

Prefatory Note

The attached document represents the most complete and accurate version available based on original files from the FOMC Secretariat at the Board of Governors of the Federal Reserve System.

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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

April 23, 2014

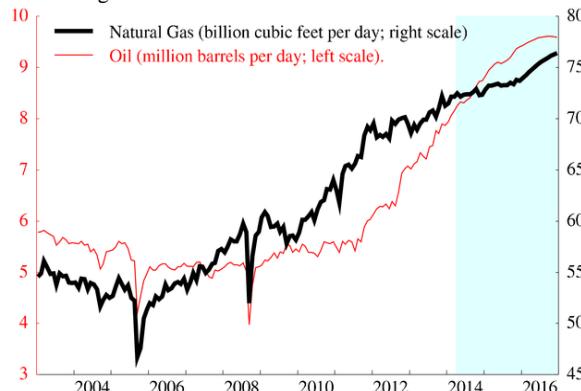
Prepared for the Federal Open Market Committee
by the staff of the Board of Governors of the Federal Reserve System

Finally, the downstream effects of the energy boom measure the contributions from the output of industries that most heavily rely on oil and gas as direct inputs (for example, some chemicals and refined petroleum products). Although these industries account for only 3 percent of total IP growth since the trough, the energy boom has been transformative for some downstream industries—particularly petrochemicals and fertilizers, for which natural gas is an important input.¹ Prior to the energy boom, many facilities in these industries had been slated for closure. However, the surge in natural gas production led to remarkable declines in prices, providing a notable cost advantage for U.S. producers relative to their international competitors. As the lower prices persisted, not only were scheduled capacity reductions canceled, but expansions were planned. In contrast, downstream effects related to oil have likely been minimal, as prices, which are set globally, have not been materially affected by the increased supplies of oil.

Looking ahead, the output of industries related to the energy boom should continue to support the industrial sector. The Department of Energy (DOE) projects further gains in oil and gas extraction in coming years, and we estimate that the resulting direct effects will boost the level of IP about 2½ percent by the end of 2016 (figure 2). DOE projections have regularly been revised upward in recent years, so future direct effects could be even larger. The contribution of future build-out effects is harder to quantify, but the new extraction techniques require more frequent drilling, which in turn requires more new machinery, pipelines, and transportation infrastructure; furthermore, continued exploration will likely lead to the development of new oil and gas fields.

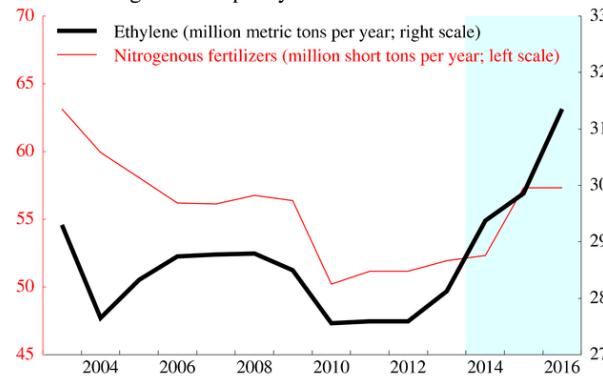
Although downstream industries have contributed only modestly to IP growth to date, significant ongoing investments for new plants and the expansion of existing plants will likely increase the downstream effects in coming years. For example, as seen in figure 3, industry capacity for nitrogenous fertilizers, which use natural gas as a feedstock, and for ethylene, which is a fundamental petrochemical, is expected to increase about 15 percent by 2016 as existing facilities expand and new ones come online.

Figure 2. Crude Oil and Natural Gas Extraction



Note: Shaded region indicates forecast data.
Source: U.S. Department of Energy.

Figure 3. Capacity for Selected Chemicals



Note: Shaded region indicates forecast data.
Source: For ethylene, *Oil & Gas Journal*, ICIS Chemical Business; for fertilizer, International Fertilizer Development Center.

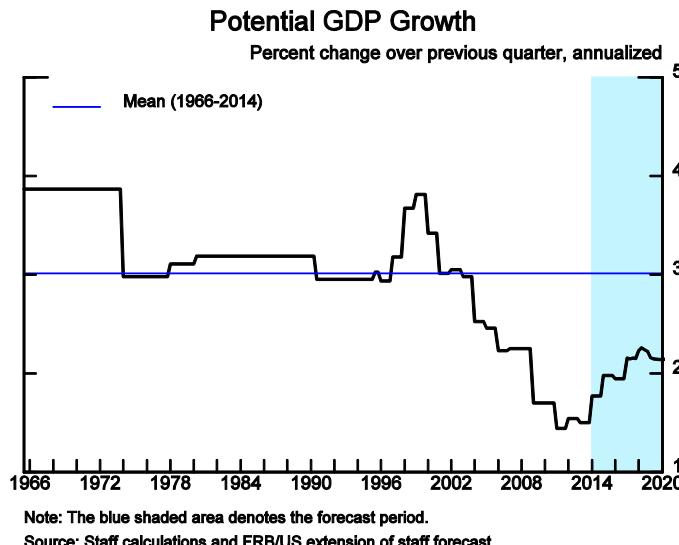
¹ See Will Melick (2013), “The Energy Boom and Manufacturing in the United States: A First Look,” International Finance Discussion Papers Note (Washington: Board of Governors of the Federal Reserve System, December), www.federalreserve.gov/econresdata/notes/ifdp-notes/2013/the-energy-boom-and-manufacturing-in-the-united-states-a-first-look-20131203.html.

Alternative View: A Lower Long-Run Natural Rate of Interest

This box proposes that the natural rate of interest—the risk-free real rate consistent with inflation at target and a closed output gap—will remain at a low level for many years to come.¹ It provides an alternative view to the staff's assumption that the nominal federal funds rate will return to 4 percent as the equilibrium real interest rate returns to 2 percent in the longer run.

The natural rate of interest is the real rate at which the demand and supply of loanable funds are equal in an economy in which prices increase at the desired rate. The demand for loanable funds rises with the rate of return on investment. In the steady state of a standard growth model, optimal investment decisions imply that the real interest rate falls as growth rates of productivity and the population decline. As shown in the figure below, the staff estimates that recent slow growth in these factors has pushed potential output growth well below its historical mean and projects that potential output growth will remain low in the medium and longer term. This projection is supported by research showing that recent structural productivity growth is considerably below rates in the late 1990s and early 2000s and is likely to remain at this lower pace.² Moreover, other research suggests that the contribution to productivity growth from increases in human capital is likely to slow substantially and that growth in the labor force will be well below historical norms.³ With weaker potential output growth, we should expect a natural real rate well below the average of about 2 percent over the 15 years prior to the Great Recession.

Turning to the supply of loanable funds, over the past decades there has been a trend inflow of capital to the United States from abroad as a result of the global savings glut. Going forward, the strong global appetite for safe U.S. assets will likely continue to put downward pressure on



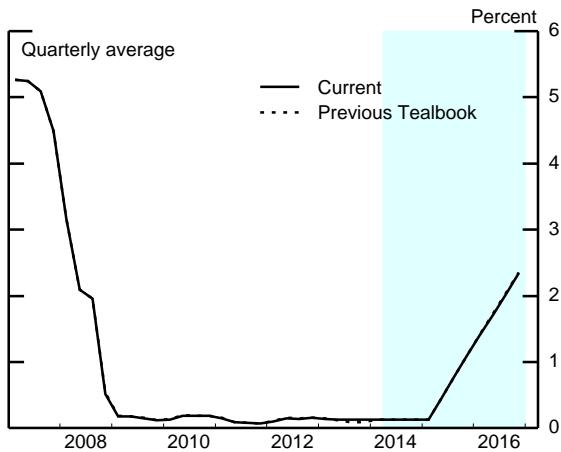
¹ Prepared by Matthias Paushtian.

² See John Fernald (2012), "Productivity and Potential Output before, during, and after the Great Recession," Working Paper Series 2012-18 (San Francisco: Federal Reserve Bank of San Francisco, September).

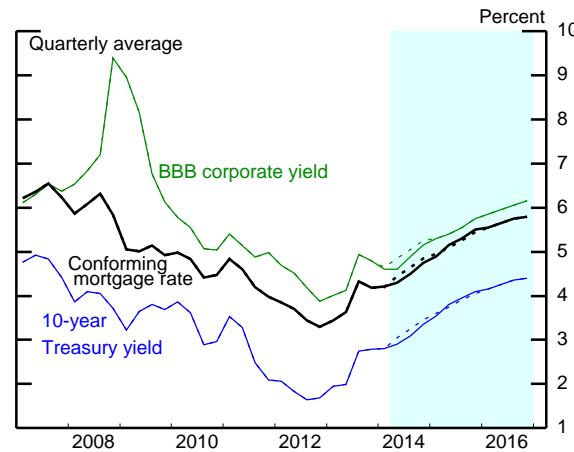
³ See John G. Fernald and Charles I. Jones (2014), "The Future of U.S. Economic Growth," NBER Working Paper Series 19830 (Cambridge, Mass.: National Bureau of Economic Research, January), and references therein.

Key Background Factors underlying the Baseline Staff Projection

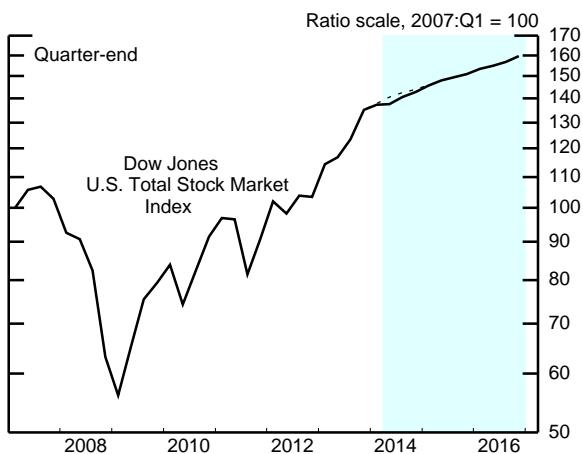
Federal Funds Rate



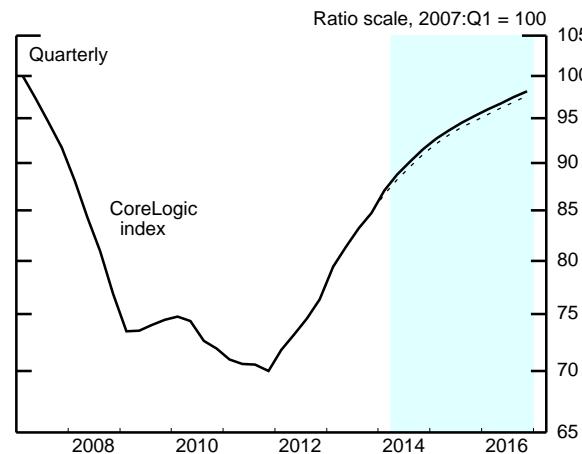
Long-Term Interest Rates



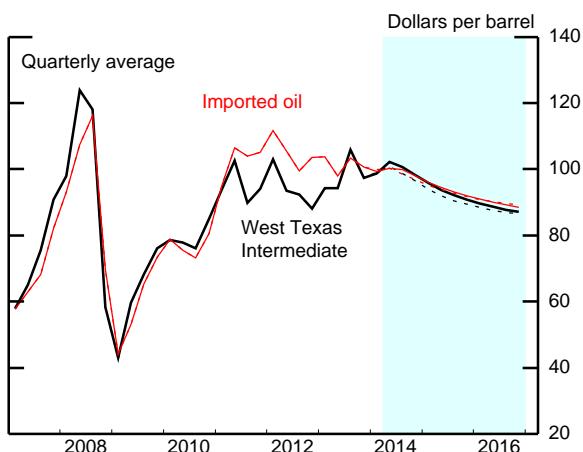
Equity Prices



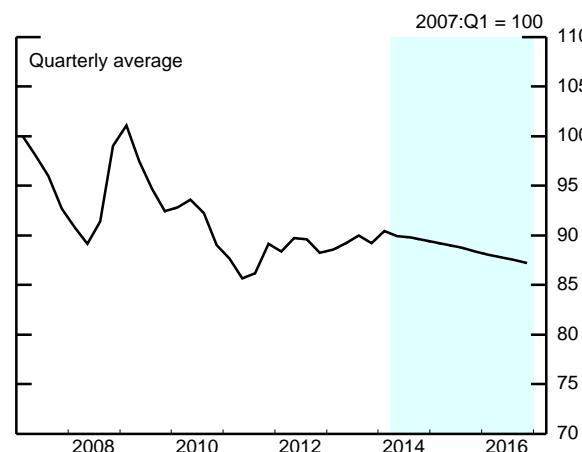
House Prices



Crude Oil Prices



Broad Real Dollar



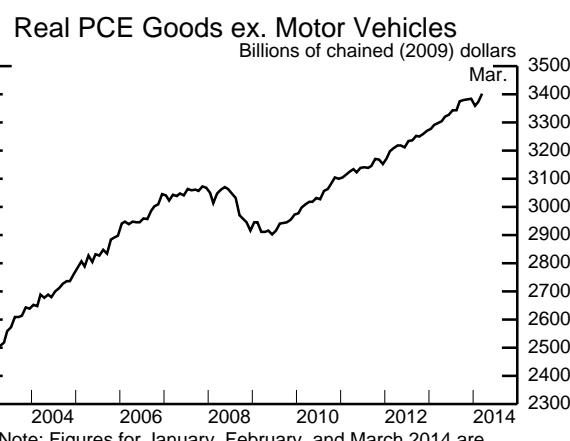
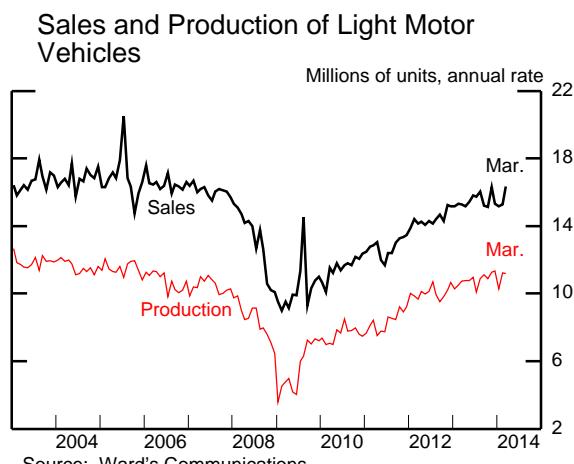
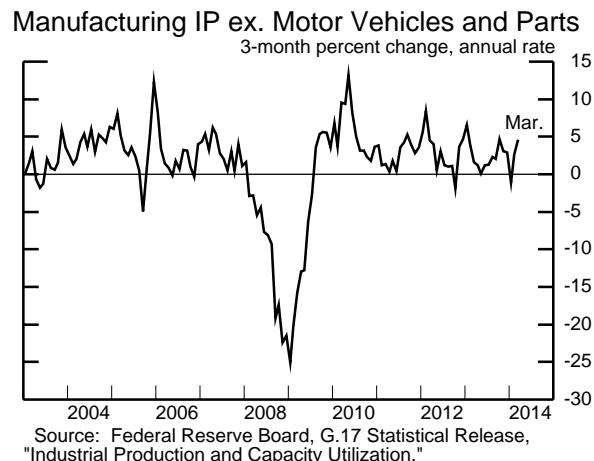
Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

Measure	2013:Q4		2014:Q1		2014:Q2	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
Real GDP	2.2	2.6	1.5	.7	3.5	3.5
Private domestic final purchases	2.5	3.2	2.5	2.3	4.2	4.0
Personal consumption expenditures	2.6	3.3	2.6	2.5	3.7	3.8
Residential investment	-8.6	-7.9	2.9	-2.1	10.4	6.3
Nonres. private fixed investment	5.5	5.7	1.6	2.2	5.7	4.7
Government purchases	-5.2	-5.2	.3	.2	-.5	-.3
<i>Contributions to change in real GDP</i>						
Inventory investment ¹	.1	.0	-.4	-.3	-.2	-.2
Net exports ¹	1.0	1.0	-.2	-1.0	.2	.3
Unemployment rate	7.0	7.0	6.6	6.7	6.5	6.6
PCE chain price index	1.0	1.1	1.4	1.5	1.3	1.6
Ex. food and energy	1.3	1.3	1.2	1.3	1.5	1.5

1. Percentage points.

Recent Nonfinancial Developments (1)



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

Measure	2013	2014	2014		2015	2016
			H1	H2		
Real GDP			2.6	2.8	2.0	3.5
Previous Tealbook	2.5	2.9	2.5	3.4	3.2	3.0
Final sales	1.8	2.9	2.3	3.6	3.5	3.2
Previous Tealbook	1.7	3.0	2.8	3.3	3.4	3.1
Personal consumption expenditures	2.3	3.6	3.1	4.1	3.7	2.9
Previous Tealbook	2.1	3.5	3.2	3.8	3.7	2.9
Residential investment	6.9	8.7	2.0	15.8	14.5	12.0
Previous Tealbook	6.7	9.8	6.6	13.1	15.1	11.0
Nonresidential structures	-.7	6.0	6.5	5.4	2.6	2.0
Previous Tealbook	-.6	4.6	4.6	4.7	2.4	1.9
Equipment and intangibles	3.5	3.8	2.5	5.2	5.7	5.6
Previous Tealbook	3.4	4.2	3.4	5.0	5.8	5.0
Federal purchases	-6.2	-1.3	.4	-2.9	-3.5	-1.1
Previous Tealbook	-6.2	-1.7	-.8	-2.7	-3.6	-1.2
State and local purchases	.2	.3	-.3	.8	1.1	1.5
Previous Tealbook	.2	.4	-.3	.5	1.1	1.5
Exports	4.9	1.7	-1.2	4.6	5.0	5.6
Previous Tealbook	4.9	3.1	1.7	4.4	4.9	5.6
Imports	2.8	3.2	1.1	5.4	4.9	4.6
Previous Tealbook	2.8	3.3	1.6	5.1	4.9	4.5
Contributions to change in real GDP (percentage points)						
Inventory change	.7	-.1	-.2	-.1	-.2	-.1
Previous Tealbook	.8	-.1	-.3	.1	-.2	.0
Net exports	.2	-.3	-.3	-.3	-.1	.0
Previous Tealbook	.2	-.1	.0	-.2	-.1	.0

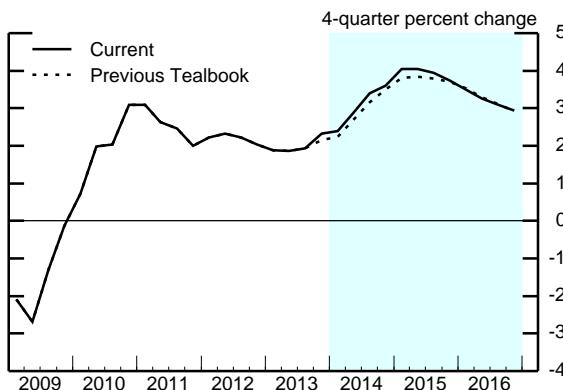
Real GDP

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

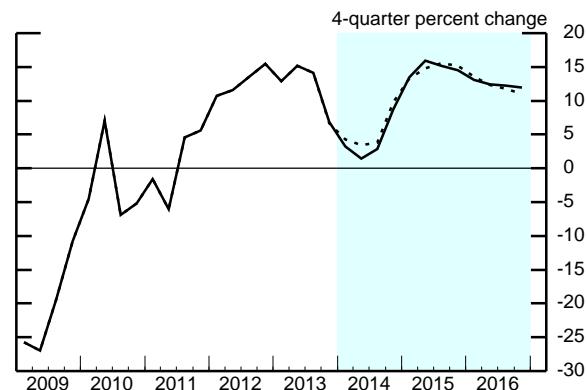
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Components of Final Demand

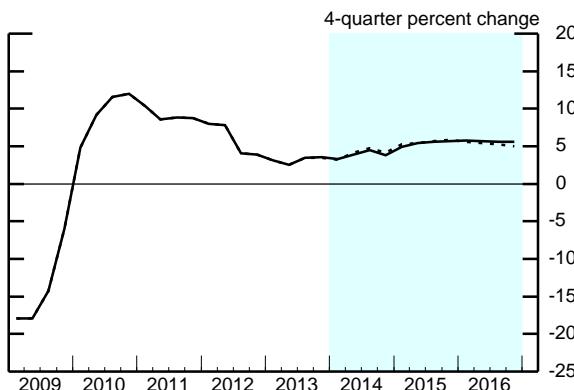
Personal Consumption Expenditures



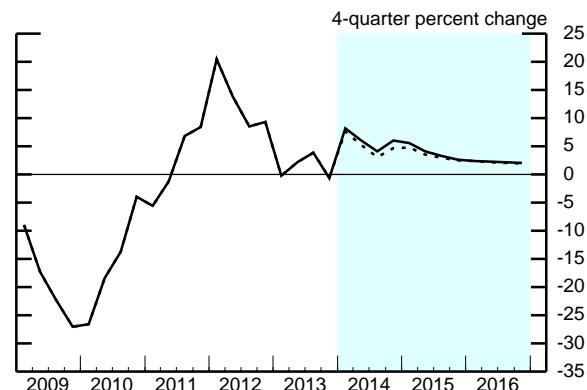
Residential Investment



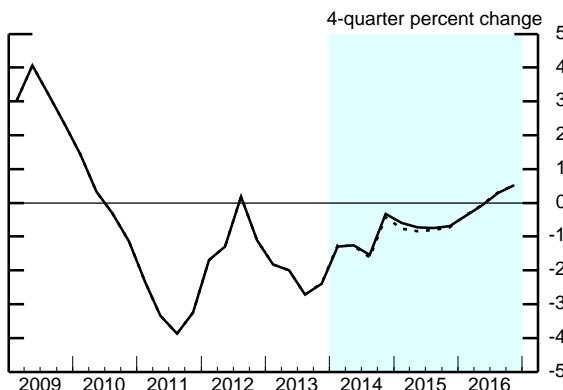
Equipment and Intangibles



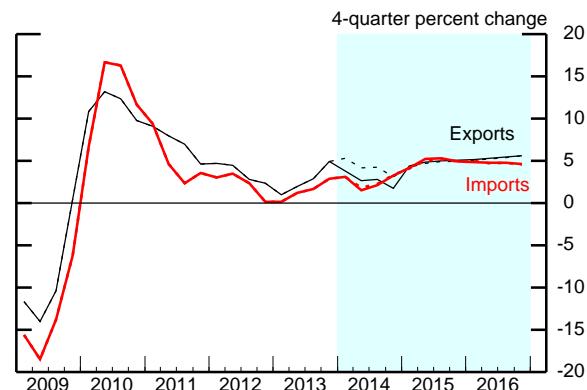
Nonresidential Structures



Government Consumption & Investment



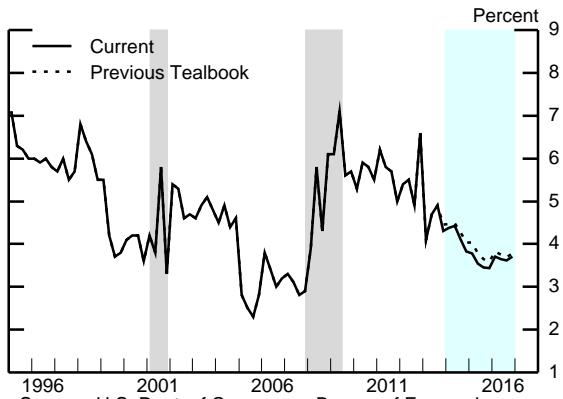
Exports and Imports



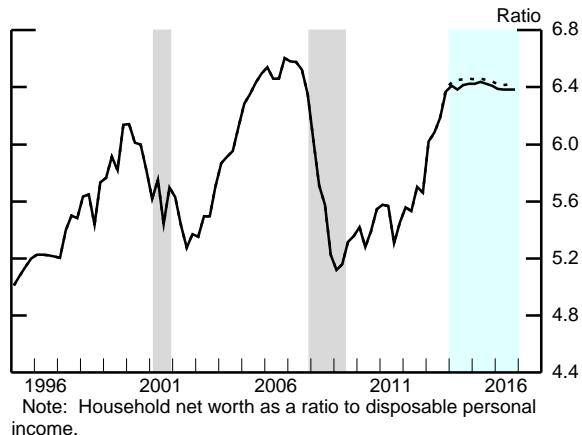
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Aspects of the Medium-Term Projection

