i>Previous Tealbook</i> ³	1.2	-2.3	1.7	.2	-2.0	-.3	.6	1.2	1.4	1.7	1.5	.1	-.4	1.4	1.5
Core goods imports chain-wt. price index ³ <i>Previous Tealbook</i> ³	1.2	-2.3	1.7	.2	-1.1	-.2	.5	1.0	1.4	1.7	1.4	.1	-.1	1.4	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 <i>Previous Tealbook</i>	2.9 2.9	2.6 2.6	2.1 2.1	.5 .5	1.8 1.8	2.0 2.0	1.8 1.8	1.1 1.0	1.5 1.6	1.6 1.7
PCE chain-wt. price index <i>Previous Tealbook</i>	1.9 1.9	3.5 3.5	1.7 1.7	1.4 1.4	1.5 1.5	2.5 2.5	1.6 1.6	.9 .9	1.3 1.4	1.5 1.6
Energy <i>Previous Tealbook</i>	-3.7 -3.7	19.3 19.3	-8.8 -8.8	2.7 2.7	6.5 6.5	11.9 11.9	3.2 3.2	-4.0 -5.0	-2.4 -9	-1.6 -9
Food <i>Previous Tealbook</i>	1.7 1.7	4.7 4.7	7.0 7.0	-1.7 -1.7	1.3 1.3	5.1 5.1	1.1 1.1	1.0 1.2	.8 .9	1.3 1.4
Ex. food & energy <i>Previous Tealbook</i>	2.3 2.3	2.4 2.4	2.0 2.0	1.6 1.6	1.2 1.2	1.7 1.7	1.5 1.5	1.3 1.2	1.6 1.6	1.7 1.8
Ex. food & energy, market based <i>Previous Tealbook</i>	2.2 2.2	2.1 2.1	2.2 2.2	1.7 1.7	.7 .7	1.9 1.9	1.6 1.6	1.2 1.1	1.5 1.5	1.6 1.7
CPI <i>Previous Tealbook</i>	2.0 2.0	4.0 4.0	1.6 1.6	1.5 1.5	1.2 1.2	3.3 3.3	1.9 1.9	1.2 1.0	1.4 1.5	1.6 1.7
Ex. food & energy <i>Previous Tealbook</i>	2.7 2.7	2.3 2.3	2.0 2.0	1.7 1.7	.6 .6	2.2 2.2	1.9 1.9	1.8 1.7	1.8 1.8	1.9 2.0
ECL, hourly compensation ¹ <i>Previous Tealbook</i> ¹	3.2 3.2	3.0 3.0	2.4 2.4	1.2 1.2	2.1 2.1	2.2 2.2	1.8 1.9	2.3 2.2	2.6 2.6	2.9 3.0
Nonfarm business sector Output per hour <i>Previous Tealbook</i>	.8 .8	2.4 2.4	-1.2 -1.2	5.6 5.6	1.9 1.9	.4 .4	.6 .6	.3 .9	1.6 1.6	1.7 1.6
Compensation per hour <i>Previous Tealbook</i>	4.5 4.5	3.6 3.6	2.5 2.5	1.5 1.5	1.6 1.6	1.7 1.7	4.4 4.4	.8 .7	2.8 2.8	3.3 3.4
Unit labor costs <i>Previous Tealbook</i>	3.6 3.6	1.1 1.1	3.7 3.7	-3.9 -3.9	-2 -2	1.3 1.3	3.8 3.8	.4 -2	1.1 1.3	1.6 1.7
Core goods imports chain-wt. price index ² <i>Previous Tealbook</i> ²	2.5 2.5	2.9 2.9	3.7 3.7	-1.7 -1.7	2.7 2.7	4.3 4.3	.1 .1	-4 -1	1.4 1.4	1.5 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 ¹	2013 ¹	2014 ¹	2015 ¹	
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4					
<i>Employment and production</i>																
Nonfarm payroll employment ²	.5	.4	.5	.6	.6	.6	.5	.6	.6	.6	.6		2.2	2.3	2.4	3.0
Unemployment rate ³	8.2	8.0	7.8	7.7	7.5	7.5	7.4	7.2	7.1	6.9	6.8		7.8	7.4	6.8	6.0
<i>Previous Tealbook³</i>	8.2	8.0	7.8	7.7	7.5	7.4	7.3	7.1	7.0	6.8	6.6		7.8	7.3	6.6	5.8
Natural rate of unemployment ³	5.8	5.7	5.7	5.6	5.6	5.5	5.5	5.4	5.4	5.4	5.4		5.7	5.5	5.4	5.3
<i>Previous Tealbook³</i>	5.8	5.7	5.7	5.6	5.6	5.5	5.5	5.4	5.4	5.4	5.4		5.7	5.5	5.4	5.3
GDP gap ⁴	-3.8	-3.5	-3.9	-3.9	-4.2	-4.1	-3.8	-3.5	-3.2	-2.9	-2.6		-3.9	-3.8	-2.6	-1.2
<i>Previous Tealbook⁴</i>	-3.8	-3.5	-3.9	-3.8	-3.9	-3.8	-3.4	-3.2	-2.9	-2.6	-2.2		-3.9	-3.4	-2.2	-.8
Industrial production ⁵	2.9	.3	2.5	4.2	.6	4.4	4.4	5.3	5.1	4.4	3.4		2.8	3.4	4.6	4.2
<i>Previous Tealbook⁵</i>	2.9	.3	2.6	4.4	.7	4.3	4.7	5.4	4.7	4.5	4.2		2.8	3.5	4.7	4.3
Manufacturing industr. prod. ⁵	1.6	-.5	2.4	5.1	-.2	2.9	3.7	4.4	4.4	4.4	4.1		2.8	2.9	4.4	4.5
<i>Previous Tealbook⁵</i>	1.6	-.5	2.5	5.0	-.6	2.8	4.0	5.2	4.7	4.6	4.6		2.9	2.8	4.8	4.7
Capacity utilization rate - mfg. ³	75.9	75.5	75.7	76.4	76.0	76.3	76.7	77.2	77.7	78.2	78.6		75.7	76.7	78.6	80.5
<i>Previous Tealbook³</i>	75.9	75.5	75.7	76.3	75.9	76.0	76.4	77.0	77.6	78.1	78.6		75.7	76.4	78.6	80.6
Housing starts ⁶	.7	.8	.9	1.0	.9	1.0	1.1	1.2	1.3	1.3	1.4		.8	1.0	1.3	1.6
Light motor vehicle sales ⁶	14.1	14.5	15.0	15.3	15.3	15.6	15.5	15.7	15.8	16.0	16.1		14.4	15.4	15.9	16.4
<i>Income and saving</i>																
Nominal GDP ⁵	2.8	5.9	1.3	3.1	1.1	4.3	4.4	4.9	5.0	4.9	5.0		3.5	3.2	4.9	5.3
Real disposable pers. income ⁵	2.2	.7	8.9	-8.6	4.6	2.2	2.3	3.9	3.2	3.3	3.5		3.8	.0	3.5	3.5
<i>Previous Tealbook⁵</i>	2.2	.7	8.9	-8.4	4.5	2.6	2.5	4.1	3.2	3.6	3.6		3.8	.2	3.6	3.5
Personal saving rate ³	3.8	3.6	5.3	2.5	3.2	3.1	2.8	2.9	2.8	2.7	2.6		5.3	2.8	2.6	2.2
<i>Previous Tealbook³</i>	3.8	3.6	5.3	2.4	3.0	2.8	2.6	2.7	2.5	2.5	2.4		5.3	2.6	2.4	2.0
Corporate profits ⁷	4.7	9.9	9.6	-5.5	3.7	3.3	1.6	1.0	3.4	3.9	5.6		3.1	.7	3.5	2.8
Profit share of GNP ³	12.1	12.3	12.5	12.2	12.3	12.3	12.2	12.1	12.1	12.1	12.1		12.5	12.2	12.1	11.8
Net federal saving ⁸	-1,115	-1,087	-1,036	-781	-553	-616	-664	-602	-579	-568	-555		-1,074	-654	-576	-505
Net state & local saving ⁸	-124	-140	-125	-110	-87	-91	-80	-78	-54	-49	-43		-129	-92	-56	4
Gross national saving rate ³	12.3	12.3	13.6	13.8	14.5	14.6	14.8	14.7	14.9	15.0	15.1		13.6	14.8	15.1	15.4
Net national saving rate ³	-.4	-.3	1.2	1.2	3.7	3.1	2.5	2.4	2.7	2.7	2.9		1.2	2.5	2.9	3.3

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.