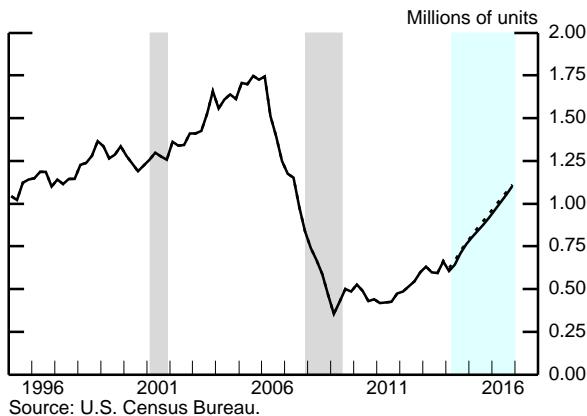
Personal Saving Rate



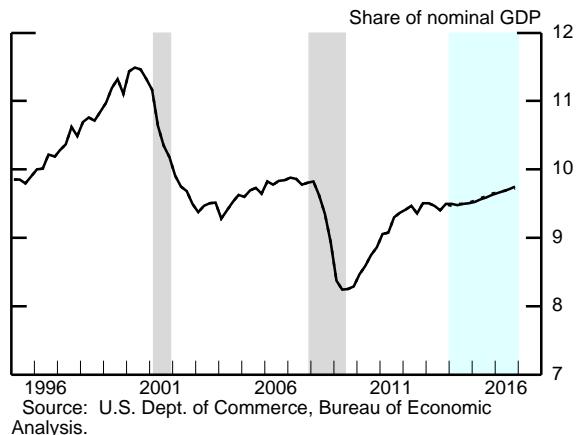
Wealth-to-Income Ratio



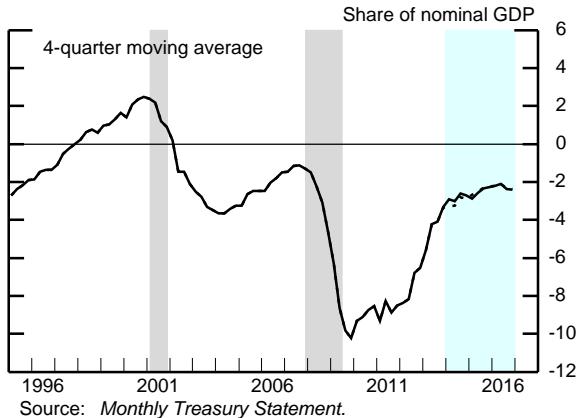
Single-Family Housing Starts



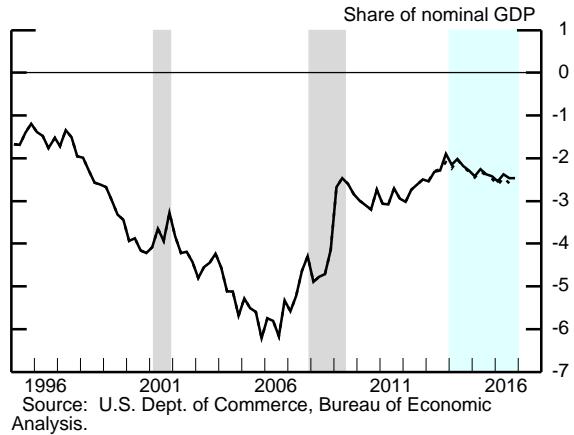
Equipment and Intangibles Spending



Federal Surplus/Deficit



Current Account Surplus/Deficit



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	2001-07	2008-10	2011-13	2014	2015	2016
Potential real GDP	3.1	3.4	2.6	1.9	1.5	1.8	2.0	1.9
Previous Tealbook	3.1	3.4	2.6	1.9	1.5	1.8	2.0	1.9
<i>Selected contributions</i> ¹								
Structural NFB labor productivity ²	1.6	2.7	2.6	1.8	1.2	1.4	1.8	1.8
Previous Tealbook	1.6	2.7	2.6	1.8	1.2	1.4	1.8	1.8
Structural hours	1.5	1.0	.7	.2	.6	.7	.6	.3
Previous Tealbook	1.5	1.0	.7	.2	.6	.7	.6	.3
Labor force participation	.4	.0	-.3	-.4	-.5	-.3	-.4	-.4
Previous Tealbook	.4	.0	-.3	-.4	-.5	-.3	-.4	-.4
Memo:								
GDP gap ³	-1.9	2.5	1.0	-4.8	-2.9	-2.0	-0.7	.4
Previous Tealbook	-1.9	2.5	1.0	-4.8	-3.0	-1.9	-0.7	.4

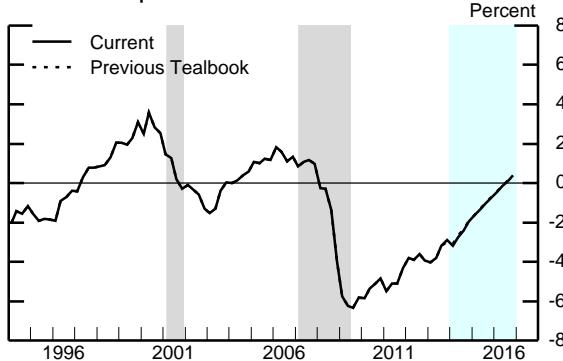
Note: For multiyear periods, the percent change is the annual average from Q4 of the year preceding the first year shown to Q4 of the last year shown.

1. Percentage points.

2. Because of substantial revisions from the Bureau of Economic Analysis to productive investment as part of the latest comprehensive revision, staff estimates of the components of structural productivity are not available for this Tealbook.

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

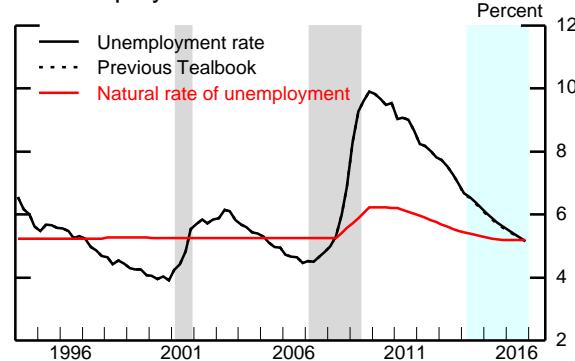
GDP Gap



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

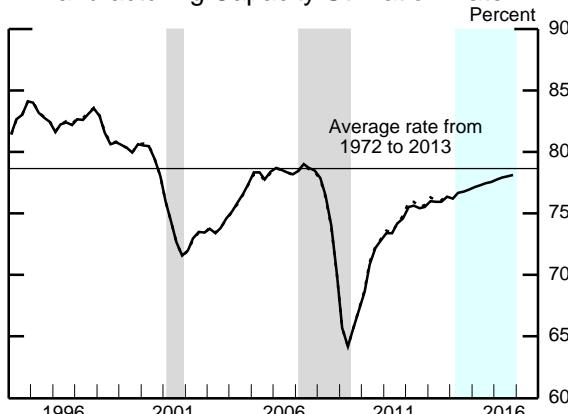
Source: U.S. Dept. of Commerce, BEA; staff assumptions.

Unemployment Rate



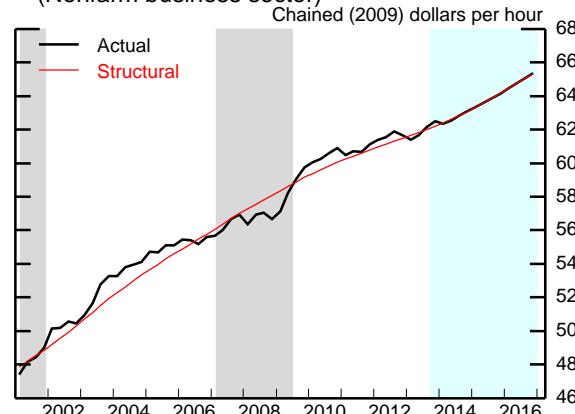
Source: U.S. Department of Labor, Bureau of Labor Statistics; staff assumptions.

Manufacturing Capacity Utilization Rate



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

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.

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	2013	2014	2014		2015	2016
			H1	H2		
Output per hour, nonfarm business ¹ Previous Tealbook	1.4 1.2	.9 1.4	.0 1.3	1.9 1.4	1.6 1.4	1.9 1.8
Nonfarm private employment ² Previous Tealbook	197 197	214 212	199 197	229 228	224 224	202 202
Labor force participation rate ³ Previous Tealbook	62.8 62.8	63.1 63.0	63.1 63.0	63.1 63.0	63.0 63.0	62.9 62.9
Civilian unemployment rate ³ Previous Tealbook	7.0 7.0	6.2 6.2	6.6 6.5	6.2 6.2	5.6 5.6	5.1 5.1

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)

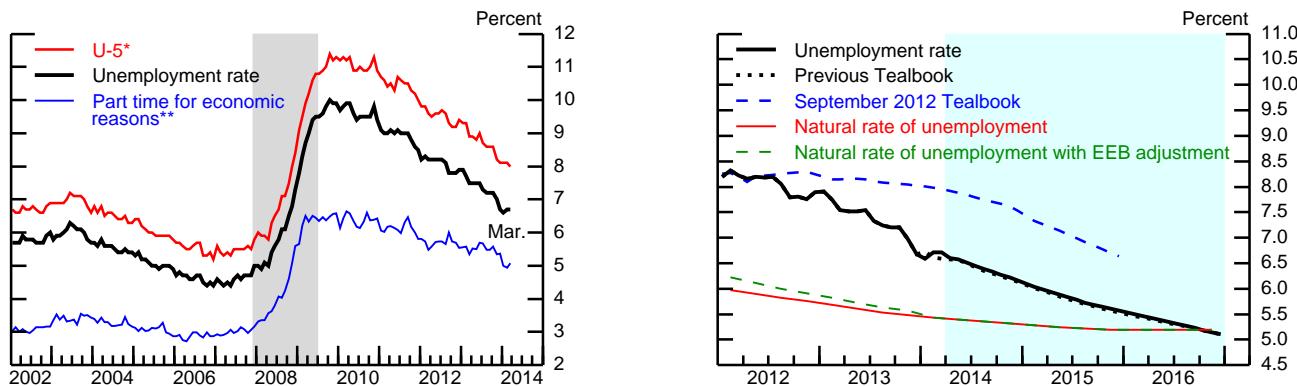
Measure	2013	2014	2014		2015	2016
			H1	H2		
PCE chain-weighted price index Previous Tealbook	1.0 1.0	1.6 1.5	1.5 1.4	1.6 1.6	1.5 1.5	1.6 1.7
Food and beverages Previous Tealbook	.8 .8	1.7 1.1	2.0 .9	1.4 1.3	1.3 1.3	1.4 1.4
Energy Previous Tealbook	-1.5 -1.5	2.3 1.5	2.8 1.8	1.7 1.2	-1.2 -.8	-.9 -.3
Excluding food and energy Previous Tealbook	1.2 1.2	1.5 1.5	1.4 1.4	1.6 1.6	1.7 1.7	1.8 1.8
Prices of core goods imports ¹ Previous Tealbook	-1.1 -1.1	1.3 1.1	1.1 .8	1.5 1.4	1.3 1.3	1.3 1.4

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 (1)

Measures of Labor Underutilization



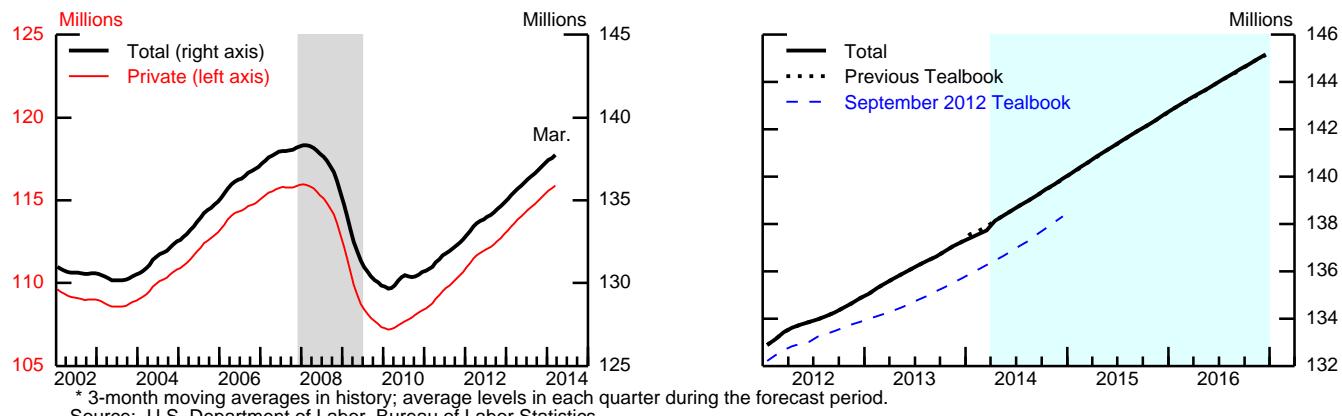
* U-5 measures total unemployed persons plus all marginally attached to the labor force, as a percent of the labor force plus persons marginally attached to the labor force.

** Percent of Current Population Survey employment.

EEB Extended and emergency unemployment benefits.

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

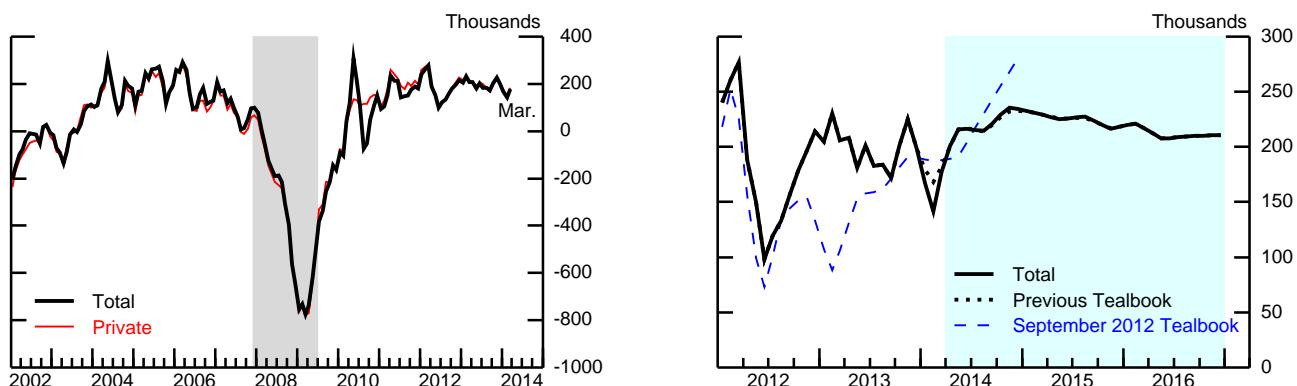
Level of Payroll Employment*



* 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.

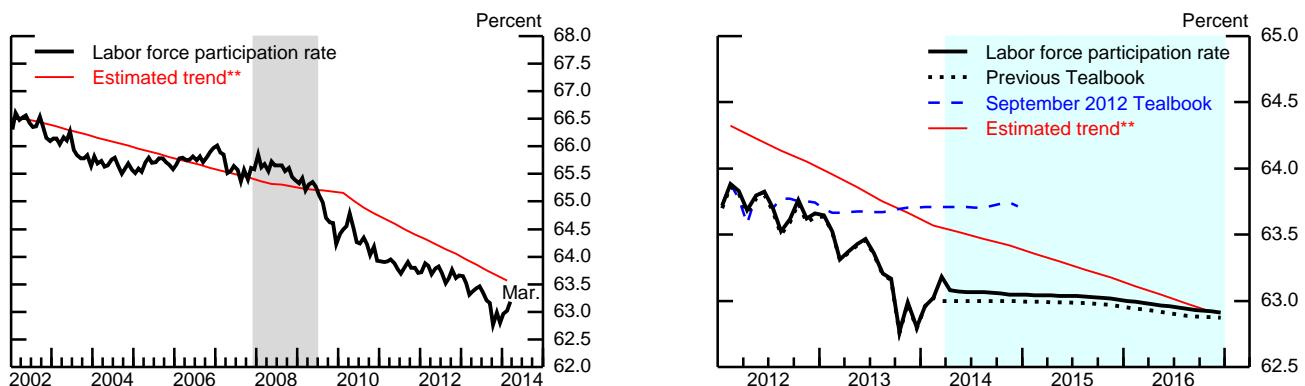
Source: U.S. Department of Labor, Bureau of Labor Statistics.

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.

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

Labor Market Developments and Outlook (2)

Labor Force Participation Rate*

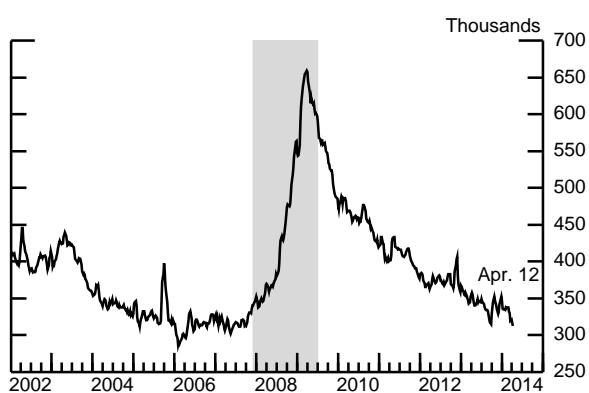


* Published data adjusted by staff to account for changes in population weights.

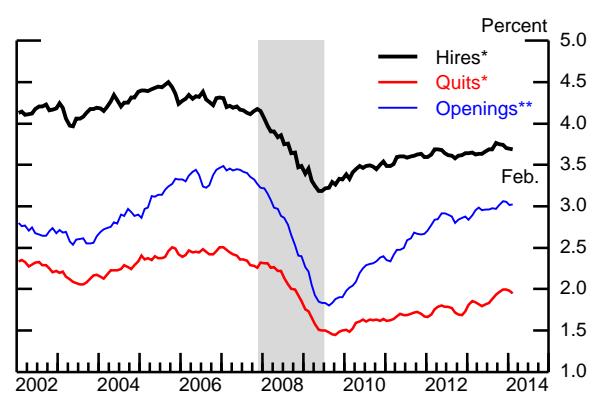
** Includes staff estimate of the effect of extended and emergency unemployment benefits.

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

Initial Unemployment Insurance Claims*

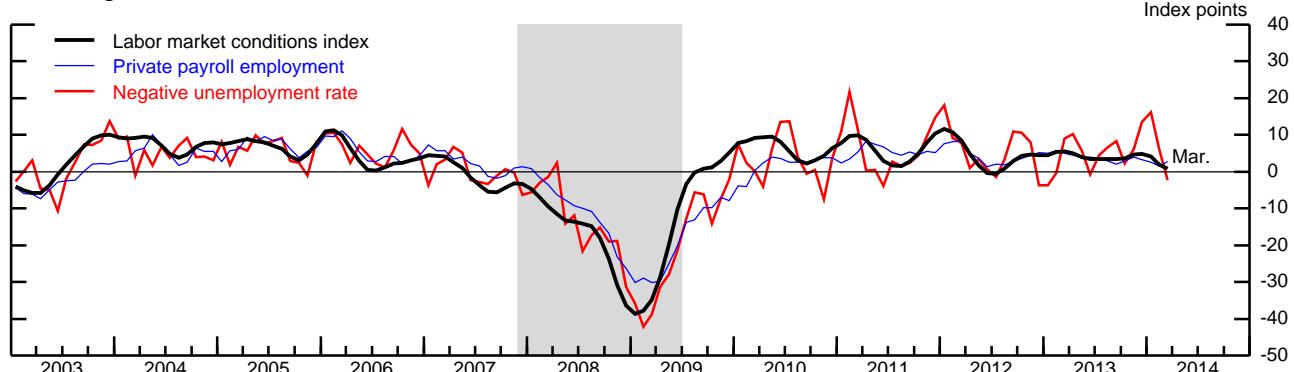


Private Hires, Quits, and Job Openings



Source: Job Openings and Labor Turnover Survey.

Change in Labor Market Conditions Index and Selected Indicators*



Note: Labor market conditions index estimated by staff; indexes for unemployment rate and private payroll employment are standardized deviations from estimated trend.

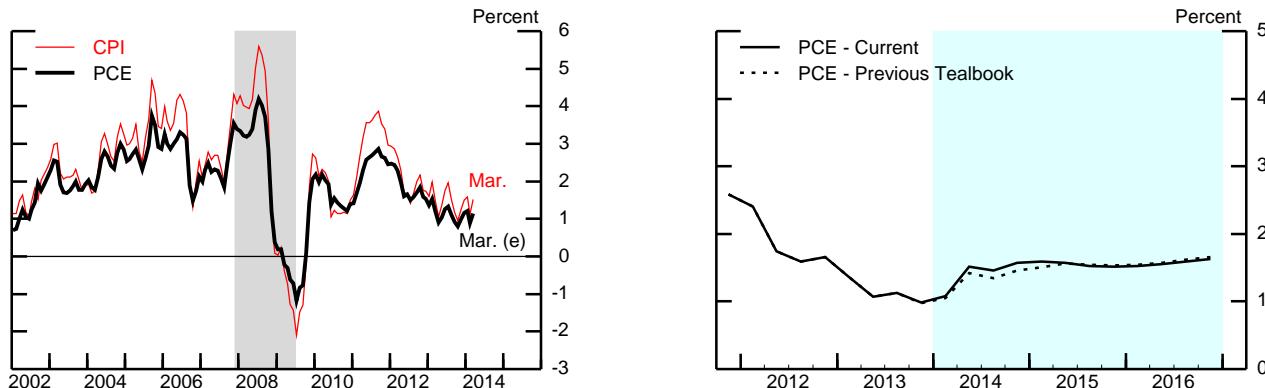
* 3-month moving average.

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

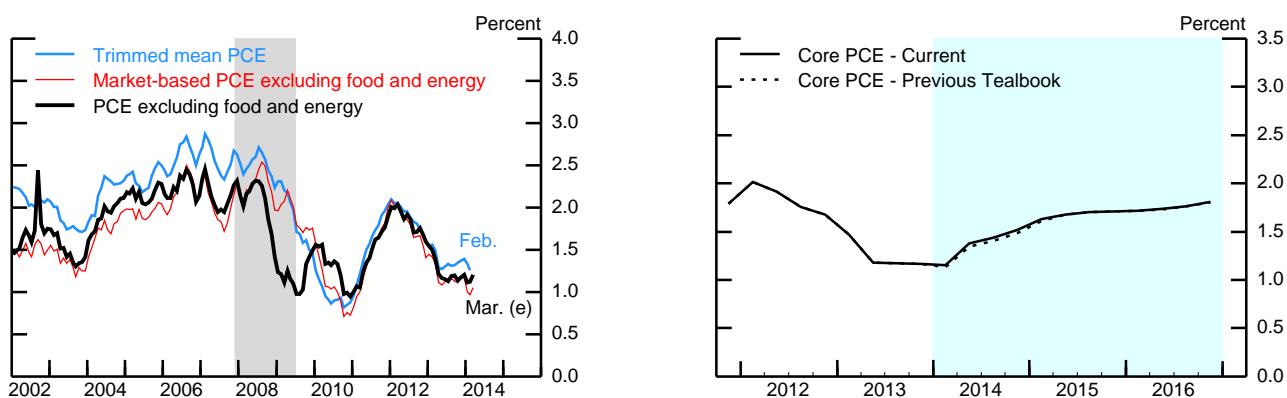
Inflation Developments and Outlook (1)

(Percent change from year-earlier period)

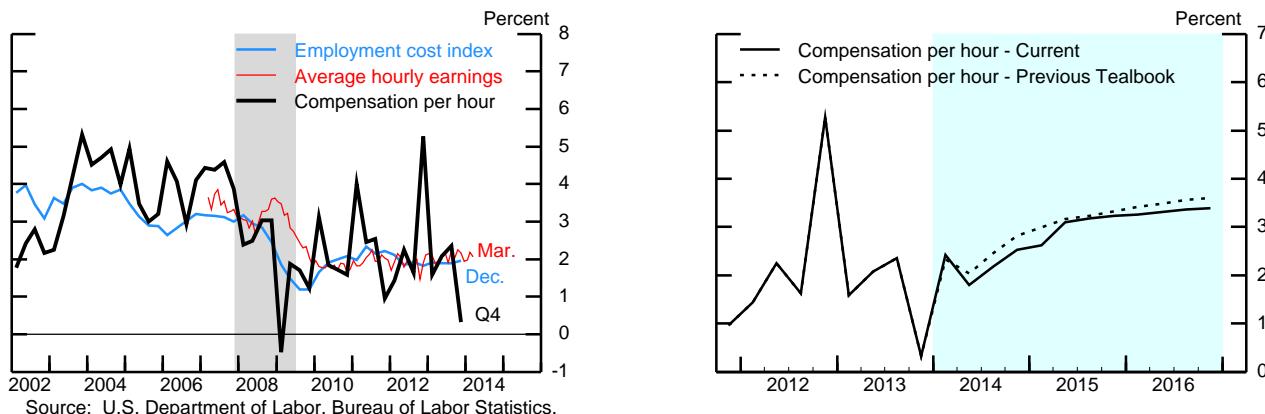
Headline Consumer Price Inflation



Measures of Underlying PCE Price Inflation



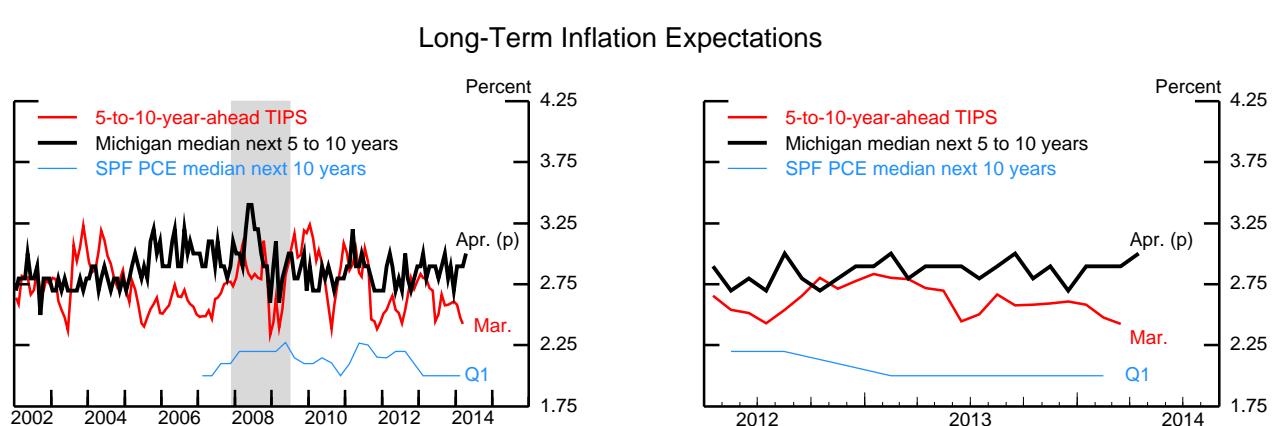
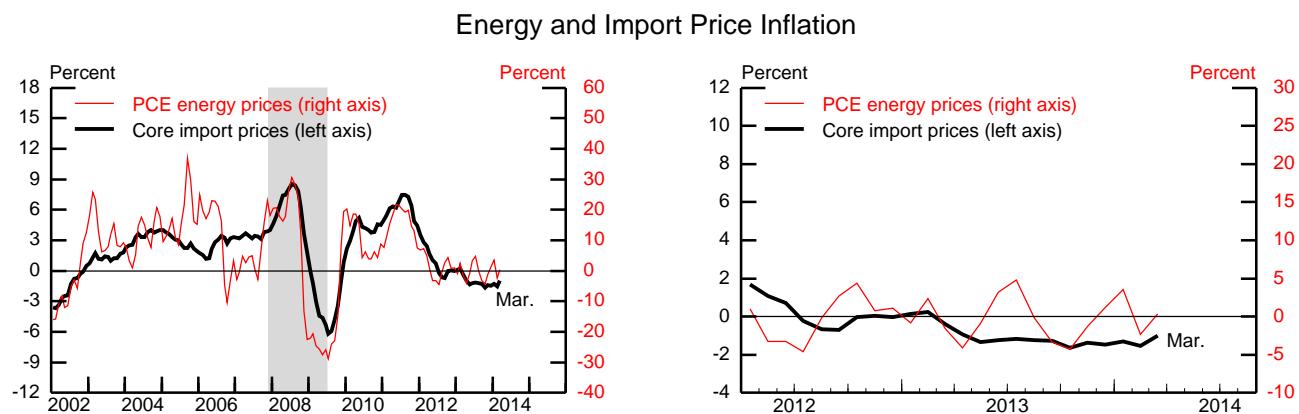
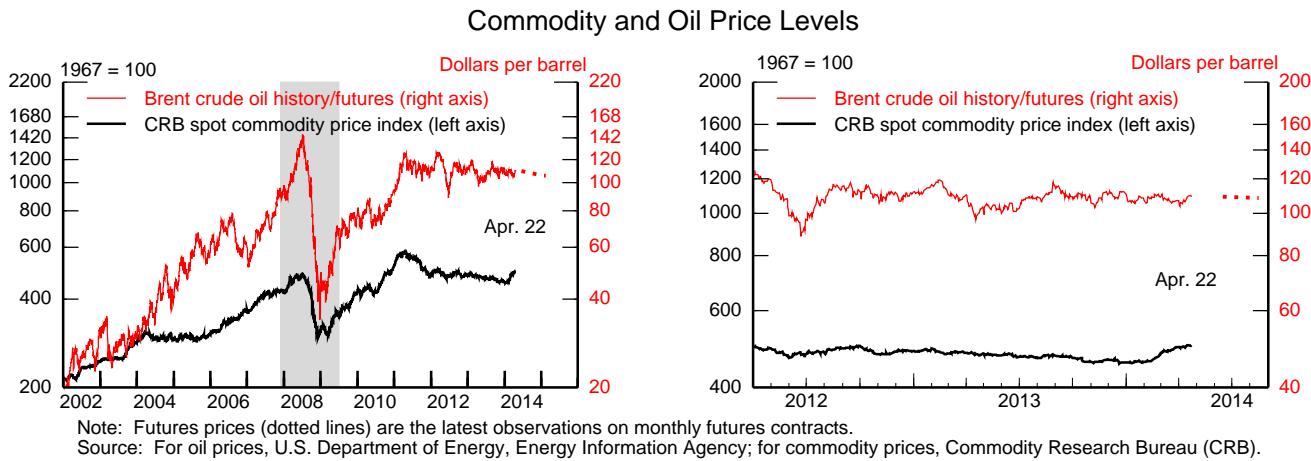
Labor Cost Growth (Private Industry)



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

Inflation Developments and Outlook (2)

(Percent change from year-earlier period, except as noted)



p Preliminary.

SPF Survey of Professional Forecasters.

Source: For Michigan, Thomson Reuters/University of Michigan Surveys of Consumers; for SPF, Federal Reserve Bank of Philadelphia; for TIPS, Federal Reserve Board staff calculations.

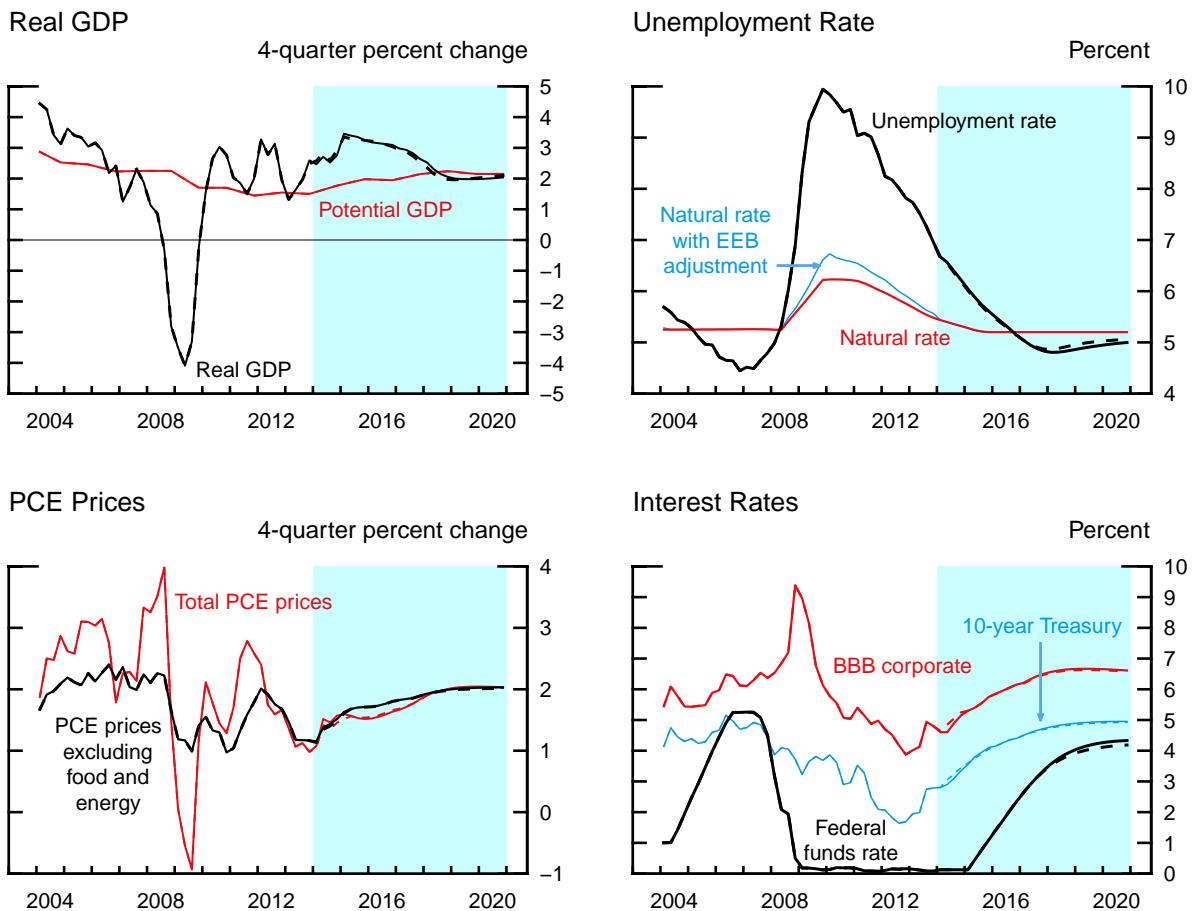
Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research.

The Long-Term Outlook

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

Measure	2014	2015	2016	2017	2018	Longer run
Real GDP Previous Tealbook	2.8 2.9	3.2 3.2	3.1 3.0	2.6 2.5	2.1 2.0	2.3 2.3
Civilian unemployment rate ¹ Previous Tealbook	6.2 6.2	5.6 5.6	5.1 5.1	4.8 4.9	4.8 4.9	5.2 5.2
PCE prices, total Previous Tealbook	1.6 1.5	1.5 1.5	1.6 1.7	1.8 1.8	2.0 2.0	2.0 2.0
Core PCE prices Previous Tealbook	1.5 1.5	1.7 1.7	1.8 1.8	1.9 1.9	2.0 2.0	2.0 2.0
Federal funds rate ¹ Previous Tealbook	.1 .1	1.1 1.1	2.3 2.4	3.4 3.3	4.0 3.9	4.0 4.0
10-year Treasury yield ¹ Previous Tealbook	3.3 3.5	4.1 4.1	4.4 4.4	4.7 4.7	4.9 4.8	4.8 4.8

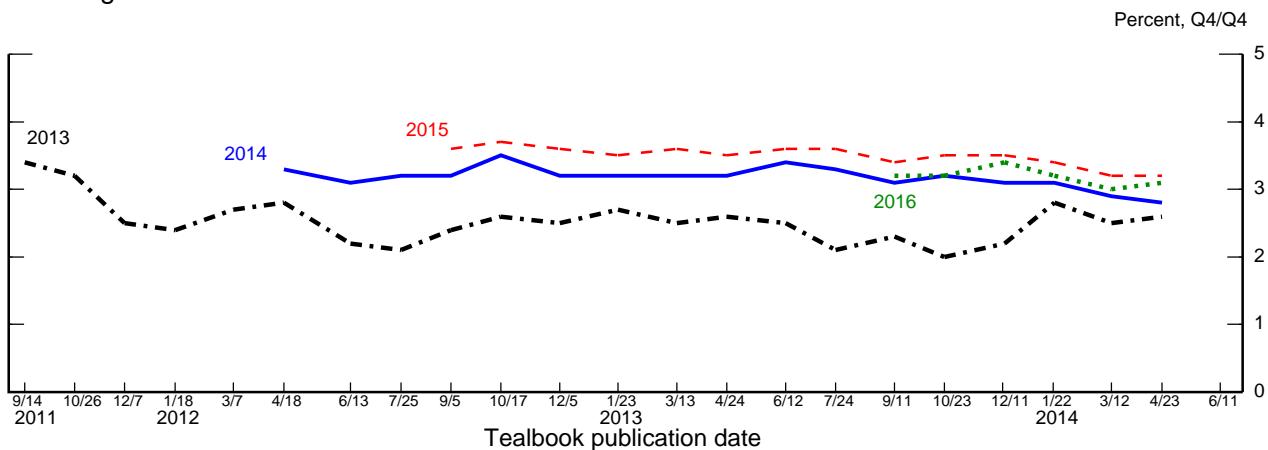
1. Percent, average for the final quarter of the period.



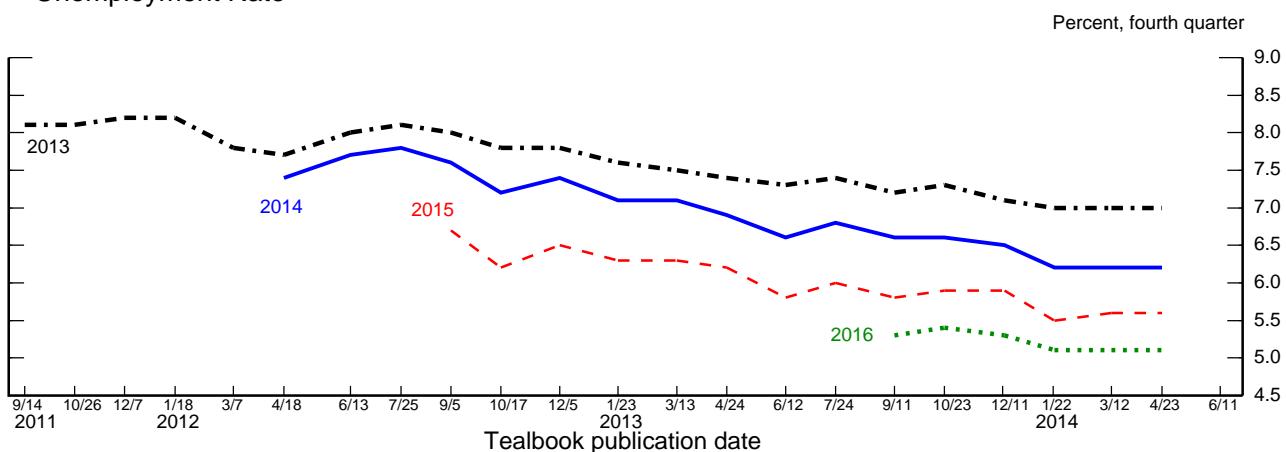
Note: In each panel, shading represents the projection period, and dashed lines are the previous Tealbook.