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 ¹	2.1	1.2	-2.8	-5.6	.8	2.0	2.2	2.3	2.4	3.0
Unemployment rate ²	4.5	4.8	6.9	9.9	9.5	8.7	7.8	7.4	6.8	6.0
<i>Previous Tealbook²</i>	4.5	4.8	6.9	9.9	9.5	8.7	7.8	7.3	6.6	5.8
Natural rate of unemployment ²	5.0	5.0	5.3	6.0	6.0	5.8	5.7	5.5	5.4	5.3
<i>Previous Tealbook²</i>	5.0	5.0	5.3	6.0	6.0	5.8	5.7	5.5	5.4	5.3
GDP gap ³	.8	.9	-4.3	-5.2	-4.0	-3.6	-3.9	-3.8	-2.6	-1.2
<i>Previous Tealbook³</i>	.8	.9	-4.3	-5.2	-4.0	-3.6	-3.9	-3.4	-2.2	-.8
Industrial production ⁴	2.1	2.7	-8.9	-5.5	6.2	3.3	2.8	3.4	4.6	4.2
<i>Previous Tealbook⁴</i>	2.1	2.7	-8.9	-5.5	6.2	3.3	2.8	3.5	4.7	4.3
Manufacturing industr. prod. ⁴	1.7	2.9	-11.6	-6.1	6.4	3.3	2.8	2.9	4.4	4.5
<i>Previous Tealbook⁴</i>	1.7	2.9	-11.6	-6.1	6.4	3.3	2.9	2.8	4.8	4.7
Capacity utilization rate - mfg. ²	78.1	78.4	69.9	67.2	72.9	74.8	75.7	76.7	78.6	80.5
<i>Previous Tealbook²</i>	78.1	78.4	69.9	67.2	72.9	74.8	75.7	76.4	78.6	80.6
Housing starts ⁵	1.8	1.4	.9	.6	.6	.6	.8	1.0	1.3	1.6
Light motor vehicle sales ⁵	16.5	16.1	13.1	10.4	11.5	12.7	14.4	15.4	15.9	16.4
<i>Income and saving</i>										
Nominal GDP ⁴	5.3	4.9	-1.2	.4	4.3	4.0	3.5	3.2	4.9	5.3
Real disposable pers. income ⁴	4.6	1.6	1.0	-3.0	3.5	.3	3.8	.0	3.5	3.5
<i>Previous Tealbook⁴</i>	4.6	1.6	1.0	-3.0	3.5	.3	3.8	.2	3.6	3.5
Personal saving rate ²	2.8	2.5	6.2	3.8	4.8	3.4	5.3	2.8	2.6	2.2
<i>Previous Tealbook²</i>	2.8	2.5	6.2	3.8	4.8	3.4	5.3	2.6	2.4	2.0
Corporate profits ⁶	3.7	-8.1	-33.5	57.0	17.3	9.2	3.1	.7	3.5	2.8
Profit share of GNP ²	11.6	10.1	6.8	10.7	12.0	12.5	12.5	12.2	12.1	11.8
Net federal saving ⁷	-204	-245	-613	-1,229	-1,308	-1,237	-1,074	-654	-576	-505
Net state & local saving ⁷	51	12	-72	-113	-90	-102	-129	-92	-56	4
Gross national saving rate ²	16.5	13.9	12.6	11.0	12.1	12.4	13.6	14.8	15.1	15.4
Net national saving rate ²	4.4	1.7	-6	-2.3	-6	-3	1.2	2.5	2.9	3.3

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 ^a	2013	2014	2015	Q1 ^a	Q2 ^a	Q3 ^a	Q4 ^a	Q1 ^a	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget																
Receipts ¹	2,449	2,805	3,052	3,282	509	760	625	616	581	891	718	682	637	960	773	747
Outlays ¹	3,538	3,431	3,559	3,685	966	885	810	909	888	800	834	902	911	884	862	924
Surplus/deficit ¹	-1,089	-626	-507	-403	-457	-125	-185	-293	-307	91	-116	-219	-274	76	-89	-176
<i>Previous Tealbook</i>	-1,089	-632	-503	-387	-457	-125	-185	-293	-307	90	-121	-221	-269	76	-90	-192
On-budget	-1,151	-666	-542	-425	-458	-187	-160	-311	-303	36	-89	-247	-260	23	-58	-200
Off-budget	62	40	34	22	1	62	-25	17	-4	55	-27	27	-15	52	-31	23
Means of financing:																
Borrowing	1,152	604	864	523	398	198	230	314	336	-17	-29	505	285	-46	119	206
Cash decrease	-27	1	15	0	42	-48	6	-7	14	-56	50	-5	20	0	0	0
Other ²	-36	21	-371	-120	17	-25	-51	-13	-43	-18	95	-281	-30	-30	-30	-30
Cash operating balance, end of period	85	85	70	70	43	91	85	93	79	135	85	90	70	70	70	70
NIPA federal sector																
Receipts	2,633	3,006	3,195	3,415	2,665	2,659	2,673	2,736	2,947	3,205	3,136	3,075	3,196	3,234	3,273	3,318
Expenditures	3,744	3,753	3,798	3,939	3,724	3,775	3,761	3,772	3,729	3,758	3,752	3,739	3,798	3,813	3,842	3,874
Consumption expenditures	1,062	1,020	973	939	1,056	1,055	1,086	1,042	1,033	1,013	994	987	981	968	957	949
Defense	709	664	634	608	703	701	728	682	672	657	644	643	639	630	623	616
Nondefense	353	357	339	330	352	354	358	360	361	356	350	343	342	338	334	332
Other spending	2,682	2,732	2,825	3,000	2,668	2,720	2,674	2,730	2,696	2,745	2,759	2,752	2,817	2,845	2,884	2,925
Current account surplus	-1,111	-747	-603	-524	-1,059	-1,115	-1,087	-1,036	-781	-553	-616	-664	-602	-579	-568	-555
Gross investment	156	145	131	121	152	156	155	155	145	139	139	135	133	130	127	124
Gross saving less gross investment ³	-1,126	-746	-584	-489	-1,071	-1,130	-1,100	-1,048	-781	-546	-608	-650	-585	-557	-542	-525
Fiscal indicators⁴																
High-employment (HEB) surplus/deficit	-922.1	-512.9	-383.2	-360.5	-869.8	-925.3	-907.7	-837.0	-550.3	-304.1	-360.1	-412.9	-380.8	-368.2	-370.7	-370.2
Change in HEB, percent of potential GDP	-1.1	-2.6	-9	-2	-8	.3	-2	-5	-1.8	-1.5	.3	.3	-2	-1	.0	.0
Fiscal impetus (FI), percent of GDP	-7	-1.4	-7	-4	-7	-6	.3	-1.5	-2.0	-1.4	-1.2	-9	-9	-8	-7	-5
<i>Previous Tealbook</i>	-7	-1.4	-8	-4	-7	-6	.3	-1.5	-2.0	-1.2	-1.3	-9	-9	-9	-7	-5

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 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			
	2012		2013		2013		2013		2014		2014	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Real GDP¹												
Total foreign	3.2	1.9	1.7	2.2	2.0	2.2	2.8	3.1	3.2	3.0	3.2	3.3
<i>Previous Tealbook</i>	3.2	1.8	1.7	2.3	2.0	2.3	2.7	3.2	3.3	3.1	3.4	3.5
Advanced foreign economies	1.0	.4	.2	-.1	1.4	1.4	1.8	1.8	2.0	1.5	2.0	2.1
Canada	.8	1.6	.8	.9	2.5	1.7	2.5	2.2	2.3	2.5	2.6	2.6
Japan	4.8	-6	-3.6	1.2	4.1	3.8	3.0	3.1	3.8	-2.5	1.1	1.2
United Kingdom	.0	-2.0	3.0	-.9	1.1	2.4	1.9	2.0	2.0	2.1	2.3	2.5
Euro area	-.2	-.7	-.4	-2.4	-1.1	-.1	.2	.6	.8	1.0	1.3	1.5
Germany	2.5	.7	.9	-2.7	.3	1.3	1.3	1.4	1.6	1.7	1.9	2.0
Emerging market economies	5.4	3.4	3.2	4.6	2.5	3.1	3.8	4.4	4.5	4.5	4.5	4.6
Asia	6.0	4.2	4.7	6.0	3.3	4.3	4.7	5.3	5.4	5.5	5.5	5.5
Korea	3.3	1.2	.2	1.1	3.4	2.7	3.3	3.7	3.8	3.9	4.0	4.1
China	7.1	7.7	8.1	8.1	7.0	6.9	7.3	7.7	7.9	7.9	7.8	7.8
Latin America	5.0	2.7	1.5	3.3	1.7	1.9	2.8	3.5	3.6	3.6	3.6	3.6
Mexico	5.8	3.0	1.4	2.7	1.8	1.7	2.8	3.7	3.8	3.8	3.7	3.7
Brazil	.5	1.3	1.2	2.6	2.2	2.5	3.1	3.2	3.3	3.3	3.5	3.5
Consumer prices²												
Total foreign	2.5	2.0	2.2	2.4	2.3	1.9	2.3	2.3	2.4	3.0	2.5	2.5
<i>Previous Tealbook</i>	2.6	2.1	2.2	2.3	2.3	1.9	2.1	2.3	2.4	3.0	2.5	2.5
Advanced foreign economies	1.9	.9	.8	1.6	.9	.5	1.3	1.3	1.3	2.7	1.4	1.5
Canada	2.0	.2	.1	1.4	1.6	.1	1.7	1.7	1.7	1.7	1.8	1.8
Japan	1.2	-.7	-1.5	.0	-.4	.6	.4	.4	.5	8.7	.7	.9
United Kingdom	1.8	1.7	3.0	4.1	2.3	1.4	2.1	2.7	1.7	1.6	1.7	2.7
Euro area	2.5	2.4	2.0	2.3	.7	.6	1.4	1.3	1.3	1.3	1.4	1.4
Germany	2.2	1.6	2.0	2.1	1.4	.6	1.7	1.7	1.7	1.7	1.8	1.8
Emerging market economies	3.0	2.9	3.4	3.0	3.4	3.0	3.0	3.1	3.2	3.3	3.3	3.3
Asia	2.2	3.0	2.4	2.7	3.3	1.9	2.8	3.0	3.1	3.1	3.2	3.2
Korea	1.8	1.4	1.1	2.5	.6	.3	1.8	2.8	3.0	3.0	3.0	3.1
China	1.7	2.2	1.8	2.6	3.2	2.1	2.4	2.8	2.9	3.0	3.0	3.0
Latin America	5.1	2.7	5.7	3.7	3.8	5.5	3.5	3.4	3.6	3.7	3.7	3.7
Mexico	5.2	2.4	5.7	3.1	3.5	5.5	3.0	3.1	3.3	3.4	3.4	3.4
Brazil	4.1	4.8	6.6	7.0	7.0	5.8	5.9	5.5	5.4	5.3	5.3	5.3

¹ Foreign GDP aggregates calculated using shares of U.S. exports.