Evolution of the Staff Forecast

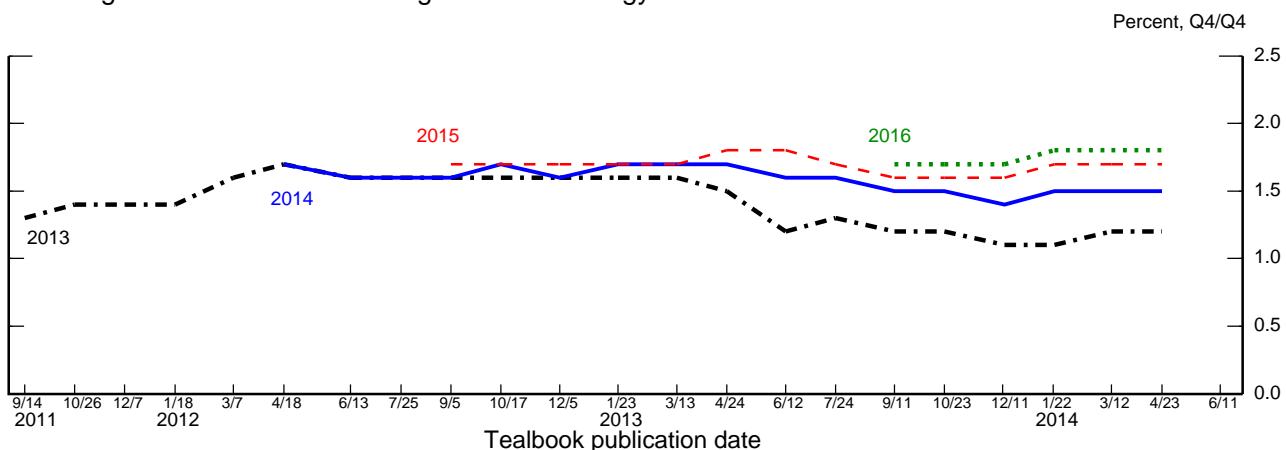
Change in Real GDP



Unemployment Rate

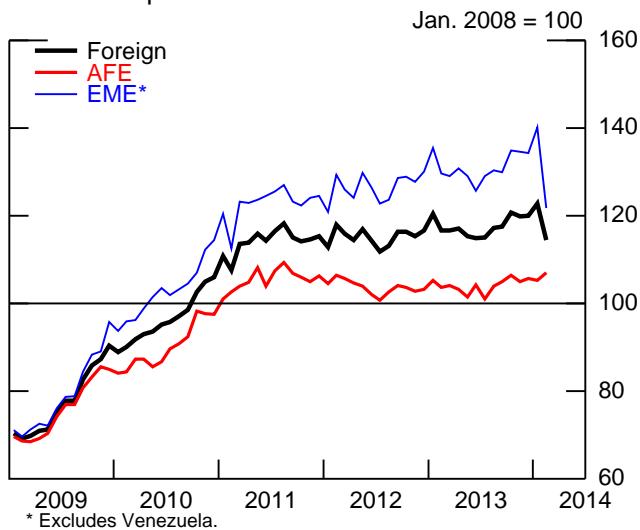


Change in PCE Prices excluding Food and Energy

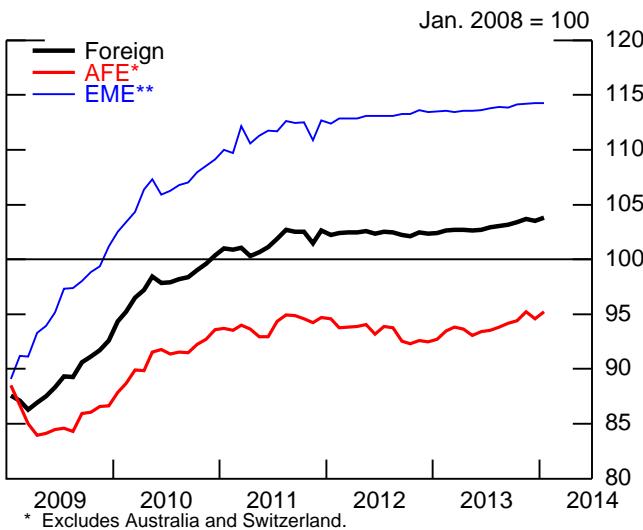


Recent Foreign Indicators

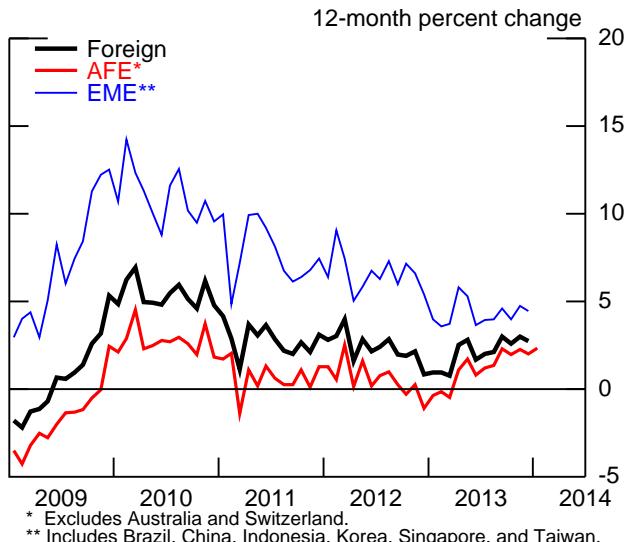
Nominal Exports



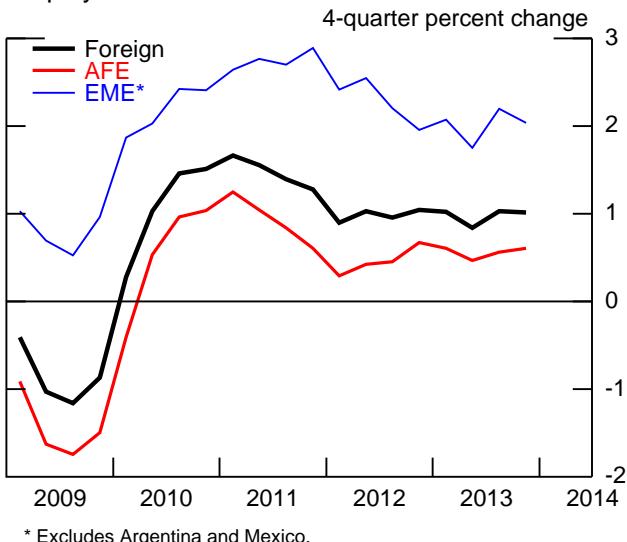
Industrial Production



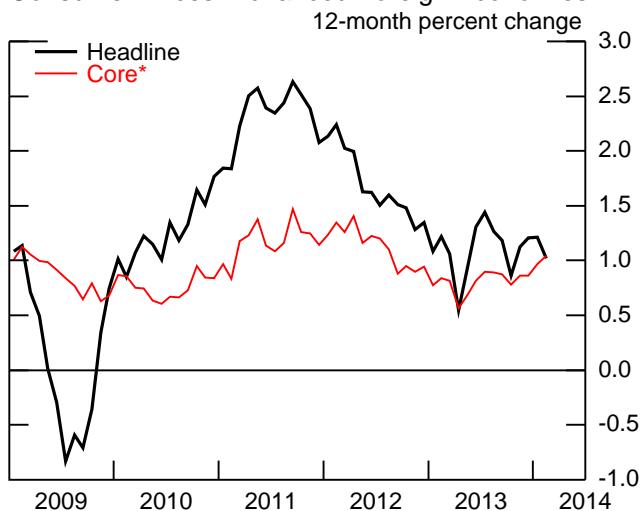
Retail Sales



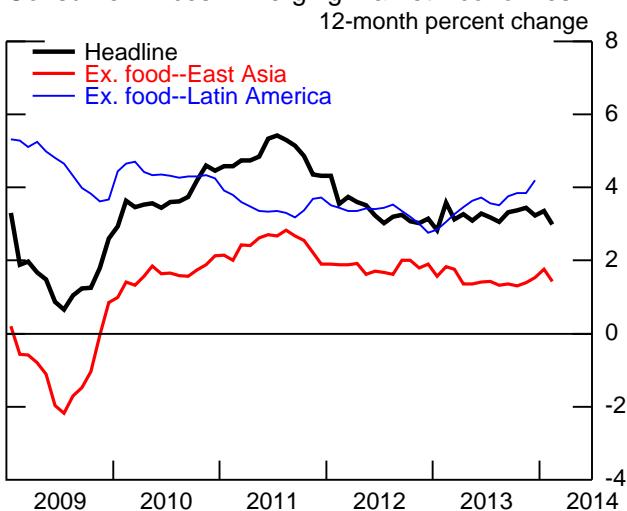
Employment



Consumer Prices: Advanced Foreign Economies



Consumer Prices: Emerging Market Economies



Note: Excludes Australia, Sweden, and Switzerland.

* Excludes all food and energy; staff calculation.

Source: Haver Analytics and CEIC.

Int'l Econ Devel & Outlook

The Foreign GDP Outlook

Real GDP*

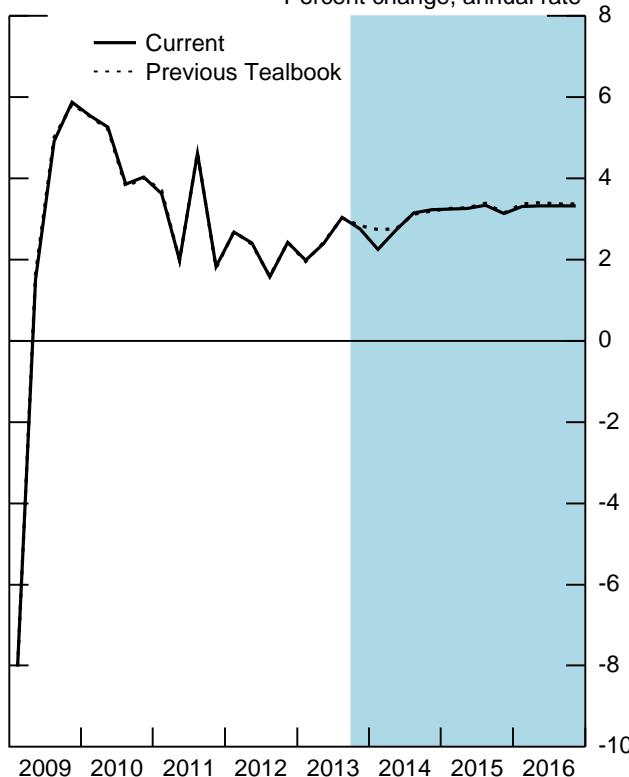
Percent change, annual rate

	2013			2014			2015		2016
	H1	Q3	Q4	Q1	Q2	H2			
1. Total Foreign	2.2	3.0	2.8	2.3	2.7	3.2	3.2	3.3	
<i>Previous Tealbook</i>	2.2	3.0	2.8	2.7	2.8	3.2	3.3	3.4	
2. Advanced Foreign Economies	2.0	1.9	2.1	1.8	1.9	2.2	2.2	2.2	
<i>Previous Tealbook</i>	2.0	1.9	2.1	2.1	1.7	2.2	2.2	2.2	
3. Canada	2.5	2.7	2.9	1.5	3.3	2.6	2.7	2.6	
4. Euro Area	0.2	0.6	0.9	1.4	1.4	1.4	1.7	1.9	
5. Japan	4.3	0.9	0.7	3.1	-3.4	1.8	0.8	1.1	
6. United Kingdom	2.3	3.4	2.7	3.0	2.9	2.9	2.6	2.5	
7. Emerging Market Economies	2.4	4.2	3.4	2.7	3.6	4.2	4.3	4.4	
<i>Previous Tealbook</i>	2.4	4.2	3.5	3.4	3.8	4.1	4.4	4.5	
8. China	6.9	8.8	8.0	5.6	6.2	7.5	7.2	7.1	
9. Emerging Asia ex. China	2.8	4.4	5.2	3.0	3.6	4.3	4.4	4.4	
10. Mexico	-1.0	3.9	0.7	2.0	3.2	3.4	3.6	3.7	
11. Brazil	3.7	-2.1	2.8	0.4	2.2	2.5	2.6	2.7	

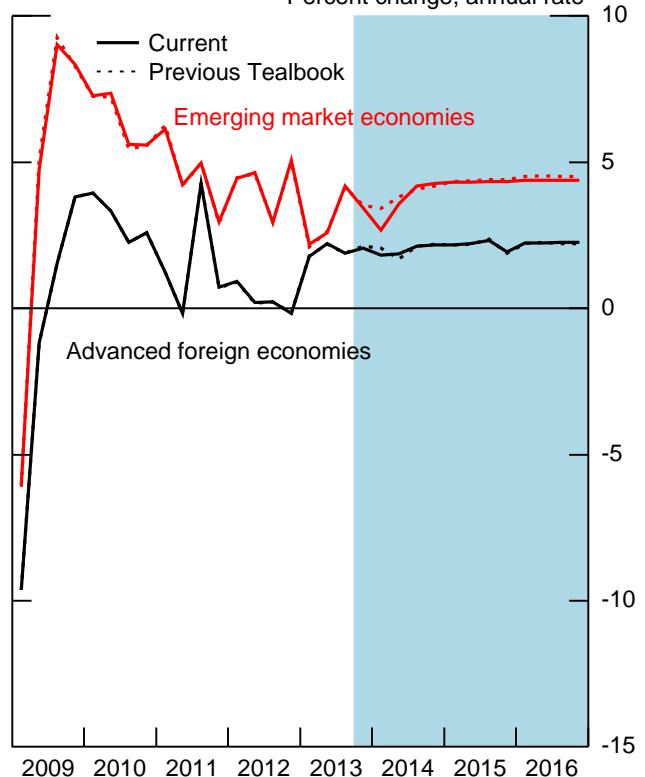
* GDP aggregates weighted by shares of U.S. merchandise exports.

Total Foreign GDP

Percent change, annual rate

**Foreign GDP**

Percent change, annual rate



The Foreign Inflation Outlook

Consumer Prices*

Percent change, annual rate

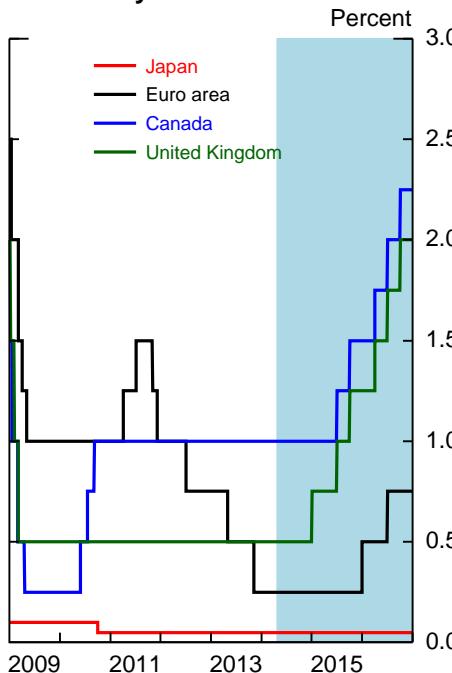
	2013			2014			2015	2016
	H1	Q3	Q4	Q1	Q2	H2		
1. Total Foreign	2.1	2.7	2.4	2.0	3.0	2.5	2.6	2.6
<i>Previous Tealbook</i>	2.1	2.8	2.4	2.1	3.2	2.5	2.6	2.6
2. Advanced Foreign Economies	0.7	2.0	0.7	1.1	2.7	1.4	1.7	1.6
<i>Previous Tealbook</i>	0.7	2.1	0.7	1.2	2.9	1.3	1.7	1.7
3. Canada	0.8	1.9	0.5	2.7	1.8	1.6	1.7	1.9
4. Euro Area	0.7	1.6	0.1	0.2	0.9	1.3	1.4	1.5
5. Japan	0.4	3.0	1.9	0.7	8.8	0.9	2.4	1.3
6. United Kingdom	2.0	2.8	1.5	0.9	1.5	2.0	1.9	1.8
7. Emerging Market Economies	3.2	3.3	3.7	2.6	3.2	3.4	3.4	3.3
<i>Previous Tealbook</i>	3.2	3.3	3.7	2.7	3.4	3.4	3.3	3.3
8. China	2.6	3.4	3.0	0.8	2.8	3.0	3.0	3.0
9. Emerging Asia ex. China	2.8	3.9	4.2	2.6	3.1	3.5	3.5	3.4
10. Mexico	4.2	2.0	4.2	5.2	3.0	3.3	3.3	3.3
11. Brazil	6.4	4.6	6.0	6.9	7.6	5.8	5.4	5.3

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

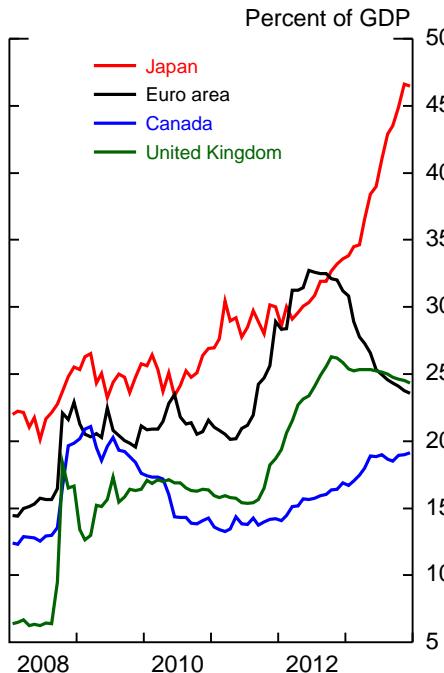
Int'l Econ Devel & Outlook

Foreign Monetary Policy

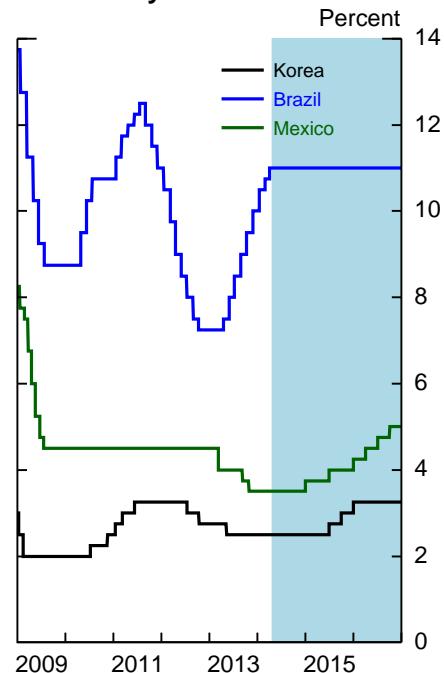
AFE Policy Rates



AFE Central Bank Balance Sheets

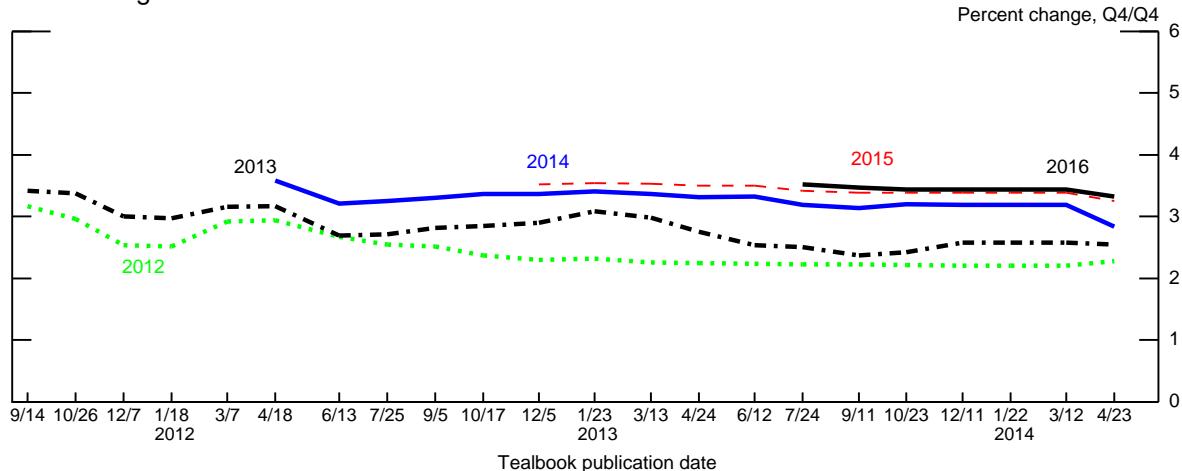


EME Policy Rates

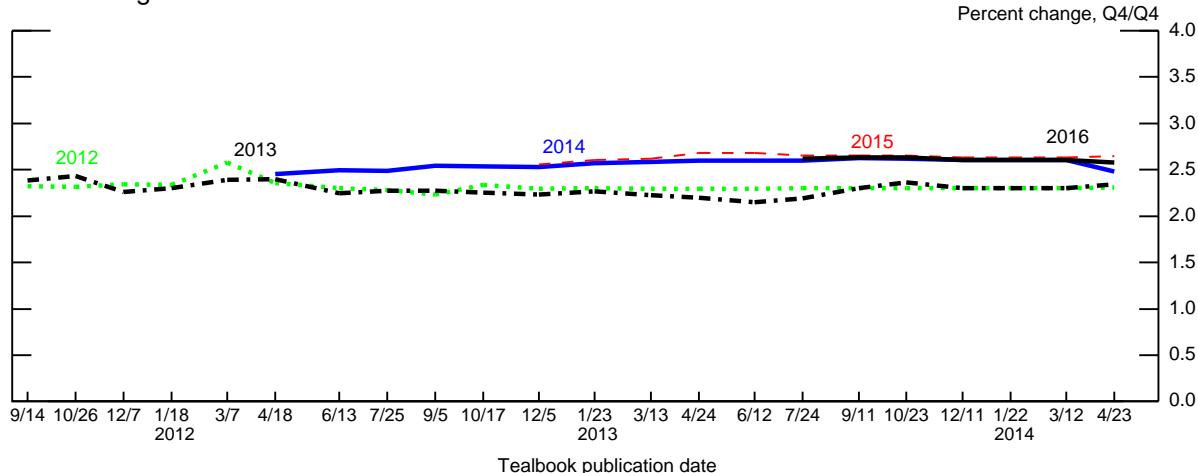


Evolution of Staff's International Forecast

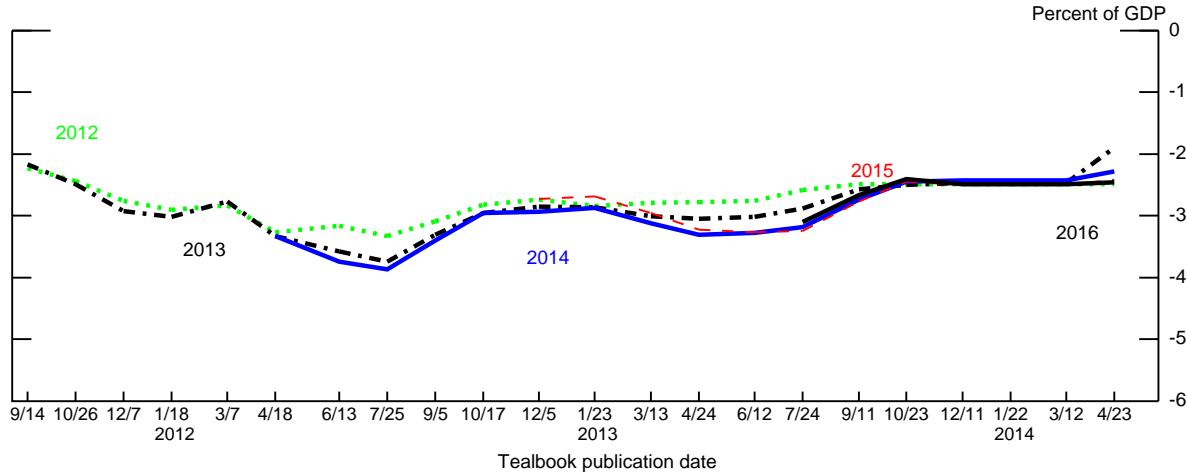
Total Foreign GDP



Total Foreign CPI

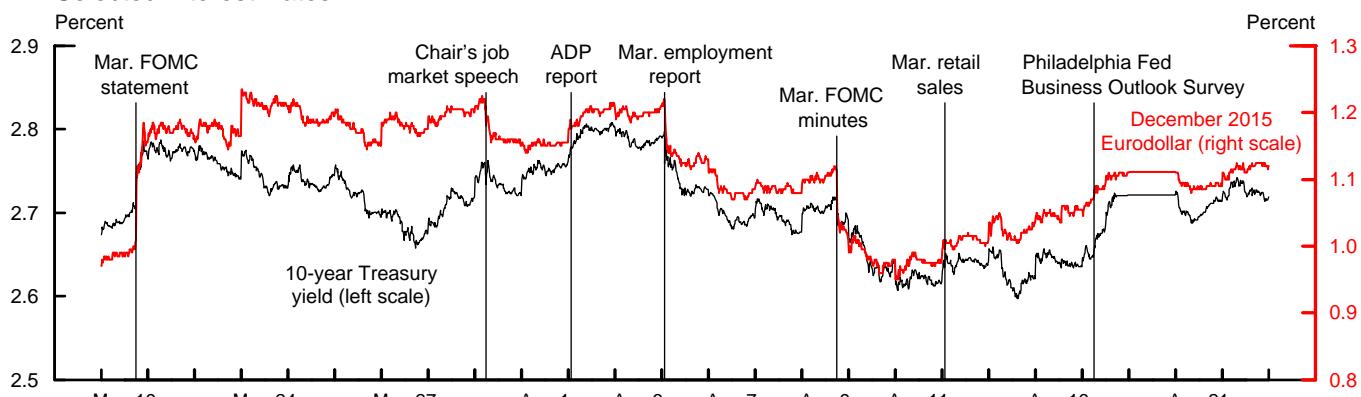


U.S. Current Account Balance



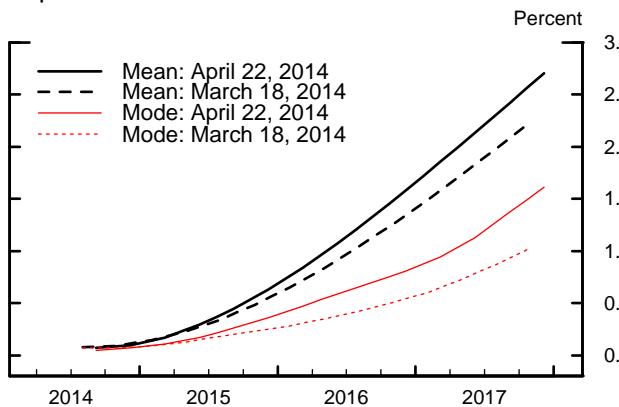
Policy Expectations and Treasury Yields

Selected Interest Rates



Note: 5-minute intervals. 8:00 a.m. to 4:00 p.m.
Source: Bloomberg.