² 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
Real GDP¹									
Total foreign	4.3	-7	.8	4.6	3.0	2.2	2.5	3.2	3.4
<i>Previous Tealbook</i>	4.3	-7	.9	4.6	3.0	2.2	2.5	3.3	3.5
Advanced foreign economies	2.4	-1.5	-1.5	3.0	1.5	.4	1.6	1.9	2.2
Canada	2.3	.1	-1.4	3.6	2.4	1.0	2.2	2.5	2.6
Japan	1.6	-4.8	-.5	3.5	.0	.4	3.5	.9	1.0
United Kingdom	3.7	-4.3	-2.5	1.8	1.1	.0	1.8	2.2	2.6
Euro area	2.3	-2.1	-2.3	2.2	.7	-.9	-1	1.1	1.9
Germany	2.4	-1.9	-2.2	4.2	1.9	.3	1.1	1.8	2.4
Emerging market economies	6.7	.4	3.5	6.2	4.5	4.1	3.4	4.5	4.6
Asia	8.9	.8	8.0	7.8	4.9	5.2	4.4	5.5	5.6
Korea	5.8	-3.2	6.3	5.0	3.4	1.4	3.3	3.9	4.4
China	13.7	7.6	11.3	9.7	8.7	7.8	7.2	7.8	7.7
Latin America	4.4	-.3	-.8	4.5	3.9	3.1	2.5	3.6	3.7
Mexico	3.5	-1.1	-2.2	4.1	3.9	3.2	2.5	3.7	3.7
Brazil	6.6	.9	5.3	5.3	1.4	1.4	2.8	3.4	3.8
Consumer prices²									
Total foreign	3.7	3.3	1.2	3.2	3.4	2.3	2.2	2.6	2.7
<i>Previous Tealbook</i>	3.7	3.3	1.2	3.2	3.4	2.3	2.1	2.6	2.7
Advanced foreign economies	2.2	2.0	.2	1.7	2.2	1.3	1.0	1.7	1.8
Canada	2.5	1.8	.8	2.2	2.7	.9	1.3	1.7	1.8
Japan	.5	1.1	-2.0	-.2	-.3	-.2	.3	2.6	2.5
United Kingdom	2.1	3.9	2.2	3.4	4.6	2.6	2.1	1.9	2.0
Euro area	2.9	2.3	.4	2.0	2.9	2.3	1.0	1.4	1.6
Germany	3.1	1.7	.3	1.6	2.6	2.0	1.4	1.7	1.8
Emerging market economies	5.1	4.6	2.1	4.3	4.3	3.1	3.1	3.3	3.3
Asia	5.5	3.7	1.3	4.3	4.5	2.6	2.8	3.1	3.2
Korea	3.4	4.5	2.4	3.2	3.9	1.7	1.4	3.0	3.2
China	6.7	2.5	.6	4.7	4.6	2.1	2.6	3.0	3.0
Latin America	4.2	6.6	3.9	4.4	4.0	4.3	4.1	3.7	3.7
Mexico	3.8	6.2	4.0	4.3	3.5	4.1	3.8	3.4	3.4
Brazil	4.3	6.2	4.2	5.6	6.7	5.6	6.1	5.3	5.3

¹ Foreign GDP aggregates calculated using shares of U.S. exports.² Foreign CPI aggregates calculated using shares of U.S. non-oil imports.

U.S. Current Account

Quarterly Data

	2012				2013				Projected-----			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<i>Billions of dollars, s.a.a.r.</i>												
U.S. current account balance	-483.4	-442.0	-427.0	-409.3	-424.6	-429.7	-435.6	-471.7	-520.2	-499.7	-531.5	-547.9
<i>Previous Tealbook</i>	-512.5	-464.0	-466.5	-437.5	-445.1	-421.5	-453.5	-495.0	-527.4	-517.5	-547.2	-565.3
Current account as percent of GDP	-3.1	-2.8	-2.7	-2.6	-2.7	-2.7	-2.7	-2.9	-3.1	-3.0	-3.1	-3.2
<i>Previous Tealbook</i>	-3.3	-3.0	-3.0	-2.8	-2.8	-2.6	-2.8	-3.0	-3.2	-3.1	-3.2	-3.3
Net goods & services	-571.8	-541.2	-516.1	-509.5	-494.6	-502.6	-493.7	-521.9	-534.7	-513.2	-524.9	-532.5
Investment income, net	227.5	238.6	227.0	235.9	215.7	215.2	204.4	188.0	169.1	151.0	134.7	122.4
Direct, net	290.6	297.2	283.4	302.8	281.9	274.1	268.0	266.7	257.9	249.1	242.9	240.5
Portfolio, net	-63.0	-58.6	-56.4	-66.9	-66.2	-58.9	-63.6	-78.7	-88.8	-98.1	-108.2	-118.2
Other income and transfers, net	-139.1	-139.5	-137.9	-135.7	-145.7	-142.3	-146.3	-137.8	-154.6	-137.6	-141.2	-137.8

Annual Data

	-----Projected-----									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	
<i>Billions of dollars</i>										
U.S. current account balance	-713.4	-681.3	-381.6	-449.5	-457.7	-440.4	-440.4	-524.8	-573.4	
<i>Previous Tealbook</i>	-712.6	-681.1	-386.4	-446.6	-462.9	-470.1	-453.8	-539.3	-581.8	
Current account as percent of GDP	-5.1	-4.8	-2.7	-3.1	-3.0	-2.8	-2.7	-3.1	-3.2	
<i>Previous Tealbook</i>	-5.1	-4.8	-2.8	-3.1	-3.1	-3.0	-2.8	-3.2	-3.3	
Net goods & services	-699.1	-702.3	-383.7	-499.4	-556.8	-534.7	-503.2	-526.3	-533.6	
Investment income, net	111.1	157.8	132.3	185.7	240.7	232.3	205.8	144.3	102.9	
Direct, net	244.6	284.3	257.7	288.0	310.6	293.5	272.7	247.6	250.9	
Portfolio, net	-133.5	-126.5	-125.4	-102.3	-69.8	-61.2	-66.9	-103.3	-148.0	
Other income and transfers, net	-125.4	-136.9	-130.2	-135.8	-141.6	-138.0	-143.0	-142.8	-142.8	

Class I FOMC – Restricted Controlled (FR)

Report to the FOMC on Economic Conditions and Monetary Policy



Book B Monetary Policy: Strategies and Alternatives

July 25, 2013

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

Near-Term Prescriptions of Selected Policy Rules

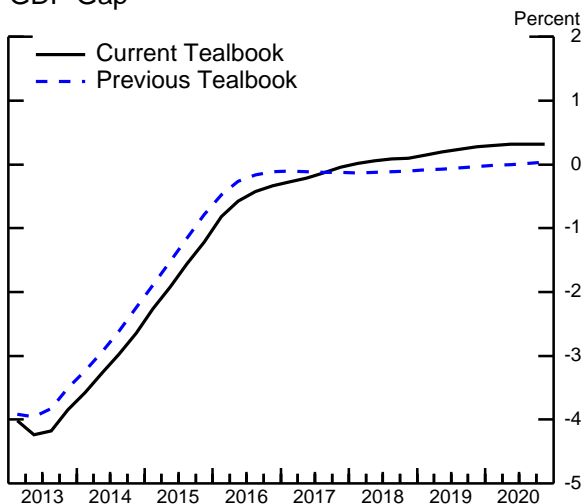
	Constrained Policy		Unconstrained Policy	
	2013Q3	2013Q4	2013Q3	2013Q4
Taylor (1993) rule	0.68	1.00	0.68	1.00
Previous Tealbook	0.77	1.12	0.77	1.12
Taylor (1999) rule	0.13	0.13	-1.36	-0.89
Previous Tealbook	0.13	0.13	-1.10	-0.60
Inertial Taylor (1999) rule	0.13	0.13	-0.10	-0.22
Previous Tealbook	0.13	0.13	-0.06	-0.14
Outcome-based rule	0.13	0.13	-0.12	-0.19
Previous Tealbook	0.13	0.13	-0.05	-0.05
First-difference rule	0.36	0.73	0.36	0.73
Previous Tealbook	0.39	0.79	0.39	0.79
Nominal income targeting rule	0.13	0.13	-0.78	-1.42
Previous Tealbook	0.13	0.13	-0.75	-1.32

Memo: Equilibrium and Actual Real Federal Funds Rate

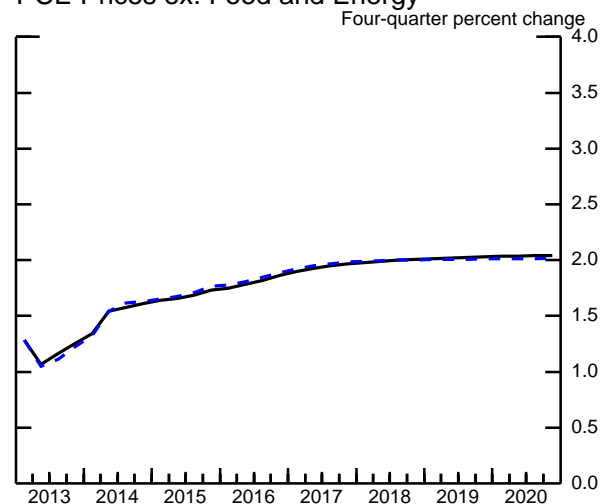
	Current Tealbook	Current Quarter Estimate as of Previous Tealbook	Previous Tealbook
Tealbook-consistent FRB/US r^* estimate	-1.57	-1.29	-1.47
Actual real federal funds rate	-0.93		-1.15

Key Elements of the Staff Projection

GDP Gap



PCE Prices ex. Food and Energy

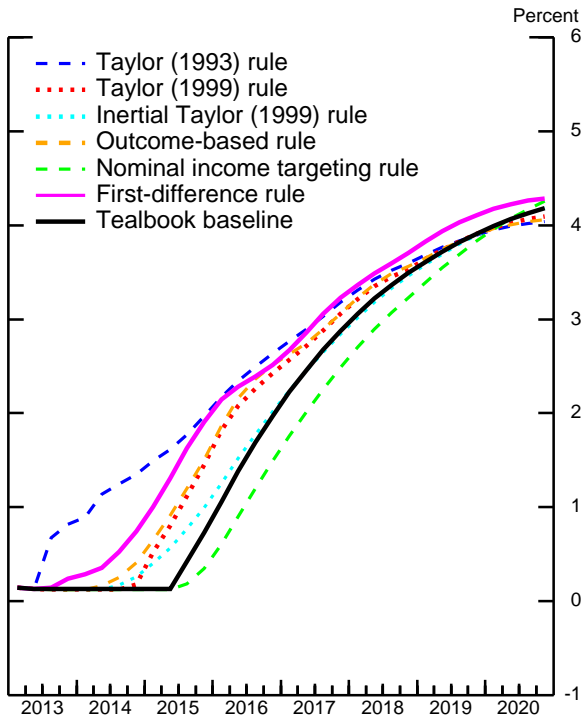


Estimates of r^* may change at the beginning of a quarter even when the staff outlook is unchanged because the twelve-quarter horizon covered by the calculation has rolled forward one quarter. Therefore, whenever the Tealbook is published early in the quarter, the memo includes a third column labeled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