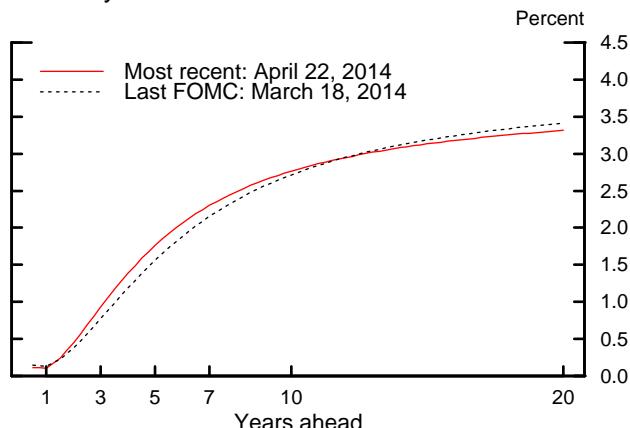
Implied Federal Funds Rate



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; CME Group.

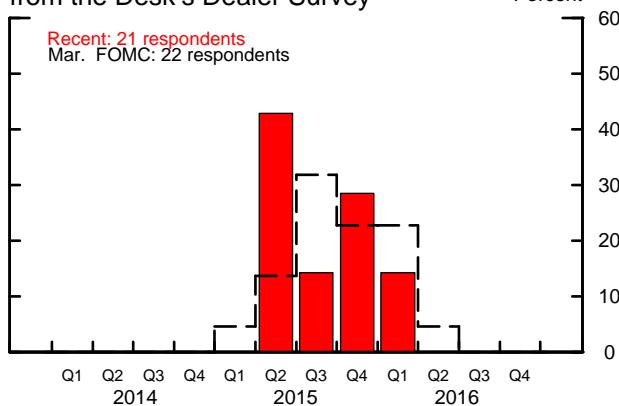
Treasury Yield Curve



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

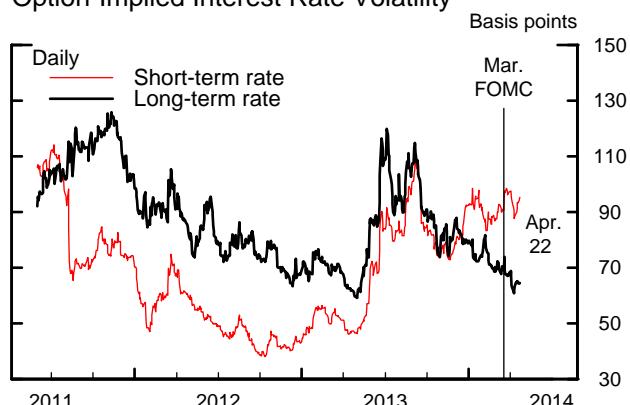
Source: Federal Reserve Board.

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



Source: Desk's dealer survey from April 22, 2014.

Option-Implied Interest Rate Volatility



Note: Implied volatility of the long-term rate is based on options on the 10-year swap rate that expire in 3 months, while implied volatility of the short-term rate is based on options on the 1-year swap rate that expire in 2 years.

Source: Staff calculations from Barclays data.

Alternative Scenarios

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

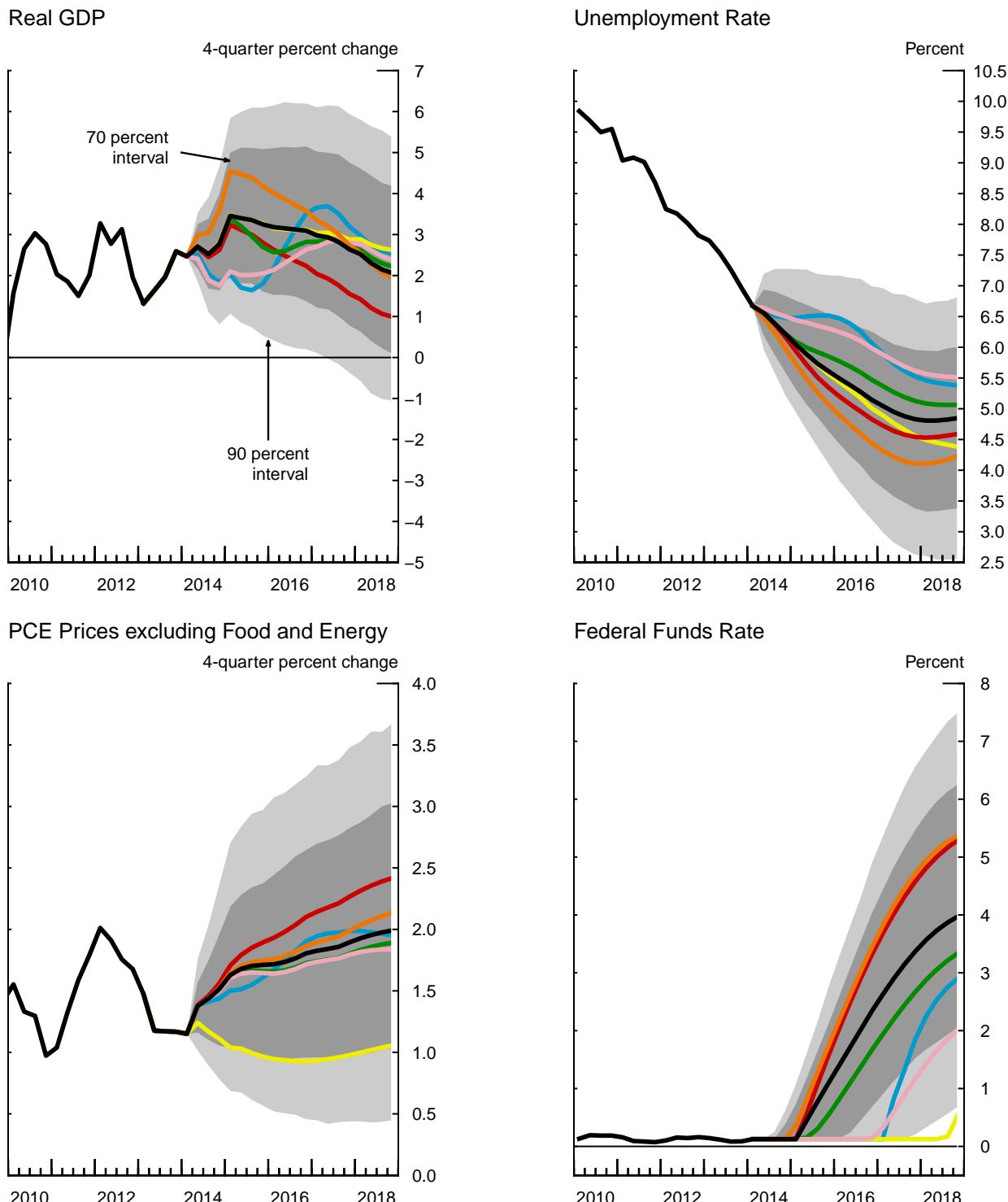
Measure and scenario	2014		2015	2016	2017-18
	H1	H2			
<i>Real GDP</i>					
Extended Tealbook baseline	2.0	3.5	3.2	3.1	2.3
Faster recovery	2.5	4.6	4.1	3.6	2.3
Weaker household demand	1.4	2.1	2.0	2.6	2.5
Liftoff tantrum	2.0	3.5	2.6	2.8	2.4
Supply-side damage	2.0	3.3	2.8	2.2	1.2
Low inflation	2.0	3.5	3.2	3.1	2.7
Escalating geopolitical tensions	1.6	2.0	1.7	3.5	2.8
<i>Unemployment rate¹</i>					
Extended Tealbook baseline	6.6	6.2	5.6	5.1	4.8
Faster recovery	6.5	6.0	5.1	4.4	4.2
Weaker household demand	6.7	6.5	6.3	5.9	5.5
Liftoff tantrum	6.6	6.2	5.8	5.4	5.0
Supply-side damage	6.6	6.1	5.3	4.8	4.5
Low inflation	6.6	6.2	5.6	5.0	4.3
Escalating geopolitical tensions	6.6	6.5	6.5	6.0	5.3
<i>Total PCE prices</i>					
Extended Tealbook baseline	1.5	1.6	1.5	1.6	1.9
Faster recovery	1.5	1.6	1.5	1.7	2.0
Weaker household demand	1.5	1.6	1.4	1.5	1.8
Liftoff tantrum	1.5	1.6	1.4	1.5	1.8
Supply-side damage	1.5	1.7	1.7	1.9	2.3
Low inflation	1.2	1.1	.8	.7	1.0
Escalating geopolitical tensions	4.1	2.3	.8	.6	2.0
<i>Core PCE prices</i>					
Extended Tealbook baseline	1.4	1.6	1.7	1.8	1.9
Faster recovery	1.4	1.6	1.7	1.9	2.0
Weaker household demand	1.4	1.6	1.6	1.7	1.8
Liftoff tantrum	1.4	1.6	1.6	1.7	1.8
Supply-side damage	1.4	1.7	1.9	2.1	2.3
Low inflation	1.1	1.1	1.0	.9	1.0
Escalating geopolitical tensions	1.4	1.4	1.6	1.9	1.9
<i>Federal funds rate¹</i>					
Extended Tealbook baseline	.1	.1	1.1	2.3	4.0
Faster recovery	.1	.1	1.7	3.4	5.4
Weaker household demand	.1	.1	.1	.1	2.0
Liftoff tantrum	.1	.1	.5	1.7	3.3
Supply-side damage	.1	.1	1.6	3.3	5.3
Low inflation	.1	.1	.1	.1	.6
Escalating geopolitical tensions	.1	.1	.1	.1	2.9

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

Forecast Confidence Intervals and Alternative Scenarios

Confidence Intervals Based on FRB/US Stochastic Simulations

- | | | |
|---|---|---|
| █ Extended Tealbook baseline
█ Faster recovery
█ Weaker household demand | █ Liftoff tantrum
█ Supply-side damage | █ Low inflation
█ Escalating geopolitical tensions |
|---|---|---|



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

Measure	2014	2015	2016	2017	2018
<i>Real GDP</i> <i>(percent change, Q4 to Q4)</i>					
Projection	2.8	3.2	3.1	2.6	2.1
Confidence interval					
Tealbook forecast errors	1.5–4.0	1.4–5.1
FRB/US stochastic simulations	1.6–4.0	1.6–5.1	1.4–5.1	.8–4.8	.1–4.2
<i>Civilian unemployment rate</i> <i>(percent, Q4)</i>					
Projection	6.2	5.6	5.1	4.8	4.8
Confidence interval					
Tealbook forecast errors	5.7–6.7	4.8–6.4
FRB/US stochastic simulations	5.6–6.8	4.6–6.5	3.9–6.3	3.4–6.0	3.4–6.0
<i>PCE prices, total</i> <i>(percent change, Q4 to Q4)</i>					
Projection	1.6	1.5	1.6	1.8	2.0
Confidence interval					
Tealbook forecast errors	.9–2.3	.3–2.7
FRB/US stochastic simulations	.9–2.3	.5–2.5	.6–2.7	.7–2.9	.9–3.2
<i>PCE prices excluding</i> <i>food and energy</i> <i>(percent change, Q4 to Q4)</i>					
Projection	1.5	1.7	1.8	1.9	2.0
Confidence interval					
Tealbook forecast errors	1.1–1.9	1.0–2.4
FRB/US stochastic simulations	1.1–2.0	1.0–2.4	1.0–2.6	1.0–2.8	1.0–3.0
<i>Federal funds rate</i> <i>(percent, Q4)</i>					
Projection	.1	1.1	2.3	3.4	4.0
Confidence interval					
FRB/US stochastic simulations	.1–.4	.1–2.1	.7–4.0	1.5–5.5	2.0–6.3

Note: Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1969–2013 set of model equation residuals.

Intervals derived from Tealbook forecast errors are based on projections made from 1979 to 2013, except for PCE prices excluding food and energy, where the sample is 1981–2013.

... 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	2014		2015		2016	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
<i>Real GDP</i>						
Staff	2.9	2.8	3.2	3.2	3.0	3.1
FRB/US	1.9	1.9	2.4	2.7	2.7	2.9
EDO	2.6	2.3	2.9	2.8	2.8	2.8
Blue Chip	2.7	2.7	3.0	3.0
<i>Unemployment rate¹</i>						
Staff	6.2	6.2	5.6	5.6	5.1	5.1
FRB/US	6.4	6.5	6.1	6.1	5.8	5.7
EDO	6.9	6.8	6.7	6.8	6.6	6.7
Blue Chip	6.2	6.2	5.8	5.8
<i>Total PCE prices</i>						
Staff	1.5	1.6	1.5	1.5	1.7	1.6
FRB/US	1.3	1.4	1.2	1.2	1.4	1.4
EDO	1.4	1.4	1.5	1.5	1.7	1.7
Blue Chip ²	2.0	1.9	2.1	2.0
<i>Core PCE prices</i>						
Staff	1.5	1.5	1.7	1.7	1.8	1.8
FRB/US	1.3	1.3	1.4	1.4	1.5	1.5
EDO	1.3	1.4	1.5	1.5	1.7	1.7
Blue Chip
<i>Federal funds rate¹</i>						
Staff	.1	.1	1.1	1.1	2.4	2.3
FRB/US	.1	.1	.1	.1	.6	.7
EDO	.9	1.1	1.8	1.9	2.4	2.5
Blue Chip ³	.1	.1	.9	.9

Note: Blue Chip forecast completed on April 10, 2014.

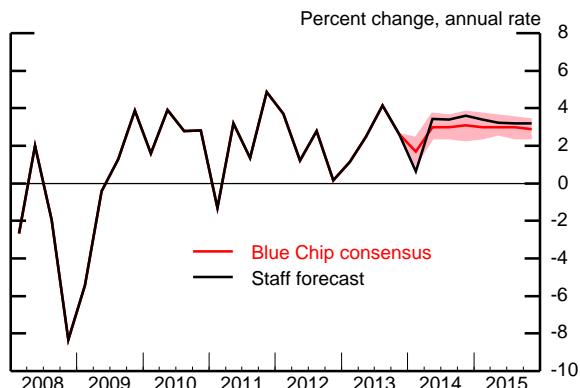
1. Percent, average for Q4.

2. Consumer price index.

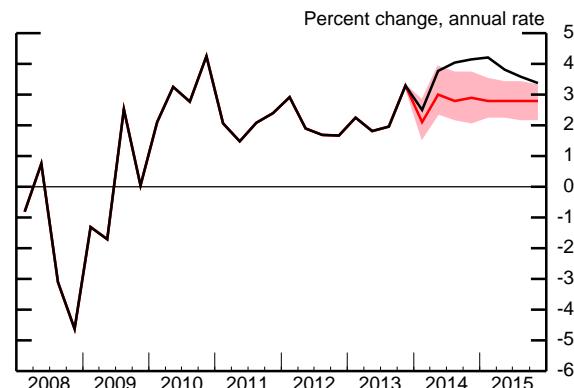
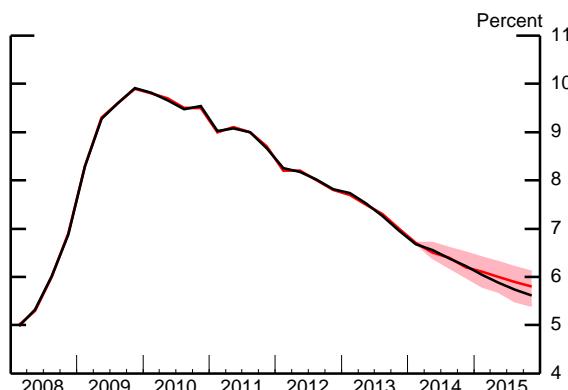
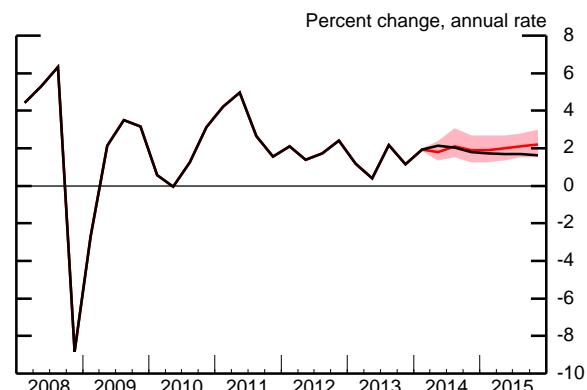
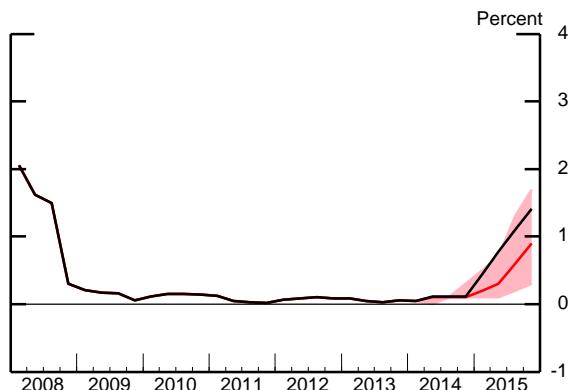
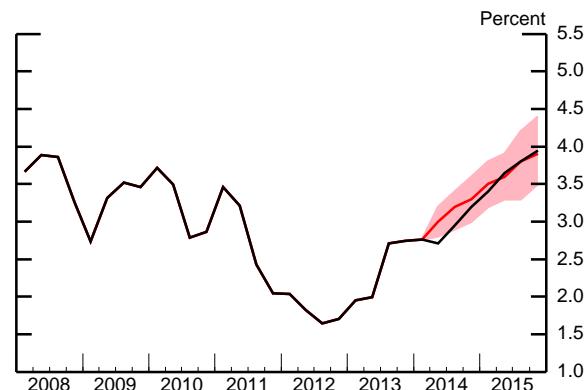
3. Treasury bill rate.

... Not applicable. The Blue Chip forecast is not available for core inflation.

Tealbook Forecast Compared with Blue Chip (Blue Chip survey released April 10, 2014)

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—2015:Q1)

Probability that the 4-quarter change in total PCE prices will be ...	Staff	FRB/US	EDO	BVAR
<i>Greater than 3 percent</i>				
Current Tealbook	.05	.03	.09	.07
Previous Tealbook	.04	.02	.10	.07
<i>Less than 1 percent</i>				
Current Tealbook	.22	.34	.34	.15
Previous Tealbook	.26	.38	.32	.15

Probability of Unemployment Events

(4 quarters ahead—2015:Q1)

Probability that the unemployment rate will ...	Staff	FRB/US	EDO	BVAR
<i>Increase by 1 percentage point</i>				
Current Tealbook	.02	.04	.21	.01
Previous Tealbook	.01	.03	.21	.01
<i>Decrease by 1 percentage point</i>				
Current Tealbook	.33	.17	.15	.29
Previous Tealbook	.31	.16	.14	.36

Probability of Near-Term Recession

Probability that real GDP declines in each of 2014:Q2 and 2014:Q3	Staff	FRB/US	EDO	BVAR	Factor Model
Current Tealbook	.01	.03	.03	.07	.09
Previous Tealbook	.02	.05	.03	.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)

	Nominal GDP		Real GDP		PCE price index		Core PCE price index		Unemployment rate ¹	
Interval	03/12/14	04/23/14	03/12/14	04/23/14	03/12/14	04/23/14	03/12/14	04/23/14	03/12/14	04/23/14
<i>Quarterly</i>										
2013:Q1	2.8	2.8	1.1	1.1	1.1	1.1	1.4	1.4	7.7	7.7
Q2	3.1	3.1	2.5	2.5	.7	.7	.6	.6	7.5	7.5
Q3	6.2	6.2	4.1	4.1	1.9	1.9	1.4	1.4	7.3	7.3
Q4	3.9	4.2	2.2	2.6	1.0	1.1	1.3	1.3	7.0	7.0
2014:Q1	3.0	2.3	1.5	.7	1.4	1.5	1.2	1.3	6.6	6.7
Q2	5.0	5.1	3.5	3.5	1.3	1.6	1.5	1.5	6.5	6.6
Q3	5.0	5.2	3.2	3.4	1.6	1.7	1.6	1.6	6.4	6.4
Q4	5.3	5.5	3.5	3.6	1.5	1.5	1.6	1.6	6.2	6.2
2015:Q1	5.2	5.4	3.2	3.4	1.6	1.5	1.7	1.7	6.0	6.0
Q2	5.1	5.1	3.2	3.2	1.6	1.5	1.8	1.7	5.9	5.9
Q3	5.0	5.0	3.2	3.2	1.6	1.5	1.7	1.7	5.7	5.7
Q4	5.0	4.9	3.3	3.2	1.5	1.5	1.6	1.6	5.6	5.6
<i>Two-quarter²</i>										
2013:Q2	3.0	3.0	1.8	1.8	.5	.5	1.0	1.0	-.3	-.3
Q4	5.1	5.2	3.2	3.4	1.5	1.5	1.3	1.3	-.5	-.5
2014:Q2	4.0	3.7	2.5	2.0	1.4	1.5	1.4	1.4	-.5	-.4
Q4	5.1	5.3	3.4	3.5	1.6	1.6	1.6	1.6	-.3	-.4
2015:Q2	5.2	5.2	3.2	3.3	1.6	1.5	1.7	1.7	-.3	-.3
Q4	5.0	5.0	3.2	3.2	1.5	1.5	1.7	1.7	-.3	-.3
<i>Four-quarter³</i>										
2012:Q4	3.8	3.8	2.0	2.0	1.7	1.7	1.7	1.7	-.9	-.9
2013:Q4	4.0	4.1	2.5	2.6	1.0	1.0	1.2	1.2	-.8	-.8
2014:Q4	4.6	4.5	2.9	2.8	1.5	1.6	1.5	1.5	-.8	-.8
2015:Q4	5.1	5.1	3.2	3.2	1.5	1.5	1.7	1.7	-.6	-.6
2016:Q4	4.9	5.0	3.0	3.1	1.7	1.6	1.8	1.8	-.5	-.5
<i>Annual</i>										
2012	4.6	4.6	2.8	2.8	1.8	1.8	1.8	1.8	8.1	8.1
2013	3.4	3.4	1.9	1.9	1.1	1.1	1.2	1.2	7.4	7.4
2014	4.3	4.3	2.7	2.6	1.3	1.4	1.3	1.4	6.4	6.5
2015	5.1	5.2	3.3	3.4	1.5	1.6	1.7	1.7	5.8	5.8
2016	5.0	5.0	3.1	3.1	1.6	1.6	1.8	1.8	5.3	5.3

- 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.