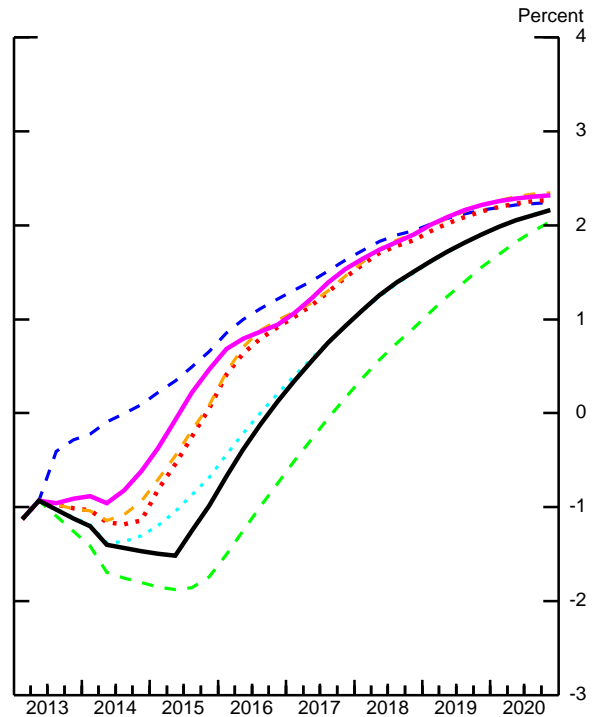
The way policy simulations are generated in FRB/US has changed since June. The "Current Quarter as of Previous Tealbook" and the "Previous Tealbook" estimates of r^* in the exhibit have been computed under the new model assumptions, using the June baseline forecast. See footnotes 3 and 8 in the Monetary Policy Strategies text for further details.

Policy Rule Simulations without Thresholds

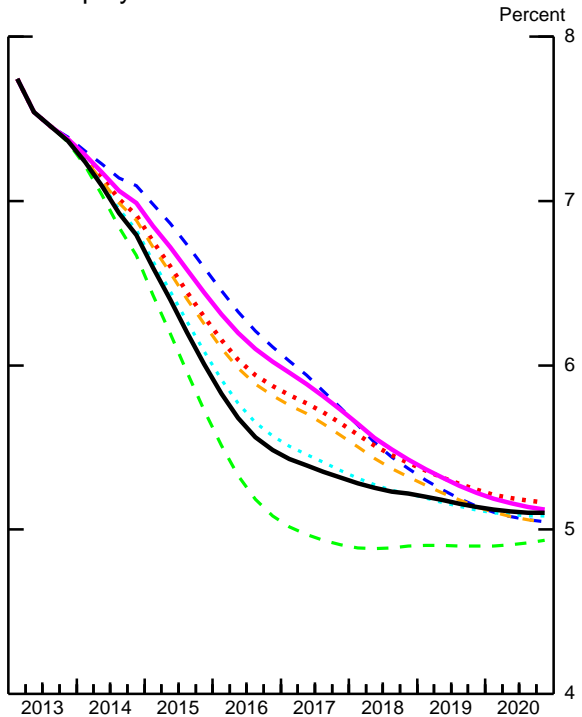
Effective Nominal Federal Funds Rate



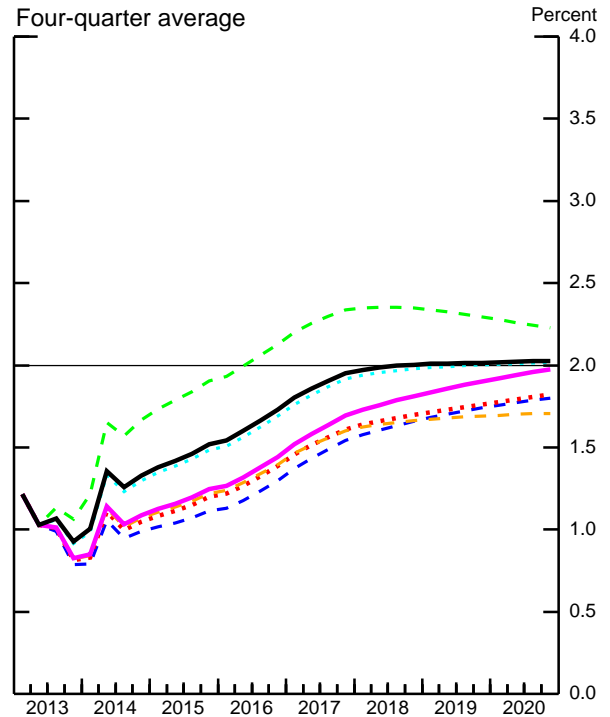
Real Federal Funds Rate



Unemployment Rate



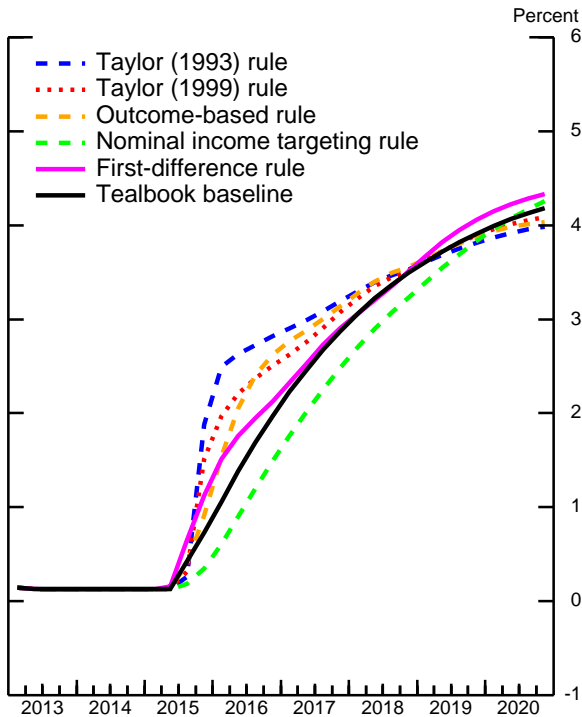
PCE Inflation
Four-quarter average



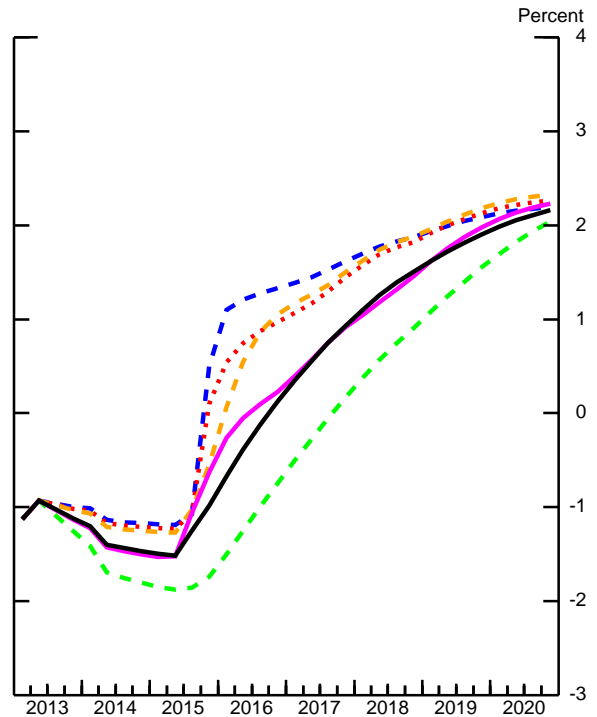
Note: The policy rule simulations in this exhibit are based on rules that respond to core inflation. This choice of rule specification was made in light of the tendency for current and near-term core inflation rates to outperform headline inflation rates as predictors of the medium-term behavior of headline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