Greensheets
Changes in Real Gross Domestic Product and Related Items
(Percent, annual rate except as noted)

Item	2013			2014			2015			2013 ¹			2014 ¹			2015 ¹		
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2013 ¹	2014 ¹	2015 ¹	2014 ¹	2015 ¹	2016 ¹	
Real GDP <i>Previous Tealbook</i>	2.5	4.1	2.6	.7	3.5	3.4	3.6	3.4	3.2	3.2	3.2	2.6	2.8	3.2	3.2	3.2	3.1	
2.5	4.1	2.2	1.5	3.5	3.2	3.5	3.2	3.2	3.2	3.3	3.3	2.5	2.9	3.2	3.2	3.0	3.0	
Final sales <i>Previous Tealbook</i>	2.1	2.5	2.7	.9	3.7	3.7	3.5	3.8	3.5	3.4	3.2	1.8	2.9	3.5	3.4	3.0	3.2	
2.1	2.5	2.1	1.9	3.7	3.2	3.4	3.6	3.5	3.4	3.3	3.3	1.7	3.0	3.4	3.0	3.1	3.1	
Priv. dom. final purch. <i>Previous Tealbook</i>	2.6	2.7	3.2	2.3	4.0	4.7	4.7	4.8	4.5	4.2	4.0	2.5	3.9	4.4	3.9	4.4	3.6	
2.6	2.7	2.5	2.5	4.2	4.2	4.5	4.5	4.5	4.5	4.3	4.1	2.4	3.9	4.4	3.9	4.4	3.5	
Personal cons. expend. <i>Previous Tealbook</i>	1.8	2.0	3.3	2.5	3.8	4.0	4.1	4.2	3.8	3.6	3.4	2.3	3.6	3.7	3.5	3.7	2.9	
1.8	2.0	2.6	2.6	3.7	3.8	3.9	3.9	3.8	3.8	3.6	3.5	2.1	3.5	3.7	3.5	3.7	2.9	
Durables	6.2	7.9	2.8	-1.1	8.4	10.8	10.2	9.6	9.7	8.8	8.6	5.6	7.0	9.2	6.5	9.2	6.5	
Nondurables	1.6	2.9	2.9	-1.1	4.9	3.3	3.3	3.5	3.0	2.9	2.6	2.6	2.9	3.0	3.0	3.0	2.4	
Services	1.2	.7	3.5	4.0	2.7	3.2	3.5	3.6	3.2	3.0	2.8	1.7	3.3	3.1	3.1	3.1	2.6	
Residential investment <i>Previous Tealbook</i>	14.2	10.3	-7.9	-2.1	6.3	16.9	14.7	16.5	15.6	14.1	12.0	6.9	8.7	14.5	12.0	12.0	11.0	
14.2	10.3	-8.6	2.9	10.4	11.7	14.6	16.6	16.3	14.8	12.9	6.7	9.8	15.1	15.1	15.1	11.0		
Nonres. priv. fixed invest. <i>Previous Tealbook</i>	4.7	4.8	5.7	2.2	4.7	5.2	5.3	5.0	5.0	5.0	4.9	2.6	4.3	5.0	4.7	5.0	4.3	
4.7	4.8	5.5	1.6	5.7	4.6	5.2	5.0	5.0	5.0	5.0	5.1	2.5	4.3	5.0	4.3	5.0	4.3	
Equipment & intangibles <i>Previous Tealbook</i>	1.3	2.4	8.0	1.5	3.5	5.1	5.2	5.6	5.8	5.7	5.6	3.5	3.8	5.7	5.6	5.7	5.6	
1.3	2.4	7.6	1.6	5.2	4.6	5.3	5.8	5.8	5.8	5.9	5.9	3.4	4.2	5.8	5.0	5.8	5.0	
Nonres. structures <i>Previous Tealbook</i>	17.6	13.4	-1.8	4.5	8.5	5.4	5.4	2.9	2.6	2.5	2.5	.7	6.0	2.6	2.0	2.6	2.0	
17.6	13.4	-1.4	1.9	7.3	4.7	4.6	4.6	2.4	2.4	2.4	2.5	.6	4.6	2.4	1.9	2.4	1.9	
Net exports ² <i>Previous Tealbook</i> ²	-424	-420	-383	-421	-408	-414	-427	-433	-437	-441	-445	-412	-418	-439	-446	-412	-419	
-424	-420	-383	-392	-384	-389	-401	-404	-410	-414	-420	-420	-412	-392	-412	-412	-392	-419	
Exports	8.0	3.9	9.5	-5.5	3.4	4.4	4.8	4.9	5.1	5.2	4.9	4.9	4.7	4.9	5.0	5.6	5.6	
Imports	6.9	2.4	1.5	1.5	.7	4.6	6.2	5.0	4.9	4.9	4.9	4.7	2.8	3.2	4.9	4.6	4.6	
Gov't. cons. & invest. <i>Previous Tealbook</i>	-.4	.4	-5.2	.2	-.3	-.7	-.5	-.9	-.9	-.8	-.8	-.2	-2.4	-.3	-.7	-.5	-.5	
-.4	.4	-5.2	.3	-.5	-.9	-.6	-.6	-.6	-.1	-.8	-.8	-.2	-2.4	-.4	-.7	-.5	-.5	
Federal	-1.6	-1.5	-12.8	3.3	-2.5	-3.1	-2.6	-3.9	-3.9	-3.8	-3.9	-2.5	-6.2	-1.3	-3.5	-1.1	-1.1	
Defense	-.6	-.5	-14.4	2.4	-5.2	-5.1	-3.1	-4.5	-4.2	-4.1	-4.2	-2.5	-6.9	-2.8	-3.8	-1.9	-1.9	
Nonddefense	-3.1	-3.1	-10.0	4.7	2.1	.3	-2.0	-3.0	-3.0	-3.0	-3.5	-2.5	-5.0	1.2	-3.0	0	0	
State & local	.4	1.7	.0	-1.7	1.2	.8	.9	1.0	1.1	1.1	1.1	.2	.2	.3	1.1	1.1	1.5	
Change in priv. inventories ² <i>Previous Tealbook</i> ²	57	116	112	105	102	92	96	84	72	67	66	82	99	72	57	72	57	
57	116	117	109	106	111	100	90	85	83	83	83	108	90	90	80	90	80	
Nonfarm ²	33	89	89	93	95	87	91	82	70	64	63	58	92	70	55	70	55	
Farm ²	19	23	20	12	7	5	5	2	2	2	2	20	7	2	2	2	2	

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

2. Billions of chained (2009) 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	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Real GDP <i>Previous Tealbook</i>	1.9	-2.8	-2	2.8	2.0	2.0	2.6	2.8	3.2	3.1
Final sales <i>Previous Tealbook</i>	2.0	-2.2	-4	2.0	1.8	2.5	1.8	2.9	3.5	3.2
Priv. dom. final purch. <i>Previous Tealbook</i>	.8	-4.1	-2.3	3.5	3.0	2.9	2.5	3.9	3.4	3.1
Personal cons. expend. <i>Previous Tealbook</i>	1.5	-2.0	-1	3.1	2.0	2.0	2.3	3.6	3.7	2.9
Durables	1.5	-2.0	-1	3.1	2.0	2.0	2.1	3.5	3.7	2.9
Nondurables	4.1	-12.9	2.5	9.3	5.7	7.8	5.6	7.0	9.2	6.5
Services	.1	-2.7	.2	3.3	.7	1.6	2.6	2.9	3.0	2.4
Residential investment <i>Previous Tealbook</i>	-21.3	-24.3	-10.8	-5.2	5.6	15.5	6.9	8.7	14.5	12.0
Nonres. priv. fixed invest. <i>Previous Tealbook</i>	7.1	-8.9	-12.2	8.1	8.6	5.0	2.6	4.3	5.0	4.7
Equipment & intangibles <i>Previous Tealbook</i>	3.9	-11.8	-6.0	12.0	8.7	3.9	2.5	4.3	5.0	4.3
Nonres. structures <i>Previous Tealbook</i>	3.9	-11.8	-6.0	12.0	8.7	3.9	3.5	3.8	5.7	5.6
Gov't. cons. & invest. <i>Previous Tealbook</i>	17.1	-1.2	-27.1	-4.0	8.3	9.3	3.4	4.2	5.8	5.0
Net exports ¹ <i>Previous Tealbook</i>	-704	-547	-392	-463	-446	-431	-412	-418	-439	-446
Exports	9.8	-2.9	.4	9.8	4.6	2.4	4.9	1.7	5.0	5.6
Imports	.7	-5.9	-6.2	11.7	3.5	.1	2.8	3.2	4.9	4.6
State & local	1.2	.2	1.3	-4.0	-2.8	-3	2	.3	1.1	1.5
Change in priv. inventories ¹ <i>Previous Tealbook</i>	36	-34	-148	58	34	58	82	99	72	57
Nonfarm ¹	36	-34	-148	58	34	58	83	108	90	80
Farm ¹	37	-35	-146	66	40	69	58	92	70	55
	-1	1	-2	-7	-4	-7	20	7	2	2

1. Billions of chained (2009) dollars.

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

Item	2013			2014				2015				2013 ¹	2014 ¹	2015 ¹	2016 ¹
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Real GDP <i>Previous Tealbook</i>	2.5	4.1	2.6	.7	3.5	3.4	3.6	3.4	3.2	3.2	3.2	2.6	2.8	3.2	3.1
Final sales <i>Previous Tealbook</i>	2.1	2.5	2.6	.9	3.6	3.6	3.5	3.7	3.5	3.3	3.2	2.5	2.9	3.2	3.0
Priv. dom. final purch. <i>Previous Tealbook</i>	2.2	2.3	2.7	1.9	3.6	3.2	3.4	3.5	3.5	3.4	3.3	1.8	2.9	3.4	3.2
Personal cons. expend. <i>Previous Tealbook</i>	1.2	1.4	2.2	1.7	2.6	2.8	2.8	2.9	2.6	2.5	2.3	1.6	2.5	2.4	2.0
Durables	.5	.6	.2	-.1	.6	.8	.7	.7	.7	.6	.4	.5	.7	.5	.5
Nondurables	.3	.5	.5	.0	.8	.5	.5	.5	.5	.4	.4	.4	.5	.4	.4
Services	.5	.3	1.6	1.8	1.2	1.5	1.6	1.6	1.4	1.4	1.3	.8	1.5	1.4	1.2
Residential investment <i>Previous Tealbook</i>	.4	.3	-.3	-.1	.2	.5	.5	.5	.5	.5	.4	.2	.3	.5	.5
Nonres. priv. fixed invest. <i>Previous Tealbook</i>	.6	.6	.7	.3	.6	.6	.6	.6	.6	.6	.6	.3	.5	.6	.6
Equipment & intangibles <i>Previous Tealbook</i>	.6	.6	.7	.2	.7	.6	.6	.6	.6	.6	.6	.3	.5	.6	.5
Nonres. structures <i>Previous Tealbook</i>	.1	.2	.7	.1	.1	.3	.5	.5	.5	.5	.5	.3	.4	.5	.5
Net exports <i>Previous Tealbook</i>	-1	-1	1.0	-1.0	.3	-.1	-.3	-.1	-.1	-.1	-.1	2	-3	-1	0
Exports Imports	1.0	.5	1.2	-.8	.5	.6	.6	.7	.7	.6	.7	.2	-1	-1	0
Gov't. cons. & invest. <i>Previous Tealbook</i>	-1	-1	-1.0	0	0	-.1	-.1	-.2	-.1	-.1	0	0	-5	-1	-1
Federal Defense	-1	-1	-1.0	.1	-.1	-.2	-.2	-.1	-.2	-.3	-.3	-2	-5	-1	-1
Nondfense State & local	0	-1	-.3	.1	-.1	-.2	-.1	.1	.1	.1	.1	0	-1	0	.0
Change in priv. inventories <i>Previous Tealbook</i>	4	1.7	.0	-.3	-.2	-.2	-.1	-.3	-.3	-.1	0	.7	-1	-2	-1
Nonfarm Farm	4	1.7	.1	-.4	-.2	0	.2	-.3	-.2	-.1	0	.8	-1	-2	0
	3	1.6	.0	.1	-.1	-.2	0	.0	.0	.0	0	.5	0	-2	-1
	1	.1	-.1	-.4	-.2	0	.0	.0	.0	.0	0	.3	0	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	2013			2014			2015			2014 ¹			2015 ¹		2016 ¹	
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2013 ¹	2014 ¹	2015 ¹	2016 ¹	
GDP chain-wt. price index <i>Previous Tealbook</i>	.6	2.0	1.6	1.7	1.6	1.8	1.8	2.0	1.8	1.8	1.7	1.4	1.7	1.8	1.8	1.8
PCE chain-wt. price index <i>Previous Tealbook</i>	.6	2.0	1.7	1.5	1.5	1.8	1.7	1.9	1.8	1.8	1.7	1.4	1.6	1.8	1.8	1.8
Energy <i>Previous Tealbook</i>	-1.1	1.9	1.1	1.5	1.6	1.7	1.5	1.5	1.5	1.6	1.5	1.0	1.6	1.5	1.5	1.6
Food <i>Previous Tealbook</i>	-11.9	11.8	-1.0	1.4	1.3	1.6	1.5	1.6	1.6	1.6	1.5	1.0	1.5	1.5	1.5	1.7
Ex. food & energy <i>Previous Tealbook</i>	-11.9	11.8	-1.0	4.1	4.1	2.8	5	-9	-1.4	-1.3	-1.3	-1.5	2.3	-1.2	-9	-3
Ex. food & energy, market based <i>Previous Tealbook</i>	.5	1.2	1	1.4	2.6	1.6	1.2	1.1	1.3	1.3	1.4	-9	-1.5	-8	-1.1	-3
CPI <i>Previous Tealbook</i>	.5	1.2	.1	.6	1.2	1.4	1.1	1.1	1.3	1.3	1.4	.8	1.7	1.3	1.4	1.4
Ex. food & energy <i>Previous Tealbook</i>	.6	1.4	1.3	1.3	1.5	1.6	1.6	1.7	1.7	1.7	1.6	1.2	1.5	1.5	1.7	1.8
ECI, hourly compensation ² <i>Previous Tealbook²</i>	.6	1.4	1.3	1.2	1.5	1.6	1.6	1.7	1.8	1.7	1.6	1.2	1.5	1.5	1.7	1.8
Nonfarm business sector Output per hour <i>Previous Tealbook</i>	2.4	1.7	2.0	2.4	2.5	2.5	2.6	2.8	2.9	2.9	2.9	1.7	1.7	1.2	1.8	1.7
Compensation per hour <i>Previous Tealbook</i>	2.4	1.7	2.0	2.4	2.5	2.5	2.6	2.8	2.9	2.9	2.9	2.0	2.0	1.9	2.0	2.0
Unit labor costs <i>Previous Tealbook</i>	2.0	-2.1	.1	1.0	1.4	1.6	1.7	1.8	1.9	1.9	2.0	-9	1.4	1.9	1.7	1.7
Core goods imports chain-wt. price index ³ <i>Previous Tealbook³</i>	-2.4	-3.2	.6	1.3	.9	1.7	1.3	1.3	1.3	1.3	1.3	-1.1	1.3	1.3	1.3	1.4

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

2. Private-industry workers.

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

Greensheets**Changes in Prices and Costs**
(Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise noted)

Item	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
GDP chain-wt. price index <i>Previous Tealbook</i>	2.5 2.5	1.9 .4	.4 1.8	1.8 1.8	1.8 1.8	1.8 1.4	1.4 1.4	1.7 1.6	1.8 1.8	1.8 1.8
PCE chain-wt. price index <i>Previous Tealbook</i>	3.3 3.3	1.5 1.5	1.2 1.2	1.3 1.3	2.6 2.6	1.7 1.7	1.0 1.0	1.6 1.5	1.5 1.5	1.6 1.7
Energy <i>Previous Tealbook</i>	19.1 19.1	-8.2 -8.2	2.3 2.3	6.4 6.4	11.7 11.7	2.1 2.1	-1.5 -1.5	2.3 1.5	-1.2 -1.5	-9 -8
Food <i>Previous Tealbook</i>	4.9 4.9	6.9 6.9	-1.8 -1.8	1.3 1.3	5.1 5.1	1.2 1.2	.8 .8	1.7 1.7	1.3 1.3	1.4 1.4
Ex. food & energy <i>Previous Tealbook</i>	2.2 2.2	1.6 1.6	1.4 1.4	1.0 1.0	1.8 1.8	1.7 1.7	1.2 1.2	1.5 1.5	1.7 1.7	1.8 1.8
Ex. food & energy, market based <i>Previous Tealbook</i>	2.1 2.1	2.2 2.2	1.8 1.8	.7 .7	1.9 1.9	1.5 1.5	1.2 1.1	1.4 1.4	1.7 1.7	1.8 1.8
CPI <i>Previous Tealbook</i>	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 1.2	2.0 1.8	1.7 1.7	1.7 1.7
Ex. food & energy <i>Previous Tealbook</i>	2.3 2.3	2.0 2.0	1.8 1.8	.6 .6	2.2 2.2	1.9 1.9	1.7 1.7	1.9 1.9	2.0 2.0	2.0 2.0
ECl, hourly compensation ¹ <i>Previous Tealbook</i> ¹	3.0 3.0	2.4 2.4	1.2 1.2	2.1 2.1	2.2 2.2	1.8 1.8	2.0 2.0	2.5 2.5	2.9 2.9	3.2 3.2
Nonfarm business sector										
Output per hour <i>Previous Tealbook</i>	2.4 2.4	-.5 -.5	5.5 5.5	1.9 1.9	.4 .4	.8 .8	1.4 1.2	.9 1.4	1.6 1.4	1.9 1.8
Compensation per hour <i>Previous Tealbook</i>	3.9 3.9	3.0 3.0	1.2 1.2	1.6 1.6	1.0 1.0	5.3 5.3	.3 .3	2.5 2.8	3.2 3.3	3.4 3.6
Unit labor costs <i>Previous Tealbook</i>	1.5 1.5	3.5 3.5	-4.0 -4.0	-3 -3	.5 .5	4.4 4.4	-1.0 -.9	1.6 1.4	1.5 1.9	1.5 1.7
Core goods imports chain-wt. price index ² <i>Previous Tealbook</i> ²	3.0 3.0	3.9 3.9	-1.9 -1.9	2.3 2.3	4.2 4.2	.1 .1	-1.1 -1.1	1.3 1.1	1.3 1.3	1.3 1.4

1. Private-industry workers.

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

Other Macroeconomic Indicators

Item	2013			2014				2015				2013 ^l	2014 ^l	2015 ^l	2016 ^l
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
<i>Employment and production</i>															
Nonfarm payroll employment ²	.6	.5	.6	.5	.6	.6	.6	.7	.7	.7	.7	2.4	2.4	2.7	2.6
Unemployment rate ³	7.5	7.3	7.0	6.7	6.6	6.4	6.2	6.0	5.9	5.7	5.6	7.0	6.2	5.6	5.1
<i>Previous Tealbook</i> ³	7.5	7.3	7.0	6.6	6.5	6.4	6.2	6.0	5.9	5.7	5.6	7.0	6.2	5.6	5.1
Natural rate of unemployment ³	5.6	5.5	5.5	5.4	5.4	5.4	5.3	5.3	5.2	5.2	5.2	5.5	5.3	5.2	5.2
<i>Previous Tealbook</i> ³	5.6	5.5	5.5	5.4	5.4	5.4	5.3	5.3	5.2	5.2	5.2	5.5	5.3	5.2	5.2
GDP gap ⁴	-3.8	-3.2	-2.9	-3.2	-2.8	-2.4	-2.0	-1.6	-1.3	-1.0	-1.0	-2.9	-2.0	-2.7	.4
<i>Previous Tealbook</i> ⁴	-3.8	-3.2	-3.0	-3.1	-2.7	-2.3	-1.9	-1.6	-1.3	-1.0	-1.0	-3.0	-1.9	-2.7	.4
Industrial production ⁵	1.9	2.5	4.8	4.4	4.4	4.4	3.5	4.9	4.4	3.5	2.6	3.3	4.2	3.8	3.5
<i>Previous Tealbook</i> ⁵	1.2	2.5	5.4	2.3	4.7	4.3	3.5	4.4	4.5	3.9	3.2	3.3	3.7	4.0	3.5
Manufacturing industr. prod. ⁵	1.3	1.9	4.2	1.7	5.1	3.3	3.5	3.8	3.7	3.5	3.5	2.9	3.4	3.6	3.6
<i>Previous Tealbook</i> ⁵	1.1	1.6	4.6	-.1	4.1	3.3	3.6	3.9	4.1	3.9	3.9	2.8	2.7	4.0	3.6
Capacity utilization rate - mfg. ³	75.9	76.0	76.4	76.2	76.7	76.8	76.9	77.1	77.3	77.4	77.6	76.4	76.9	77.6	78.1
<i>Previous Tealbook</i> ³	76.1	76.1	76.6	76.3	76.7	76.9	77.2	77.5	77.8	78.0	78.3	76.6	77.2	78.3	79.1
Housing starts ⁶	.9	.9	1.0	.9	1.0	1.1	1.2	1.2	1.3	1.3	1.4	.9	1.1	1.3	1.5
Light motor vehicle sales ⁶	15.5	15.7	15.6	15.9	15.6	16.0	16.1	16.2	16.4	16.5	16.6	15.5	15.9	16.5	16.7
<i>Income and saving</i>															
Nominal GDP ⁵	3.1	6.2	4.2	2.3	5.1	5.2	5.5	5.4	5.1	5.0	4.9	4.1	4.5	5.1	5.0
Real disposable pers. income ⁵	4.1	3.0	.8	2.7	4.0	2.7	2.9	4.0	2.8	3.2	3.3	-.1	3.0	3.3	3.2
<i>Previous Tealbook</i> ⁵	4.1	3.0	.6	2.4	3.7	2.9	2.9	3.9	2.8	3.1	3.3	-.2	3.0	3.2	3.1
Personal saving rate ³	4.7	4.9	4.3	4.4	4.4	4.1	3.8	3.8	3.5	3.5	3.4	4.3	3.8	3.4	3.7
<i>Previous Tealbook</i> ³	4.7	4.9	4.5	4.5	4.5	4.3	4.0	4.0	3.8	3.6	3.6	4.5	4.0	3.6	3.8
Corporate profits ⁷	13.9	7.7	9.2	-7.6	6.0	10.7	8.3	1.8	5.4	3.4	2.7	6.2	4.1	3.3	4.7
Profit share of GNP ³	12.3	12.4	12.5	12.2	12.2	12.4	12.5	12.4	12.4	12.4	12.3	12.5	12.5	12.3	12.3
Net federal saving ⁸	-653	-850	-652	-616	-610	-606	-584	-585	-561	-548	-538	-752	-604	-558	-582
Net state & local saving ⁸	-198	-226	-230	-226	-201	-199	-189	-185	-164	-160	-151	-221	-204	-165	-134
Gross national saving rate ³	17.7	17.8	18.1	18.0	18.3	18.3	18.3	18.2	18.3	18.4	18.5	18.1	18.3	18.5	18.8
Net national saving rate ³	2.5	2.7	3.1	3.6	3.9	3.9	4.0	3.8	4.0	4.0	4.1	3.1	4.0	4.1	4.5

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

2. Change, millions.

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

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

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

5. Percent change, annual rate.

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

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

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

Greensheets

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

Item	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<i>Employment and production</i>										
Nonfarm payroll employment ¹	1.2	-2.8	-5.6	.8	2.0	2.2	2.4	2.4	2.7	2.6
Unemployment rate ²	4.8	6.9	9.9	9.5	8.7	7.8	7.0	6.2	5.6	5.1
<i>Previous Tealbook</i> ²	4.8	6.9	9.9	9.5	8.7	7.8	7.0	6.2	5.6	5.1
Natural rate of unemployment ²	5.3	5.6	6.2	6.2	6.0	5.8	5.5	5.3	5.2	5.2
<i>Previous Tealbook</i> ²	5.3	5.6	6.2	6.2	6.0	5.8	5.5	5.3	5.2	5.2
GDP gap ³	1.0	-4.0	-5.8	-4.8	-4.3	-3.9	-2.9	-2.0	-7	.4
<i>Previous Tealbook</i> ³	1.0	-4.0	-5.8	-4.8	-4.3	-3.9	-3.0	-1.9	-7	.4
Industrial production ⁴	2.6	-8.9	-5.5	6.2	3.2	3.2	3.3	4.2	3.8	3.5
<i>Previous Tealbook</i> ⁴	2.7	-8.9	-5.5	6.2	3.3	2.8	3.3	3.7	4.0	3.5
Manufacturing industr. prod. ⁴	2.8	-11.6	-6.1	6.4	3.1	3.5	2.9	3.4	3.6	3.6
<i>Previous Tealbook</i> ⁴	2.9	-11.6	-6.1	6.4	3.3	2.8	2.8	2.7	4.0	3.6
Capacity utilization rate - mfg. ²	78.5	70.0	67.1	72.7	74.6	75.5	76.4	76.9	77.6	78.1
<i>Previous Tealbook</i> ²	78.4	69.9	67.2	72.9	74.8	75.7	76.6	77.2	78.3	79.1
Housing starts ⁵	1.4	.9	.6	.6	.6	.8	.9	1.1	1.3	1.5
Light motor vehicle sales ⁵	16.1	13.1	10.4	11.5	12.7	14.4	15.5	15.9	16.5	16.7
<i>Income and saving</i>										
Nominal GDP ⁴	4.4	-1.0	.1	4.6	3.9	3.8	4.1	4.5	5.1	5.0
Real disposable pers. income ⁴	1.2	1.1	-.6	2.5	1.4	3.6	-.1	3.0	3.3	3.2
<i>Previous Tealbook</i> ⁴	1.2	1.1	-.6	2.5	1.4	3.6	-.2	3.0	3.2	3.1
Personal saving rate ²	2.9	6.1	5.7	5.5	5.0	6.6	4.3	3.8	3.4	3.7
<i>Previous Tealbook</i> ²	2.9	6.1	5.7	5.5	5.0	6.6	4.5	4.0	3.6	3.8
Corporate profits ⁶	-9.0	-30.8	54.5	17.0	8.4	2.7	6.2	4.1	3.3	4.7
Profit share of GNP ²	9.9	6.9	10.7	11.9	12.4	12.3	12.5	12.5	12.3	12.3
Net federal saving ⁷	-267	-635	-1,250	-1,330	-1,248	-1,110	-752	-604	-558	-582
Net state & local saving ⁷	-73	-165	-272	-237	-213	-253	-221	-204	-165	-134
Gross national saving rate ²	16.3	15.0	14.7	15.2	15.8	16.9	18.1	18.3	18.5	18.8
Net national saving rate ²	1.0	-1.6	-1.6	-.4	.5	1.7	3.1	4.0	4.1	4.5

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				2013				2014				2015			
	2013 ^a	2014	2015	2016	Q1 ^a	Q2 ^a	Q3 ^a	Q4 ^a	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget																
Receipts ¹	2,775	3,051	3,278	3,482	581	891	687	665	656	964	766	737	674	1,038	829	771
Outlays ¹	3,455	3,502	3,700	3,933	888	800	857	837	897	894	874	935	947	925	893	963
Surplus/deficit ¹	-680	-451	-422	-451	-307	91	-170	-173	-241	70	-108	-198	-273	113	-65	-192
<i>Previous Tealbook</i>	-680	-484	-419	-448	-307	91	-170	-174	-301	90	-99	-196	-272	114	-65	-192
On-budget	-719	-482	-451	-471	-303	36	-143	-183	-238	17	-78	-223	-256	62	-33	-214
Off-budget	39	31	28	20	-4	55	-28	10	-3	53	-29	25	-17	51	-32	22
Means of financing:																
Borrowing	702	653	542	571	336	-17	69	371	262	-38	58	228	303	-83	95	222
Cash decrease	-3	18	0	0	14	-56	46	-74	20	-8	80	0	0	0	0	0
Other ²	-20	-221	-120	-120	-43	-18	55	-124	-42	-25	-30	-30	-30	-30	-30	-30
Cash operating balance, end of period	88	70	70	70	79	135	88	162	142	150	70	70	70	70	70	70
NIPA federal sector																
Receipts	2,938	3,230	3,448	3,644	2,900	3,167	2,976	3,120	3,222	3,266	3,311	3,361	3,430	3,476	3,524	3,570
Expenditures	3,797	3,851	4,017	4,215	3,753	3,820	3,826	3,772	3,838	3,877	3,916	3,944	4,014	4,037	4,072	4,108
Consumption expenditures	981	951	944	944	982	976	972	953	951	951	949	946	949	944	938	936
Defense	620	597	591	590	620	616	615	598	601	597	593	592	593	590	588	587
Nondefense	361	354	354	353	363	360	358	356	350	354	356	355	356	353	351	349
Other spending	2,815	2,900	3,073	3,271	2,771	2,844	2,853	2,819	2,887	2,926	2,968	2,998	3,066	3,093	3,134	3,172
Current account surplus	-859	-621	-569	-571	-853	-653	-850	-652	-616	-610	-606	-584	-585	-561	-548	-538
Gross investment	277	270	261	255	273	277	279	271	273	270	267	265	262	259	257	256
Gross saving less gross investment ³	-870	-619	-552	-540	-860	-663	-861	-653	-618	-608	-598	-573	-569	-541	-524	-511
Fiscal indicators⁴																
High-employment (HEB) surplus/deficit	-653.5	-443.3	-450.0	-519.0	-629.4	-440.7	-659.9	-472.0	-425.1	-433.3	-443.0	-438.5	-456.2	-450.0	-455.2	-462.7
Change in HEB, percent of potential GDP	-1.9	-1.3	-1	.3	-1.5	-1.1	1.2	-1.1	-.3	.0	.0	.0	.1	-.1	.0	.0
Fiscal impetus (FI), percent of GDP	-1.2	-.5	-.3	-.1	-.1	-.2	-.7	-.7	-.5	-.7	-.6	-.4	-.4	-.6	-.2	-.2
<i>Previous Tealbook</i>	-1.2	-.6	-.4	-.1	-.1	-.2	-.7	-.7	-.5	-.7	-.6	-.4	-.4	-.6	-.3	-.2

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

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

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

4. HEB is gross saving less gross investment (NIPA) of the federal government in current dollars, with cyclically sensitive receipts and outlays adjusted to the staff's measure of potential output and the natural rate of unemployment. The sign on Change in HEB, as a percent of nominal potential GDP, is reversed. FI is the weighted difference of discretionary changes in federal spending and taxes in chained (2009) 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.

Greensheets

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

Authorized for Public Release

Class II FOMC - Restricted (FR)

April 23, 2014

Measure and country	2013				2014				Projected 2015			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Real GDP¹												
Total foreign	2.0	2.4	3.0	2.8	2.3	2.7	3.2	3.2	3.3	3.3	3.3	3.1
<i>Previous Tealbook</i>	2.0	2.4	3.0	2.8	2.7	2.8	3.1	3.2	3.3	3.3	3.4	3.2
Advanced foreign economies	1.8	2.2	1.9	2.1	1.8	1.9	2.1	2.2	2.2	2.2	2.3	1.9
Canada	2.9	2.2	2.7	2.9	1.5	3.3	2.6	2.6	2.7	2.7	2.7	2.7
Japan	4.5	4.1	.9	.7	3.1	-3.4	1.7	1.8	1.4	1.2	2.2	-1.6
United Kingdom	1.4	3.1	3.4	2.7	3.0	2.9	2.9	2.7	2.7	2.7	2.6	2.4
Euro area	-9	1.3	.6	.9	1.4	1.4	1.4	1.5	1.7	1.7	1.8	1.8
Germany	.0	2.9	1.3	1.5	1.9	1.9	1.9	2.0	2.0	2.0	2.2	2.2
Emerging market economies	2.2	2.6	4.2	3.4	2.7	3.6	4.2	4.3	4.3	4.3	4.3	4.3
Asia	3.5	5.0	6.0	6.2	4.0	4.5	5.5	5.5	5.5	5.5	5.4	5.4
Korea	2.5	4.1	4.4	3.6	3.2	3.5	4.3	4.3	4.2	4.2	4.2	4.2
China	6.5	7.2	8.8	8.0	5.6	6.2	7.5	7.5	7.3	7.3	7.2	7.2
Latin America	1.0	.2	2.7	1.0	1.5	2.8	3.1	3.2	3.3	3.3	3.4	3.4
Mexico	.8	-2.7	3.9	.7	2.0	3.2	3.3	3.5	3.6	3.6	3.6	3.6
Brazil	.0	7.5	-2.1	2.8	.4	2.2	2.5	2.5	2.6	2.6	2.7	2.7
<i>Consumer prices²</i>												
Total foreign	2.3	1.9	2.7	2.4	2.0	3.0	2.5	2.5	2.5	2.5	2.6	3.0
<i>Previous Tealbook</i>	2.3	1.9	2.8	2.4	2.1	3.2	2.4	2.5	2.5	2.5	2.6	3.0
Advanced foreign economies	.9	.5	2.0	.7	1.1	2.7	1.3	1.4	1.4	1.4	1.5	2.6
Canada	1.6	-1	1.9	.5	2.7	1.8	1.6	1.7	1.7	1.7	1.8	1.8
Japan	.0	.8	3.0	1.9	.8	8.8	.8	.9	1.0	1.1	1.2	6.6
United Kingdom	2.3	1.8	2.8	1.5	.9	1.5	1.8	2.3	1.7	1.7	1.8	2.3
Euro area	.8	.7	1.6	.1	.2	.9	1.4	1.3	1.3	1.3	1.4	1.4
Germany	1.4	.8	2.4	.8	.1	1.1	1.7	1.6	1.6	1.6	1.6	1.6
Emerging market economies	3.4	3.0	3.3	3.7	2.6	3.2	3.4	3.4	3.4	3.4	3.4	3.3
Asia	3.3	2.0	3.6	3.4	1.4	2.9	3.2	3.2	3.2	3.2	3.2	3.2
Korea	1.0	.4	1.7	1.1	1.3	2.4	2.8	3.1	3.2	3.2	3.1	3.1
China	3.2	2.1	3.4	3.0	.8	2.8	3.0	3.0	3.0	3.0	3.0	3.0
Latin America	3.5	5.4	2.6	4.5	5.7	3.8	3.9	3.8	3.8	3.8	3.8	3.8
Mexico	3.2	5.3	2.0	4.2	5.2	3.0	3.3	3.3	3.3	3.3	3.3	3.3
Brazil	7.0	5.8	4.6	6.0	6.9	7.6	6.0	5.6	5.4	5.4	5.4	5.4

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

²Foreign 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	2008	2009	2010	2011	2012	2013	2014	2015	2016	Projected
Real GDP¹										
Total foreign	-.6	.9	4.7	3.0	2.3	2.5	2.8	3.2	3.3	3.3
<i>Previous Tealbook</i>	-.7	1.0	4.6	3.0	2.3	2.6	3.0	3.3	3.4	3.4
Advanced foreign economies	-1.5	-1.5	3.0	1.5	.3	2.0	2.0	2.2	2.2	2.2
Canada	.1	-1.4	3.6	2.4	1.0	2.7	2.5	2.7	2.6	2.6
Japan	-4.8	-.6	3.5	.3	-.3	2.5	.8	.8	1.1	1.1
United Kingdom	-4.3	-2.5	1.8	1.1	.2	2.7	2.9	2.6	2.5	2.5
Euro area	-2.1	-2.3	2.3	.7	-1.0	.5	1.4	1.7	1.9	1.9
Germany	-1.8	-2.2	4.2	2.2	.3	1.4	1.9	2.1	2.3	2.3
Emerging market economies	.5	3.8	6.5	4.6	4.3	3.1	3.7	4.3	4.4	4.4
Asia	1.1	7.9	8.0	5.0	5.5	5.2	4.9	5.4	5.4	5.4
Korea	-1.6	4.9	6.1	3.0	2.1	3.6	3.8	4.2	4.1	4.1
China	7.7	11.3	9.7	8.7	7.8	7.6	6.7	7.2	7.1	7.1
Latin America	-.4	-.1	4.7	4.0	3.2	1.2	2.6	3.3	3.5	3.5
Mexico	-1.3	-1.2	4.4	4.1	3.3	.6	3.0	3.6	3.7	3.7
Brazil	.9	5.3	5.3	1.4	1.8	2.0	1.9	2.6	2.7	2.7
Consumer prices ²										
Total foreign	3.3	1.2	3.2	3.4	2.3	2.3	2.3	2.5	2.6	2.6
<i>Previous Tealbook</i>	3.3	1.2	3.2	3.4	2.3	2.3	2.3	2.5	2.6	2.6
Advanced foreign economies	2.0	.2	1.7	2.2	1.3	1.0	1.0	1.6	1.7	1.6
Canada	1.8	.8	2.2	2.7	.9	1.0	1.0	2.0	1.7	1.9
Japan	1.1	-2.0	-.3	-.3	-.2	1.4	2.8	2.4	2.4	1.3
United Kingdom	3.9	2.2	3.4	4.6	2.6	2.1	1.6	1.9	1.8	1.8
Euro area	2.3	.4	2.0	2.9	2.3	.8	.9	1.4	1.5	1.5
Germany	1.7	.3	1.6	2.6	2.0	1.3	1.1	1.6	1.7	1.7
Emerging market economies	4.6	2.0	4.3	4.3	3.1	3.3	3.1	3.4	3.3	3.3
Asia	3.7	1.2	4.3	4.5	2.6	3.1	2.7	3.2	3.2	3.2
Korea	4.5	2.4	3.2	3.9	1.7	1.1	2.4	3.2	3.2	3.2
China	2.5	.6	4.7	4.6	2.1	2.9	2.4	3.0	3.0	3.0
Latin America	6.6	3.9	4.4	4.0	4.3	4.0	4.3	3.8	3.7	3.7
Mexico	6.2	4.0	4.3	3.5	4.1	3.7	3.7	3.3	3.3	3.3
Brazil	6.2	4.2	5.6	6.7	5.6	5.8	6.5	5.4	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**

	2013				2014				Projected 2015			
	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	-420.2	-387.0	-385.5	-324.5	-368.5	-350.9	-385.7	-408.2	-438.9	-414.7	-440.9	-454.2
<i>Previous Tealbook</i>	-416.9	-383.8	-382.6	-357.6	-385.0	-354.5	-387.9	-412.6	-441.9	-420.9	-447.2	-465.9
Current account as percent of GDP	-2.5	-2.3	-2.3	-1.9	-2.1	-2.0	-2.0	-2.3	-2.4	-2.3	-2.4	-2.4
<i>Previous Tealbook</i>	-2.5	-2.3	-2.3	-2.1	-2.2	-2.0	-2.0	-2.3	-2.4	-2.3	-2.4	-2.5
Net goods & services	-487.8	-469.8	-486.2	-455.7	-485.0	-467.3	-486.6	-501.3	-505.4	-487.1	-498.6	-507.0
Investment income, net	208.3	229.5	245.4	266.5	276.8	259.7	247.8	236.6	226.8	215.7	204.6	196.3
Direct, net	273.4	287.4	301.4	321.0	319.9	319.1	315.8	315.2	318.7	321.5	327.8	336.8
Portfolio, net	-65.1	-57.9	-56.0	-54.5	-43.1	-59.4	-68.1	-78.6	-91.9	-105.8	-123.2	-140.5
Other income and transfers, net	-140.7	-146.7	-144.7	-135.3	-160.3	-143.3	-146.9	-143.5	-160.3	-143.3	-146.9	-143.5
<i>Annual Data</i>												
	2008	2009	2010	2011	2012	2013	2014	2015	2016			
U.S. current account balance	-681.3	-381.6	-449.5	-457.7	-440.4	-379.3	-378.3	-437.2	-476.0			
<i>Previous Tealbook</i>	-681.3	-381.6	-449.5	-457.7	-440.4	-385.2	-385.0	-444.0	-495.7			
Current account as percent of GDP	-4.6	-2.6	-3.0	-2.9	-2.7	-2.3	-2.2	-2.4	-2.5			
<i>Previous Tealbook</i>	-4.6	-2.6	-3.0	-2.9	-2.7	-2.3	-2.2	-2.4	-2.6			
Net goods & services	-702.3	-383.7	-499.4	-556.8	-534.7	-474.9	-485.0	-499.5	-501.6			
Investment income, net	157.8	132.3	185.7	240.7	232.3	237.4	255.2	210.9	174.1			
Direct, net	284.3	257.7	288.0	310.6	293.5	295.8	317.5	326.2	354.7			
Portfolio, net	-126.5	-125.4	-102.3	-69.8	-61.2	-58.4	-62.3	-115.3	-180.6			
Other income and transfers, net	-136.9	-130.2	-135.8	-141.6	-138.0	-141.8	-148.5	-148.5	-148.5			

Class I FOMC – Restricted Controlled (FR)

Report to the FOMC on Economic Conditions and Monetary Policy



Book B Monetary Policy: Strategies and Alternatives

April 24, 2014

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 Rules¹

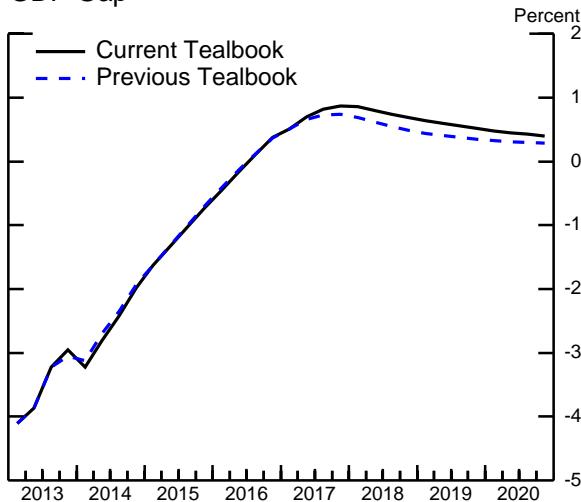
	Constrained Policy		Unconstrained Policy	
	2014Q2	2014Q3	2014Q2	2014Q3
Taylor (1993) rule	1.69	1.97	1.69	1.97
<i>Previous Tealbook</i>	1.69	1.94	1.69	1.94
Taylor (1999) rule	0.30	0.77	0.30	0.77
<i>Previous Tealbook</i>	0.35	0.78	0.35	0.78
Inertial Taylor (1999) rule	0.15	0.24	0.15	0.24
<i>Previous Tealbook outlook</i>	0.16	0.25	0.16	0.25
Outcome-based rule	0.38	0.76	0.38	0.76
<i>Previous Tealbook outlook</i>	0.39	0.75	0.39	0.75
First-difference rule	0.72	1.28	0.72	1.28
<i>Previous Tealbook outlook</i>	0.66	1.18	0.66	1.18
Nominal income targeting rule	0.13	0.13	-0.56	-0.97
<i>Previous Tealbook outlook</i>	0.13	0.13	-0.55	-0.97