Policy Rule Simulations with Thresholds

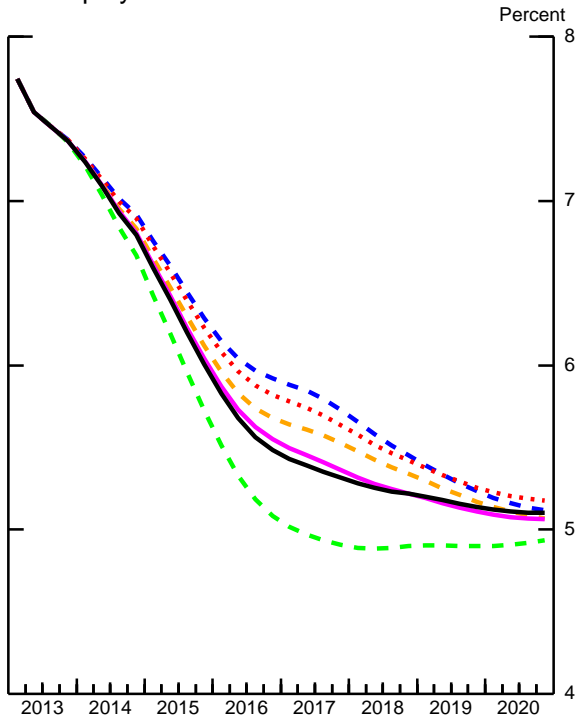
Effective Nominal Federal Funds Rate



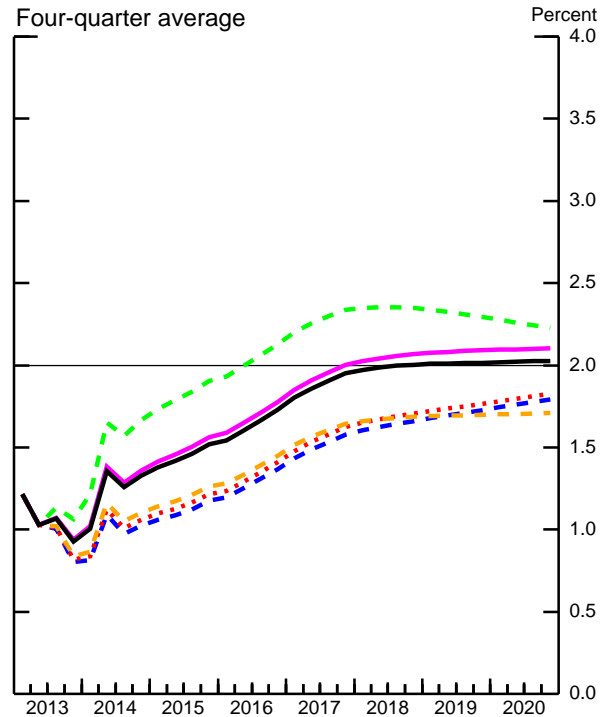
Real Federal Funds Rate



Unemployment Rate



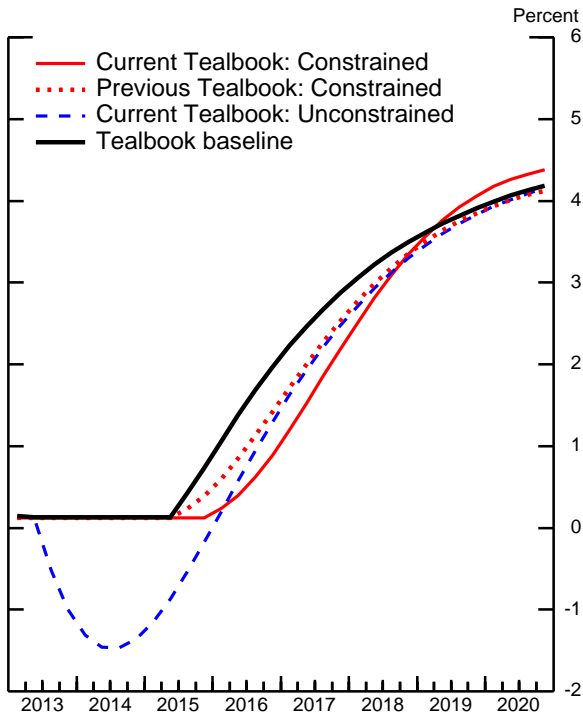
PCE Inflation
Four-quarter average



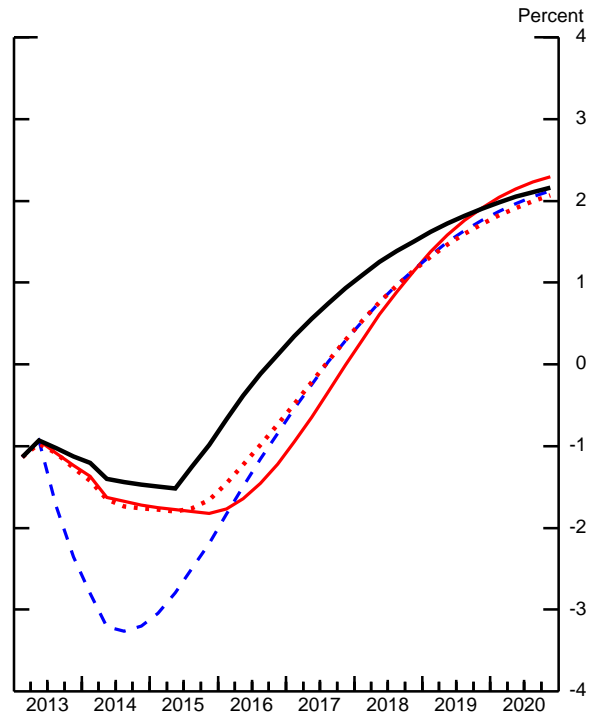
Note: The policy rule simulations in this exhibit are based on rules that respond to core inflation. This choice of rule specification was made in light of the tendency for current and near-term core inflation rates to outperform headline inflation rates as predictors of the medium-term behavior of headline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

Constrained vs. Unconstrained Optimal Control Policy

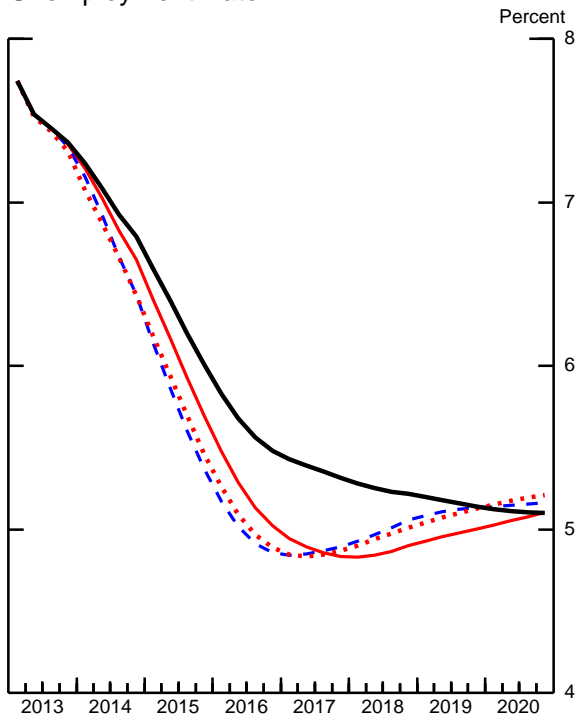
Effective Nominal Federal Funds Rate



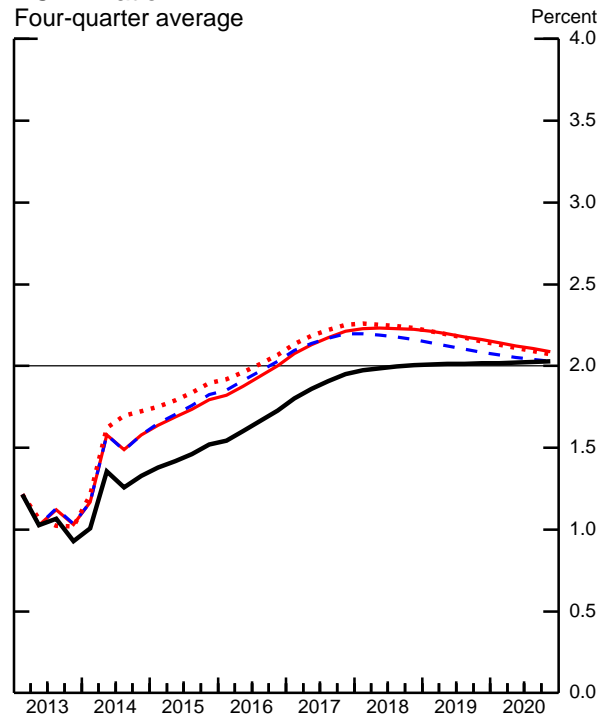
Real Federal Funds Rate



Unemployment Rate



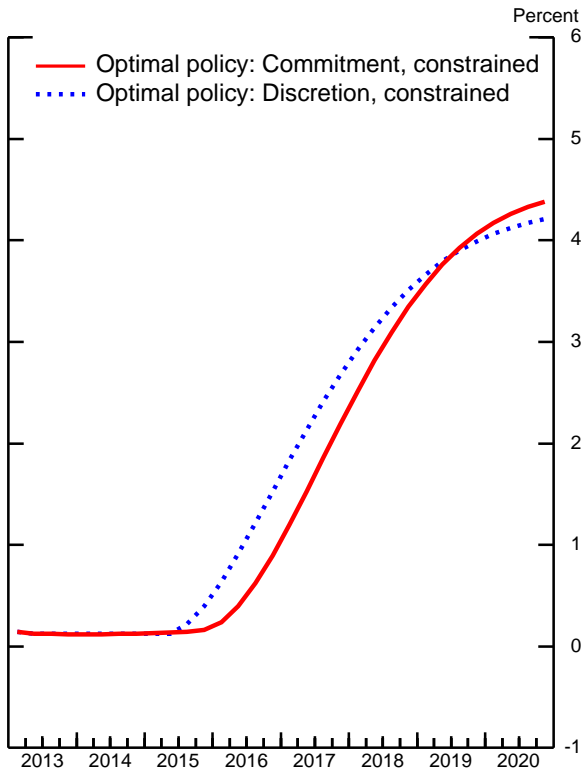
PCE Inflation
Four-quarter average



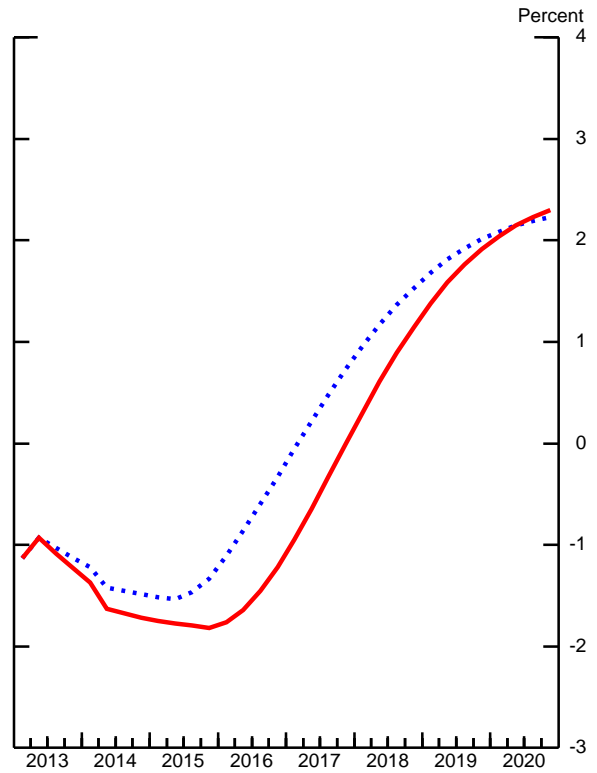
Note: The way policy simulations are generated in FRB/US has changed since June. The paths labeled "Previous Tealbook" in the exhibit have been computed under the new model assumptions, using the June baseline forecast. See footnotes 3 and 8 in the Monetary Policy Strategies text for further details.

Optimal Control Policy: Commitment vs. Discretion

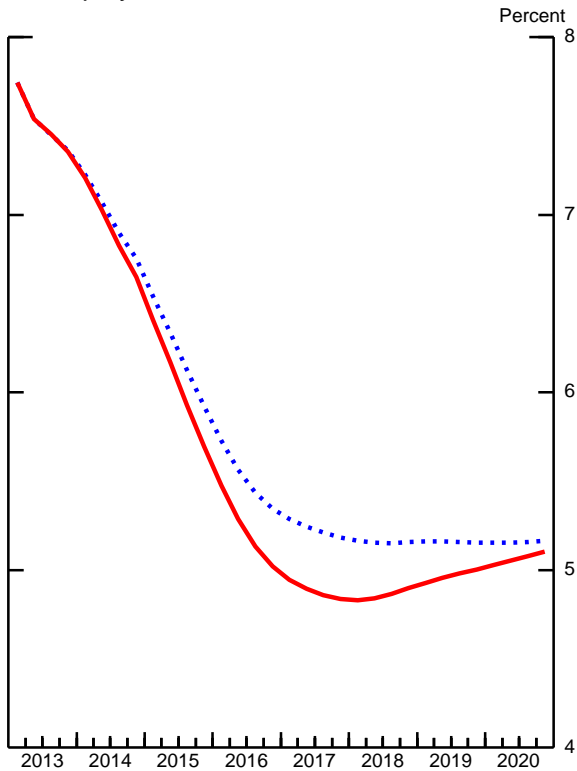
Effective Nominal Federal Funds Rate



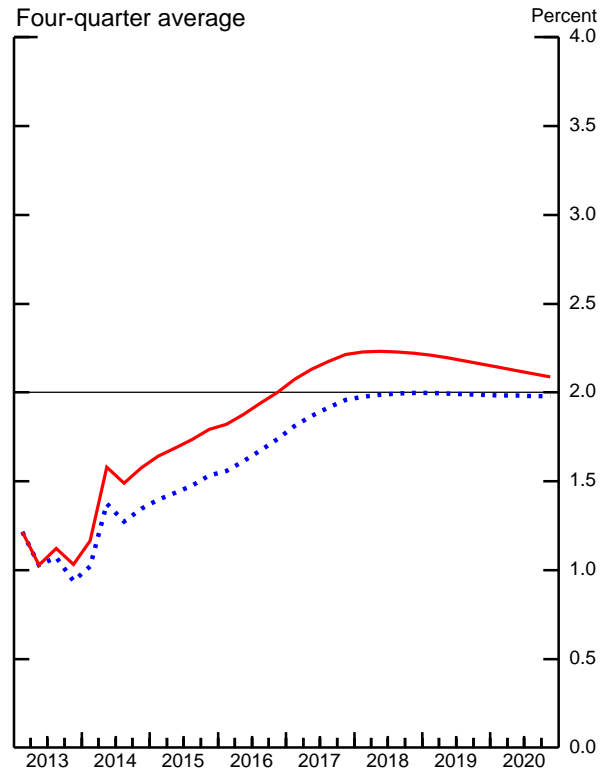
Real Federal Funds Rate



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	2013		2014	2015	2016	2017
	H1	H2				
<i>Real GDP</i>						
Extended Tealbook baseline ¹	1.4	2.8	3.3	3.6	3.0	2.4
Taylor (1993)	1.4	2.5	2.6	3.1	3.0	2.8
Taylor (1999)	1.4	2.7	3.0	3.2	2.8	2.5
Inertial Taylor (1999)	1.4	2.8	3.3	3.5	3.0	2.5
Outcome based	1.4	2.7	3.1	3.3	2.9	2.6
First difference	1.4	2.6	2.9	3.1	2.9	2.6
Nominal income targeting	1.4	2.9	3.6	3.9	3.2	2.4
Constrained optimal control	1.4	2.9	3.7	3.9	3.3	2.4
<i>Unemployment rate²</i>						
Extended Tealbook baseline ¹	7.5	7.4	6.8	6.0	5.5	5.3
Taylor (1993)	7.5	7.4	7.1	6.6	6.1	5.7
Taylor (1999)	7.5	7.4	6.9	6.3	5.9	5.6
Inertial Taylor (1999)	7.5	7.4	6.8	6.1	5.6	5.4
Outcome based	7.5	7.4	6.9	6.3	5.8	5.6
First difference	7.5	7.4	7.0	6.4	6.0	5.7
Nominal income targeting	7.5	7.4	6.7	5.7	5.1	4.9
Constrained optimal control	7.5	7.4	6.7	5.7	5.0	4.8
<i>Total PCE prices</i>						
Extended Tealbook baseline ¹	0.5	1.4	1.3	1.5	1.7	2.0
Taylor (1993)	0.5	1.1	1.0	1.1	1.3	1.5
Taylor (1999)	0.5	1.2	1.0	1.2	1.4	1.6
Inertial Taylor (1999)	0.5	1.4	1.3	1.5	1.7	1.9
Outcome based	0.5	1.2	1.1	1.2	1.4	1.6
First difference	0.5	1.2	1.1	1.2	1.4	1.7
Nominal income targeting	0.5	1.7	1.7	1.9	2.1	2.3
Constrained optimal control	0.5	1.6	1.6	1.8	2.0	2.2
<i>Core PCE prices</i>						
Extended Tealbook baseline ¹	1.1	1.5	1.6	1.7	1.9	2.0
Taylor (1993)	1.1	1.2	1.3	1.3	1.4	1.6
Taylor (1999)	1.1	1.2	1.3	1.4	1.5	1.6
Inertial Taylor (1999)	1.1	1.4	1.6	1.7	1.8	1.9
Outcome based	1.1	1.2	1.4	1.4	1.5	1.6
First difference	1.1	1.2	1.4	1.5	1.6	1.7
Nominal income targeting	1.1	1.7	1.9	2.1	2.3	2.3
Constrained optimal control	1.1	1.7	1.9	2.0	2.1	2.2
<i>Effective federal funds rate²</i>						
Extended Tealbook baseline ¹	0.1	0.1	0.1	0.7	2.0	2.9
Taylor (1993)	0.1	0.8	1.4	2.0	2.6	3.2
Taylor (1999)	0.1	0.1	0.2	1.5	2.4	3.1
Inertial Taylor (1999)	0.1	0.1	0.3	1.0	2.0	2.8
Outcome based	0.1	0.1	0.4	1.5	2.5	3.1
First difference	0.1	0.2	0.7	1.9	2.5	3.2
Nominal income targeting	0.1	0.1	0.1	0.3	1.5	2.5
Constrained optimal control	0.1	0.1	0.1	0.2	0.9	2.1

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 Thresholds¹
(Percent change, annual rate, from end of preceding period except as noted)

Measure and scenario	2013		2014	2015	2016	2017
	H1	H2				
<i>Real GDP</i>						
Extended Tealbook baseline ¹	1.4	2.8	3.3	3.6	3.0	2.4
Taylor (1993)	1.4	2.7	3.0	3.3	2.7	2.5
Taylor (1999)	1.4	2.7	3.1	3.4	2.7	2.5
Outcome based	1.4	2.8	3.2	3.4	2.8	2.4
First difference	1.4	2.8	3.3	3.5	2.9	2.5
Nominal income targeting	1.4	2.9	3.6	3.9	3.2	2.4
Constrained optimal control	1.4	2.9	3.7	3.9	3.3	2.4
<i>Unemployment rate²</i>						
Extended Tealbook baseline ¹	7.5	7.4	6.8	6.0	5.5	5.3
Taylor (1993)	7.5	7.4	6.9	6.3	5.9	5.7
Taylor (1999)	7.5	7.4	6.9	6.2	5.8	5.6
Outcome based	7.5	7.4	6.8	6.1	5.7	5.5
First difference	7.5	7.4	6.8	6.0	5.6	5.4
Nominal income targeting	7.5	7.4	6.7	5.7	5.1	4.9
Constrained optimal control	7.5	7.4	6.7	5.7	5.0	4.8
<i>Total PCE prices</i>						
Extended Tealbook baseline ¹	0.5	1.4	1.3	1.5	1.7	2.0
Taylor (1993)	0.5	1.1	1.0	1.2	1.4	1.6
Taylor (1999)	0.5	1.2	1.1	1.2	1.4	1.6
Outcome based	0.5	1.2	1.1	1.3	1.5	1.6
First difference	0.5	1.4	1.4	1.6	1.8	2.0
Nominal income targeting	0.5	1.7	1.7	1.9	2.1	2.3
Constrained optimal control	0.5	1.6	1.6	1.8	2.0	2.2
<i>Core PCE prices</i>						
Extended Tealbook baseline ¹	1.1	1.5	1.6	1.7	1.9	2.0
Taylor (1993)	1.1	1.2	1.3	1.4	1.5	1.6
Taylor (1999)	1.1	1.2	1.3	1.4	1.5	1.6
Outcome based	1.1	1.3	1.4	1.5	1.6	1.7
First difference	1.1	1.5	1.6	1.8	1.9	2.0
Nominal income targeting	1.1	1.7	1.9	2.1	2.3	2.3
Constrained optimal control	1.1	1.7	1.9	2.0	2.1	2.2
<i>Effective federal funds rate²</i>						
Extended Tealbook baseline ¹	0.1	0.1	0.1	0.7	2.0	2.9
Taylor (1993)	0.1	0.1	0.1	1.9	2.8	3.2
Taylor (1999)	0.1	0.1	0.1	1.5	2.5	3.1
Outcome based	0.1	0.1	0.1	0.9	2.6	3.1
First difference	0.1	0.1	0.1	1.1	2.1	2.9
Nominal income targeting	0.1	0.1	0.1	0.3	1.5	2.5
Constrained optimal control	0.1	0.1	0.1	0.2	0.9	2.1

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.

M2 Monetary Aggregate Projections (Percent change, annual rate; seasonally adjusted) ¹		
<i>Monthly</i>		
2013:	July	8.2
	Aug.	4.3
	Sept.	4.3
	Oct.	2.0
	Nov.	2.0
	Dec.	2.0
2014:	Jan.	2.7
	Feb.	2.6
	Mar.	2.7
	Apr.	2.5
	May	2.5
	June	2.5
<i>Quarterly</i>		
2013:	Q3	5.7
	Q4	2.8
2014:	Q1	2.4
	Q2	2.6
	Q3	2.5
	Q4	2.6
2015:	Q1	3.0
	Q2	-1.1
	Q3	-2.3
	Q4	-2.3
2016:	Q1	-2.3
	Q2	-1.4
	Q3	-1.4
	Q4	-0.7
<i>Annual</i>		
	2013	4.5
	2014	2.6
	2015	-0.7
	2016	-1.4

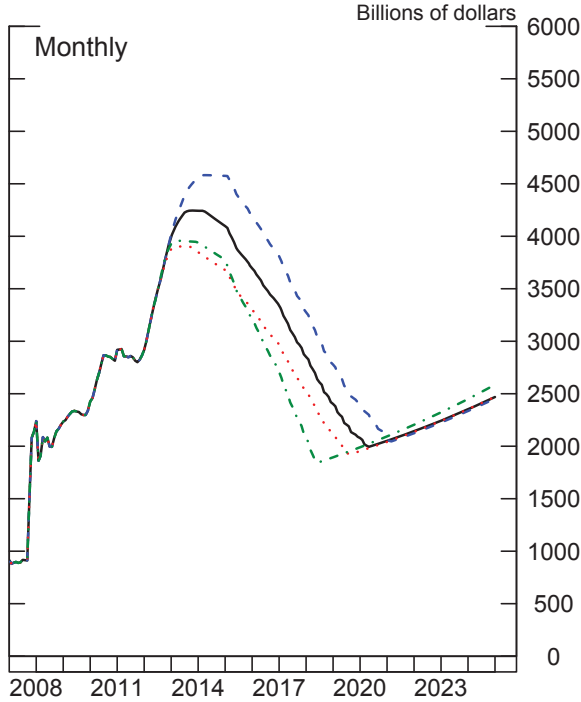
Note: This forecast is consistent with nominal GDP and interest rates in the Tealbook forecast. Actual data through July 15, 2013; projections thereafter.

1. Growth rates are computed from period averages with the exception of annual growth rates, which are the change from fourth quarter of previous year to fourth quarter of year indicated.

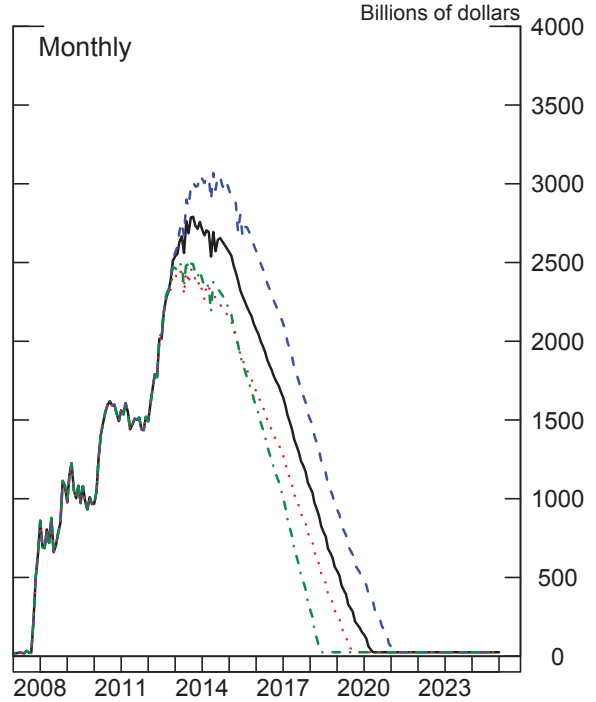
Total Assets and Selected Balance Sheet Items

— Alternative B ··· Alternative C
 - - - Alternative A ··· June Tealbook Alt B

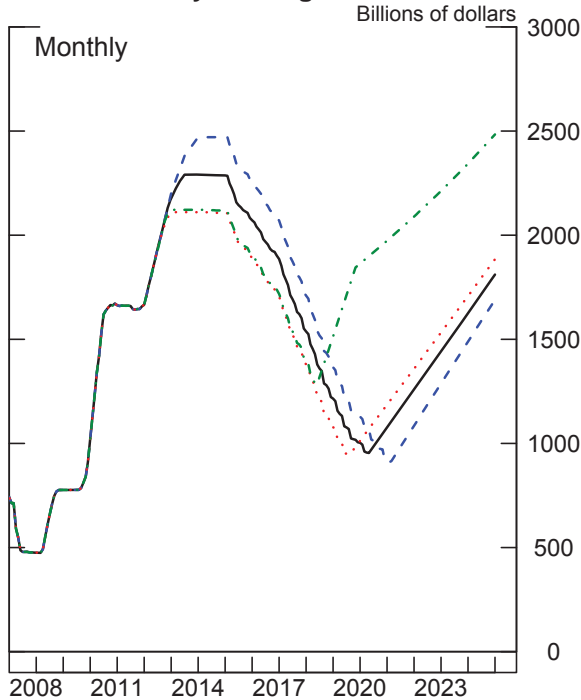
Total Assets



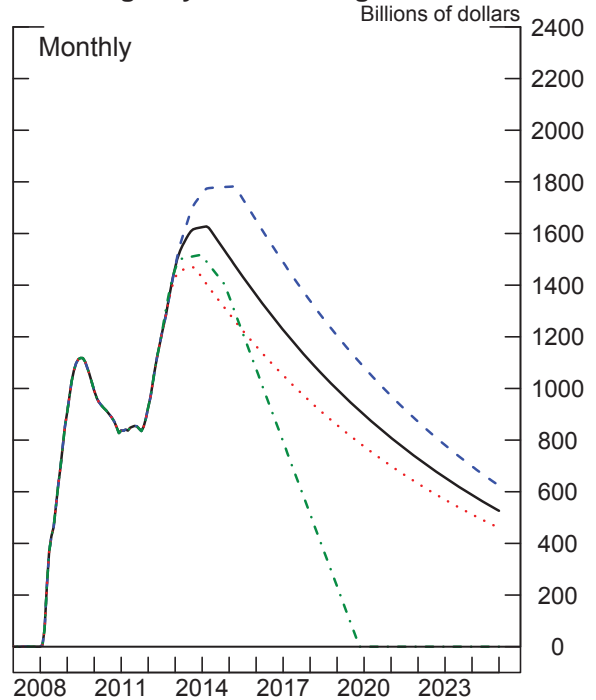
Reserve Balances



SOMA Treasury Holdings



SOMA Agency MBS Holdings

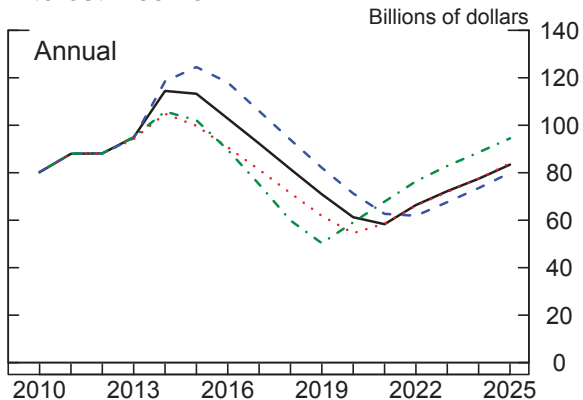


Projections

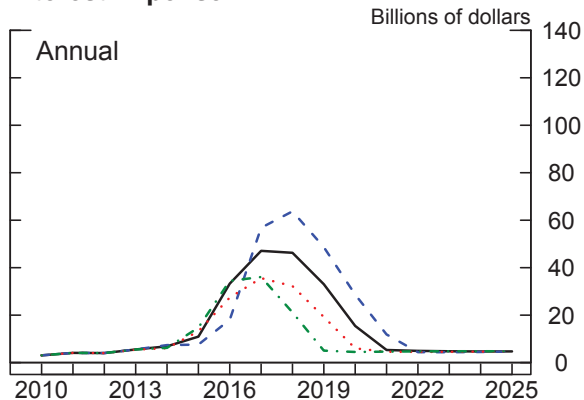
Income Projections

— Alternative B ··· Alternative C
 - - - Alternative A ··· June Tealbook Alt B

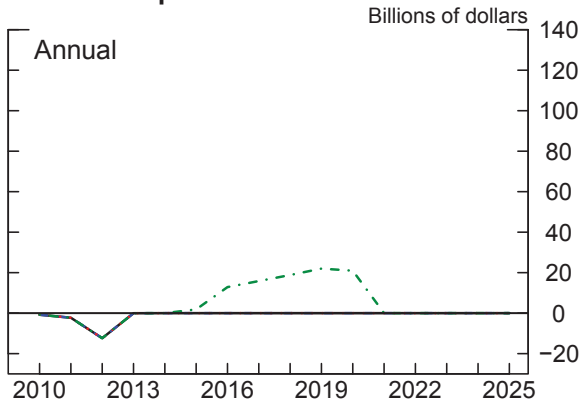
Interest Income



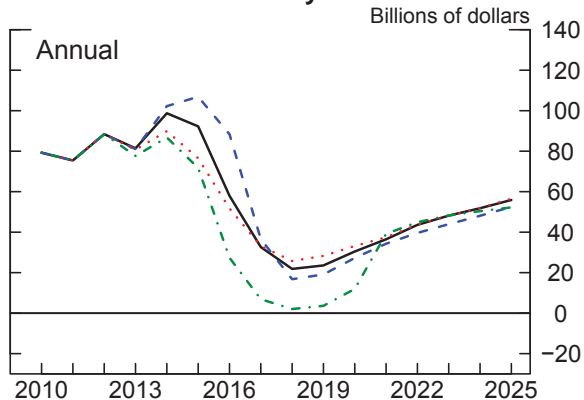
Interest Expense



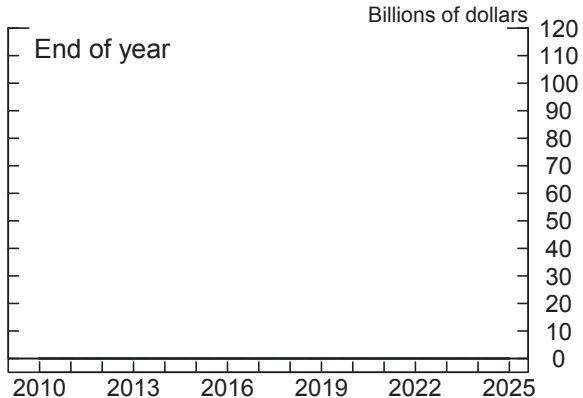
Realized Capital Losses



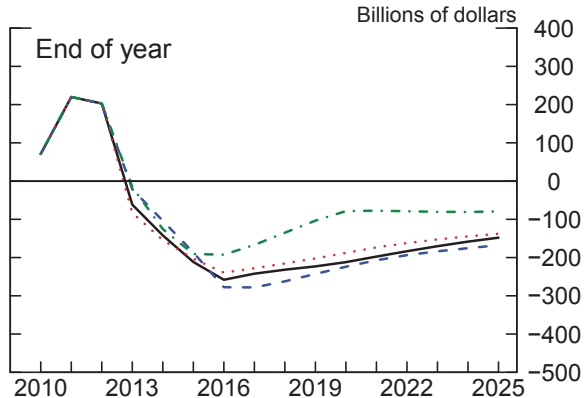
Remittances to Treasury



Deferred Asset



Memo: Unrealized Gains/Losses



Projections

Alternative Projections for the Monetary Base

Percent change, annual rate; not seasonally adjusted

Date	Alternative B	Alternative A	Alternative C	June Alternative B
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Monthly

2012: Dec	13.7	13.7	13.7	13.7
2013: Jan	21.5	21.5	21.5	21.5
Feb	37.1	37.1	37.1	37.1
Mar	42.6	42.6	42.6	42.6
Apr	35.8	35.8	35.8	35.8
May	35.6	35.6	35.6	9.3
Jun	36.3	36.3	36.3	6.2
Jul	50.0	50.3	49.8	39.2
Aug	50.3	50.6	48.3	46.0

Quarterly

2012: Q4	-0.5	-0.5	-0.5	-0.5
2013: Q1	25.1	25.1	25.1	25.1
Q2	38.6	38.6	38.6	28.7
Q3	44.1	44.3	43.0	29.3
Q4	29.6	30.1	22.4	25.1
2014: Q1	18.9	24.4	7.8	8.6
Q2	9.2	16.0	-1.7	-1.1
Q3	11.6	19.4	6.0	5.8

*Annual*¹

2012	0.3	0.3	0.3	0.3
2013	38.9	39.2	36.3	29.9
2014	9.9	17.5	1.8	2.4
2015	-1.3	1.0	-2.8	-2.7
2016	-9.7	-6.1	-10.3	-15.5
2017	-10.2	-9.6	-10.7	-17.9
2018	-15.1	-14.3	-15.6	-26.8
2019	-17.3	-16.5	-18.0	-16.8
2020	-15.9	-15.5	-11.3	5.1
2021	-3.8	-15.0	4.2	5.2
2022	4.1	-0.7	4.4	5.1
2023	4.3	4.4	4.5	5.1
2024	4.5	4.6	4.6	5.0
2025	4.6	4.6	4.6	5.0

1. Percent change from fourth quarter of previous year to fourth quarter of period indicated.

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

Billions of dollars

	<u>Jun 30, 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	3,487	3,995	4,097	3,341	2,402	2,051	2,243	2,469
Selected assets								
Liquidity programs for financial firms	2	1	0	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0	0	0
Central bank liquidity swaps	2	1	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, Maiden Lane II LLC, and Maiden Lane III LLC	1	0	0	0	0	0	0	0
Securities held outright	3,214	3,707	3,829	3,117	2,214	1,888	2,098	2,339
U.S. Treasury securities	1,937	2,180	2,287	1,885	1,215	1,077	1,441	1,811
Agency debt securities	69	57	33	4	2	2	2	2
Agency mortgage-backed securities	1,208	1,469	1,509	1,227	997	809	655	526
Net portfolio holdings of TALF LLC	0	0	0	0	0	0	0	0
Unamortized premiums	204	225	208	162	125	98	80	64
Unamortized discounts	-2	-7	-9	-7	-6	-5	-4	-4
Total other assets	67	69	69	69	69	69	69	69
Total liabilities	3,432	3,939	4,035	3,263	2,304	1,926	2,085	2,269
Selected liabilities								
Federal Reserve notes in circulation	1,151	1,189	1,340	1,493	1,637	1,778	1,937	2,121
Reverse repurchase agreements	95	100	100	100	100	100	100	100
Deposits with Federal Reserve Banks	2,178	2,639	2,582	1,659	557	40	40	40
Reserve balances held by depository institutions	2,014	2,539	2,567	1,644	542	25	25	25
U.S. Treasury, General Account	135	90	5	5	5	5	5	5
Other Deposits	30	10	10	10	10	10	10	10
Interest on Federal Reserve Notes due to U.S. Treasury	1	0	0	0	0	0	0	0
Total capital	55	55	62	78	99	125	158	200

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>Jun 30, 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	3,487	4,018	4,575	3,810	2,778	2,068	2,226	2,453
Selected assets								
Liquidity programs for financial firms	2	1	0	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0	0	0
Central bank liquidity swaps	2	1	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, Maiden Lane II LLC, and Maiden Lane III LLC	1	0	0	0	0	0	0	0
Securities held outright	3,214	3,728	4,284	3,564	2,572	1,891	2,070	2,315
U.S. Treasury securities	1,937	2,200	2,470	2,070	1,365	917	1,287	1,689
Agency debt securities	69	57	33	4	2	2	2	2
Agency mortgage-backed securities	1,208	1,471	1,781	1,489	1,204	972	781	624
Net portfolio holdings of TALF LLC	0	0	0	0	0	0	0	0
Unamortized premiums	204	225	232	185	143	113	91	73
Unamortized discounts	-2	-6	-10	-8	-7	-6	-5	-4
Total other assets	67	69	69	69	69	69	69	69
Total liabilities	3,432	3,962	4,513	3,732	2,679	1,943	2,067	2,253
Selected liabilities								
Federal Reserve notes in circulation	1,151	1,189	1,340	1,492	1,621	1,756	1,919	2,104
Reverse repurchase agreements	95	100	100	100	100	100	100	100
Deposits with Federal Reserve Banks	2,178	2,663	3,059	2,128	947	77	40	40
Reserve balances held by depository institutions	2,014	2,563	2,959	2,113	932	62	25	25
U.S. Treasury, General Account	135	90	90	5	5	5	5	5
Other Deposits	30	10	10	10	10	10	10	10
Interest on Federal Reserve Notes due to U.S. Treasury	1	0	0	0	0	0	0	0
Total capital	55	55	62	78	99	125	158	200

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 C

Billions of dollars

	<u>Jun 30, 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	3,487	3,877	3,678	2,969	2,115	2,041	2,241	2,471
Selected assets								
Liquidity programs for financial firms	2	1	0	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0	0	0
Central bank liquidity swaps	2	1	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, Maiden Lane II LLC, and Maiden Lane III LLC	1	0	0	0	0	0	0	0
Securities held outright	3,214	3,596	3,430	2,761	1,939	1,888	2,104	2,347
U.S. Treasury securities	1,937	2,110	2,107	1,705	1,078	1,186	1,532	1,884
Agency debt securities	69	57	33	4	2	2	2	2
Agency mortgage-backed securities	1,208	1,429	1,290	1,051	858	700	569	460
Net portfolio holdings of TALF LLC	0	0	0	0	0	0	0	0
Unamortized premiums	204	216	185	143	110	87	70	57
Unamortized discounts	-2	-7	-6	-4	-4	-3	-2	-2
Total other assets	67	69	69	69	69	69	69	69
Total liabilities	3,432	3,822	3,616	2,891	2,016	1,916	2,083	2,270
Selected liabilities								
Federal Reserve notes in circulation	1,151	1,189	1,340	1,491	1,626	1,769	1,936	2,124
Reverse repurchase agreements	95	100	100	100	100	100	100	100
Deposits with Federal Reserve Banks	2,178	2,522	2,167	1,292	282	40	40	40
Reserve balances held by depository institutions	2,014	2,422	2,152	1,277	267	25	25	25
U.S. Treasury, General Account	135	90	5	5	5	5	5	5
Other Deposits	30	10	10	10	10	10	10	10
Interest on Federal Reserve Notes due to U.S. Treasury	1	0	0	0	0	0	0	0
Total capital	55	55	62	78	99	125	158	200

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

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

Alternative Projections for the 10-Year Treasury Term Premium Effect

Date	Alternative B	Alternative A	Alternative C	June Alternative B
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Basis Points

Quarterly Averages

2013: Q2				-102
Q3	-125	-139	-109	-100
Q4	-121	-135	-104	-94
2014: Q1	-116	-131	-99	-89
Q2	-111	-126	-94	-83
Q3	-106	-121	-89	-78
Q4	-100	-115	-84	-72
2015: Q1	-95	-110	-80	-67
Q2	-90	-104	-75	-62
Q3	-85	-99	-71	-57
Q4	-80	-93	-67	-52
2016: Q4	-63	-74	-52	-36
2017: Q4	-49	-58	-40	-24
2018: Q4	-39	-46	-32	-17
2019: Q4	-30	-36	-25	-14
2020: Q4	-24	-28	-20	-13
2021: Q4	-19	-22	-17	-12
2022: Q4	-16	-17	-14	-10
2023: Q4	-13	-14	-11	-8
2024: Q4	-9	-10	-8	-6
2025: Q4	-7	-7	-6	-4