Memo: Equilibrium and Actual Real Federal Funds Rates²

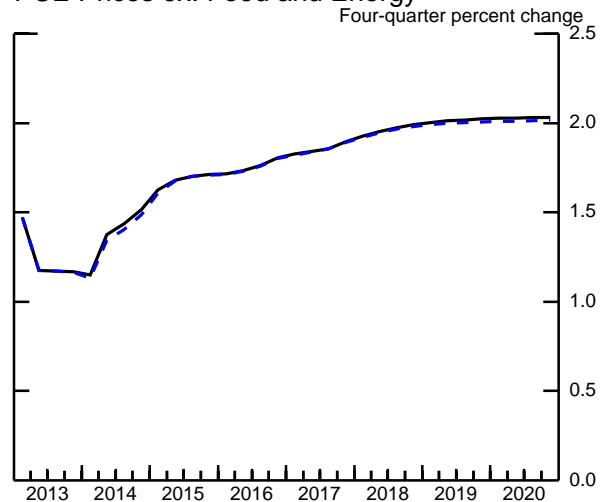
	Current Tealbook	Current Quarter Estimate as of Previous Tealbook	Previous Tealbook
Tealbook-consistent FRB/US r^* estimate	-0.87	-0.84	-0.74
Actual real federal funds rate	-1.02		-1.03

Key Elements of the Staff Projection

GDP Gap



PCE Prices ex. Food and Energy

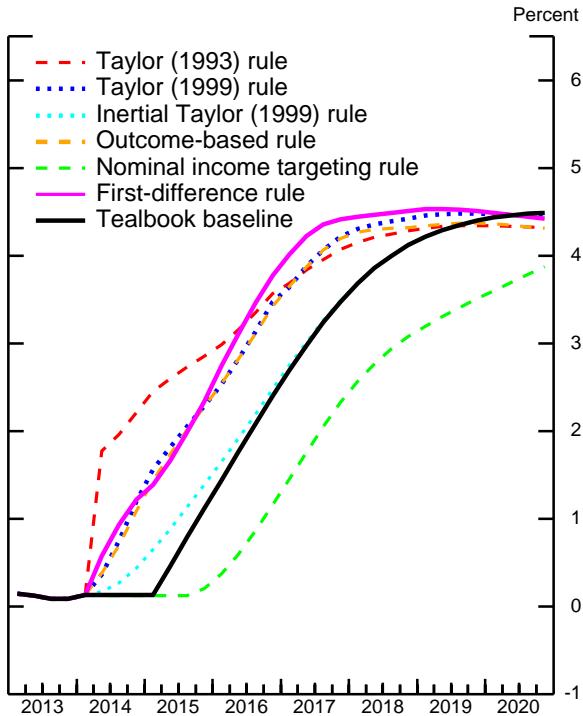
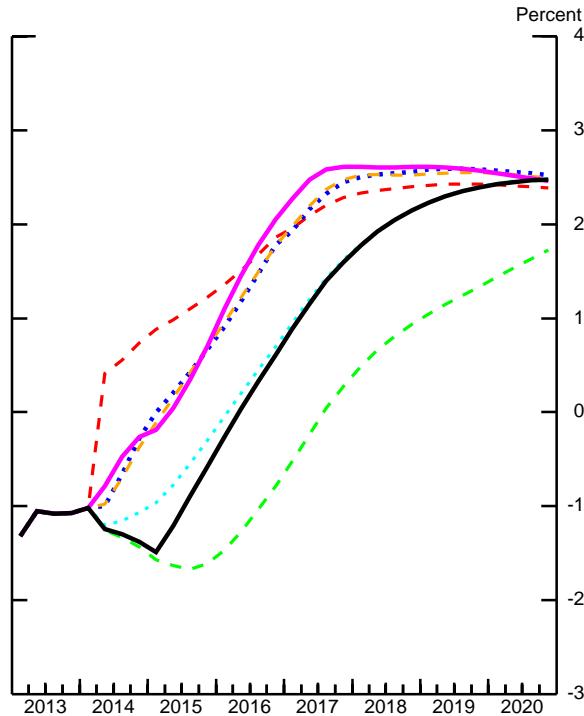
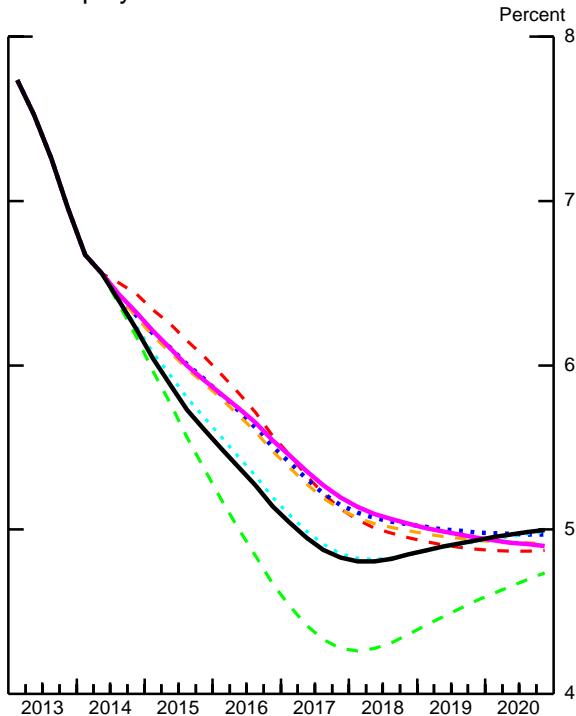
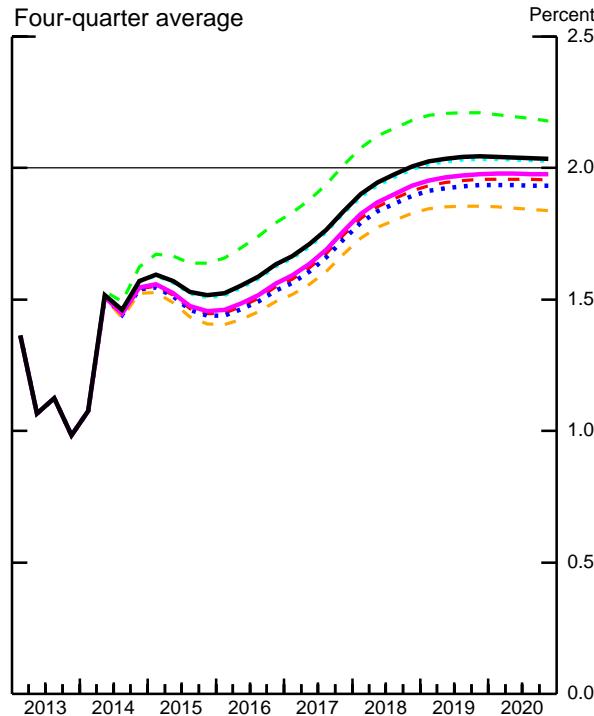


1. For rules that have the lagged policy rate as a right-hand-side variable, the lines denoted "Previous Tealbook outlook" report rule prescriptions based on the previous Tealbook's staff outlook, but jumping off from the realized value for the policy rate last quarter.

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

Policy Rule Simulations

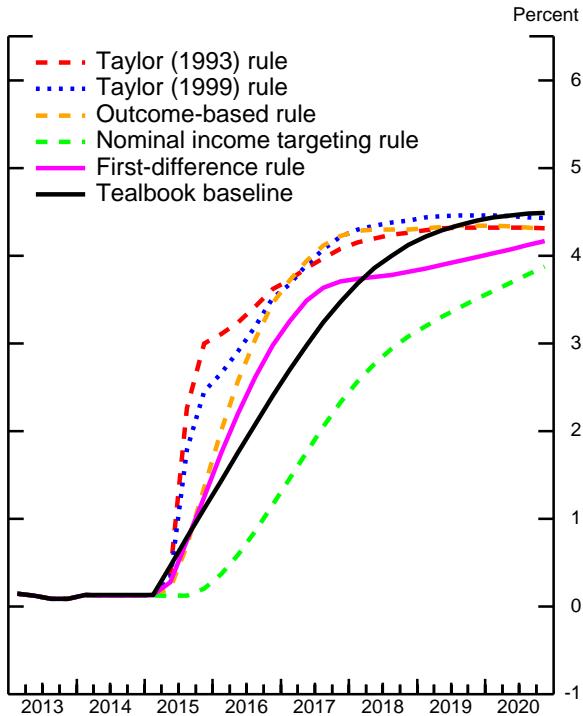
Strategies

Effective Nominal Federal Funds Rate**Real Federal Funds Rate****Unemployment Rate****PCE Inflation**
Four-quarter average

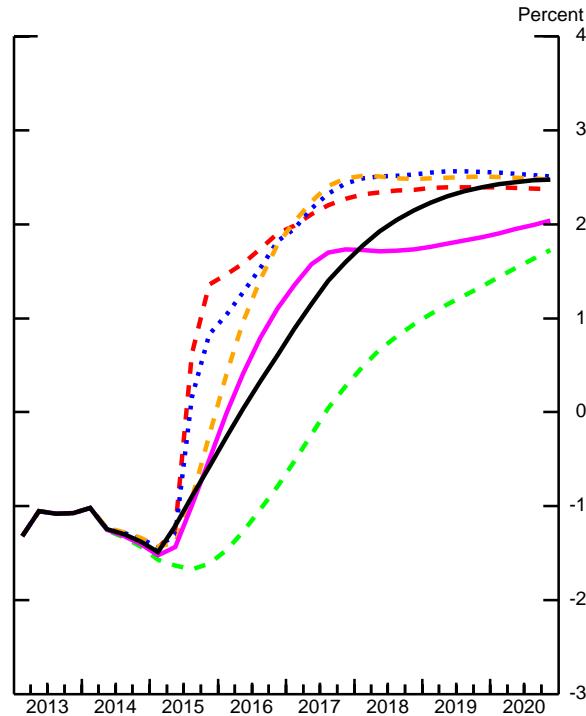
Note: The policy rule simulations in this exhibit are based on rules that respond to core inflation. This choice of rule specification was made in light of the tendency for current and near-term core inflation rates to outperform headline inflation rates as predictors of the medium-term behavior of headline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

Policy Rule Simulations with 6 Percent Unemployment Rate Threshold

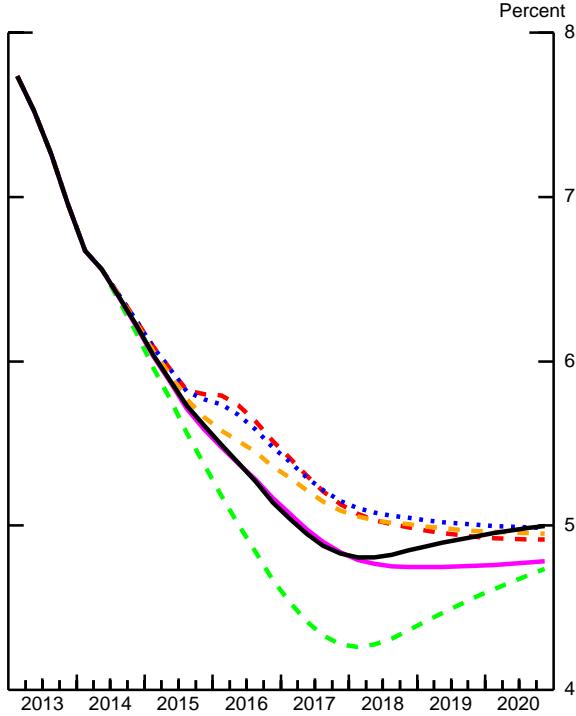
Effective Nominal Federal Funds Rate



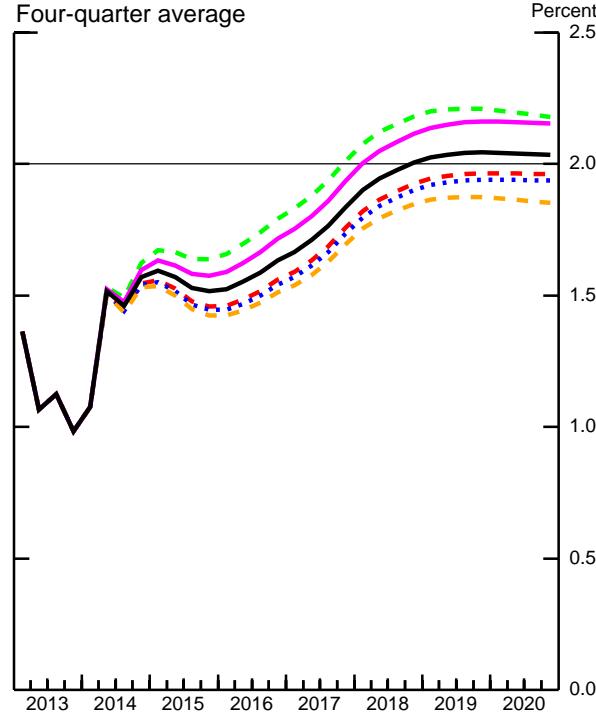
Real Federal Funds Rate



Unemployment Rate



PCE Inflation

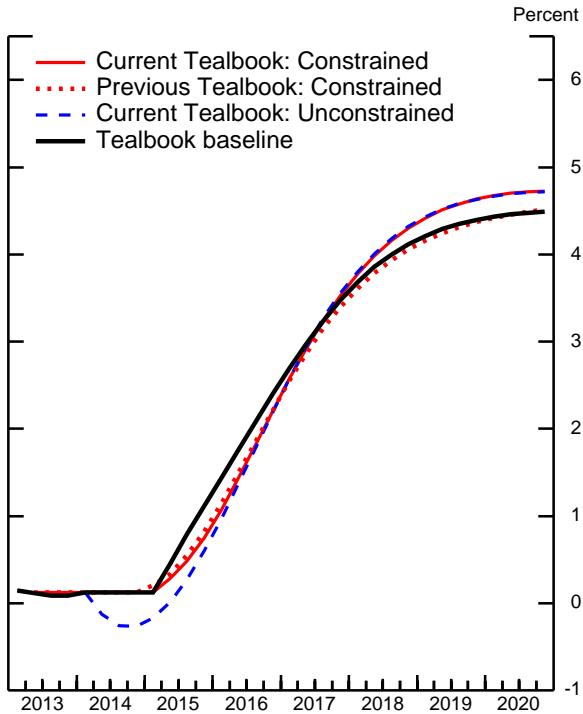


Note: The policy rule simulations in this exhibit keep the federal funds rate at an effective lower bound of 12½ basis points as long as the unemployment rate is 6 percent or more. Thereafter, the federal funds rate follows the prescriptions of the specified rule. In addition, the simulations are based 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.

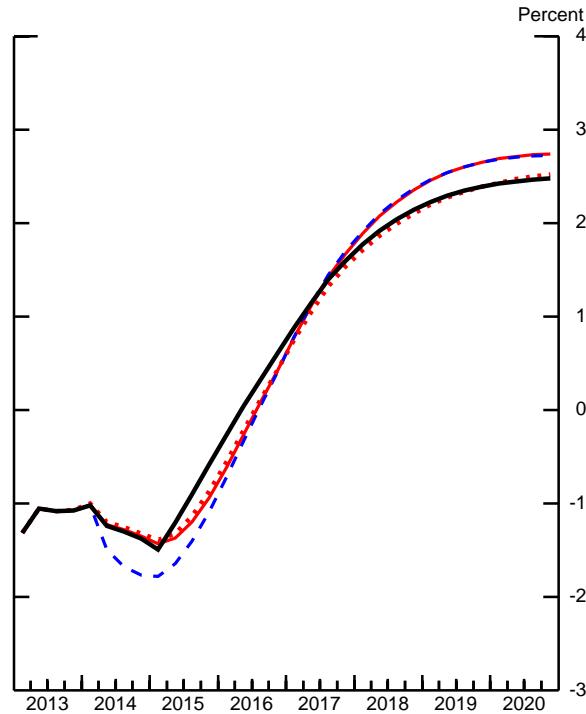
Strategies

Constrained versus Unconstrained Optimal Control Policy

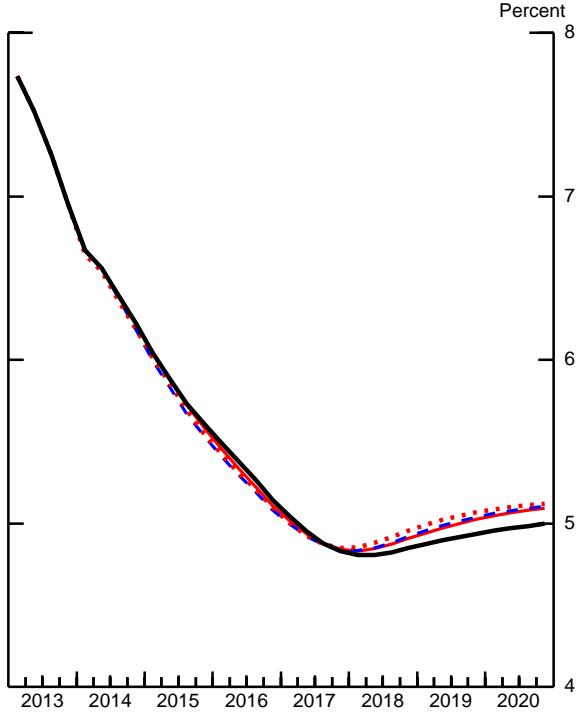
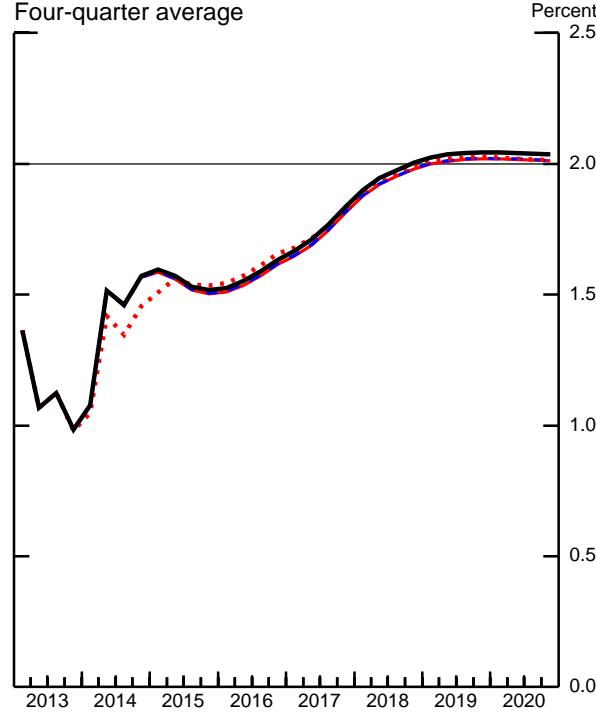
Effective Nominal Federal Funds Rate



Real Federal Funds Rate



Unemployment Rate

PCE Inflation
Four-quarter average

Outcomes under Alternative Policies

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

Measure and policy	2013					
	H2	2014	2015	2016	2017	2018
<i>Real GDP</i>						
Extended Tealbook baseline ¹	3.4	2.8	3.2	3.1	2.6	2.1
Taylor (1993)	3.4	2.4	2.8	3.1	2.9	2.4
Taylor (1999)	3.4	2.6	2.8	3.0	2.7	2.3
Inertial Taylor (1999)	3.4	2.7	3.2	3.1	2.7	2.1
Outcome based	3.4	2.6	2.9	3.0	2.7	2.3
First difference	3.4	2.6	2.8	2.9	2.7	2.3
Nominal income targeting	3.4	2.9	3.7	3.5	2.8	1.9
Constrained optimal control	3.4	2.8	3.3	3.1	2.6	2.0
<i>Unemployment rate²</i>						
Extended Tealbook baseline ¹	7.0	6.2	5.6	5.1	4.8	4.8
Taylor (1993)	7.0	6.4	6.1	5.6	5.1	5.0
Taylor (1999)	7.0	6.3	5.9	5.5	5.2	5.0
Inertial Taylor (1999)	7.0	6.2	5.7	5.2	4.9	4.9
Outcome based	7.0	6.3	5.9	5.5	5.1	5.0
First difference	7.0	6.3	5.9	5.5	5.2	5.0
Nominal income targeting	7.0	6.2	5.4	4.7	4.3	4.4
Constrained optimal control	7.0	6.2	5.6	5.1	4.8	4.9
<i>Total PCE prices</i>						
Extended Tealbook baseline ¹	1.5	1.6	1.5	1.6	1.8	2.0
Taylor (1993)	1.5	1.5	1.4	1.5	1.7	1.9
Taylor (1999)	1.5	1.5	1.4	1.5	1.7	1.9
Inertial Taylor (1999)	1.5	1.6	1.5	1.6	1.8	2.0
Outcome based	1.5	1.5	1.4	1.5	1.7	1.8
First difference	1.5	1.5	1.5	1.6	1.8	1.9
Nominal income targeting	1.5	1.6	1.6	1.8	2.0	2.2
Constrained optimal control	1.5	1.6	1.5	1.6	1.8	2.0
<i>Core PCE prices</i>						
Extended Tealbook baseline ¹	1.3	1.5	1.7	1.8	1.9	2.0
Taylor (1993)	1.3	1.5	1.6	1.7	1.8	1.9
Taylor (1999)	1.3	1.5	1.6	1.7	1.8	1.9
Inertial Taylor (1999)	1.3	1.5	1.7	1.8	1.9	2.0
Outcome based	1.3	1.5	1.6	1.7	1.7	1.8
First difference	1.3	1.5	1.7	1.7	1.8	1.9
Nominal income targeting	1.3	1.6	1.8	2.0	2.1	2.2
Constrained optimal control	1.3	1.5	1.7	1.8	1.9	2.0
<i>Effective nominal federal funds rate²</i>						
Extended Tealbook baseline ¹	0.1	0.1	1.1	2.4	3.5	4.1
Taylor (1993)	0.1	2.2	2.9	3.6	4.1	4.3
Taylor (1999)	0.1	1.2	2.3	3.5	4.2	4.4
Inertial Taylor (1999)	0.1	0.4	1.4	2.5	3.5	4.1
Outcome based	0.1	1.1	2.3	3.4	4.2	4.3
First difference	0.1	1.2	2.3	3.8	4.4	4.5
Nominal income targeting	0.1	0.1	0.2	1.2	2.3	3.1
Constrained optimal control	0.1	0.2	0.7	2.1	3.4	4.2

1. In the Tealbook baseline, the federal funds rate first departs from an effective lower bound of 12½ basis points two quarters after the end of the asset purchase program. Thereafter, the federal funds rate follows the prescriptions of the inertial Taylor (1999) rule.

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

**Outcomes under Alternative Policies
with 6 Percent Unemployment Rate Threshold¹**

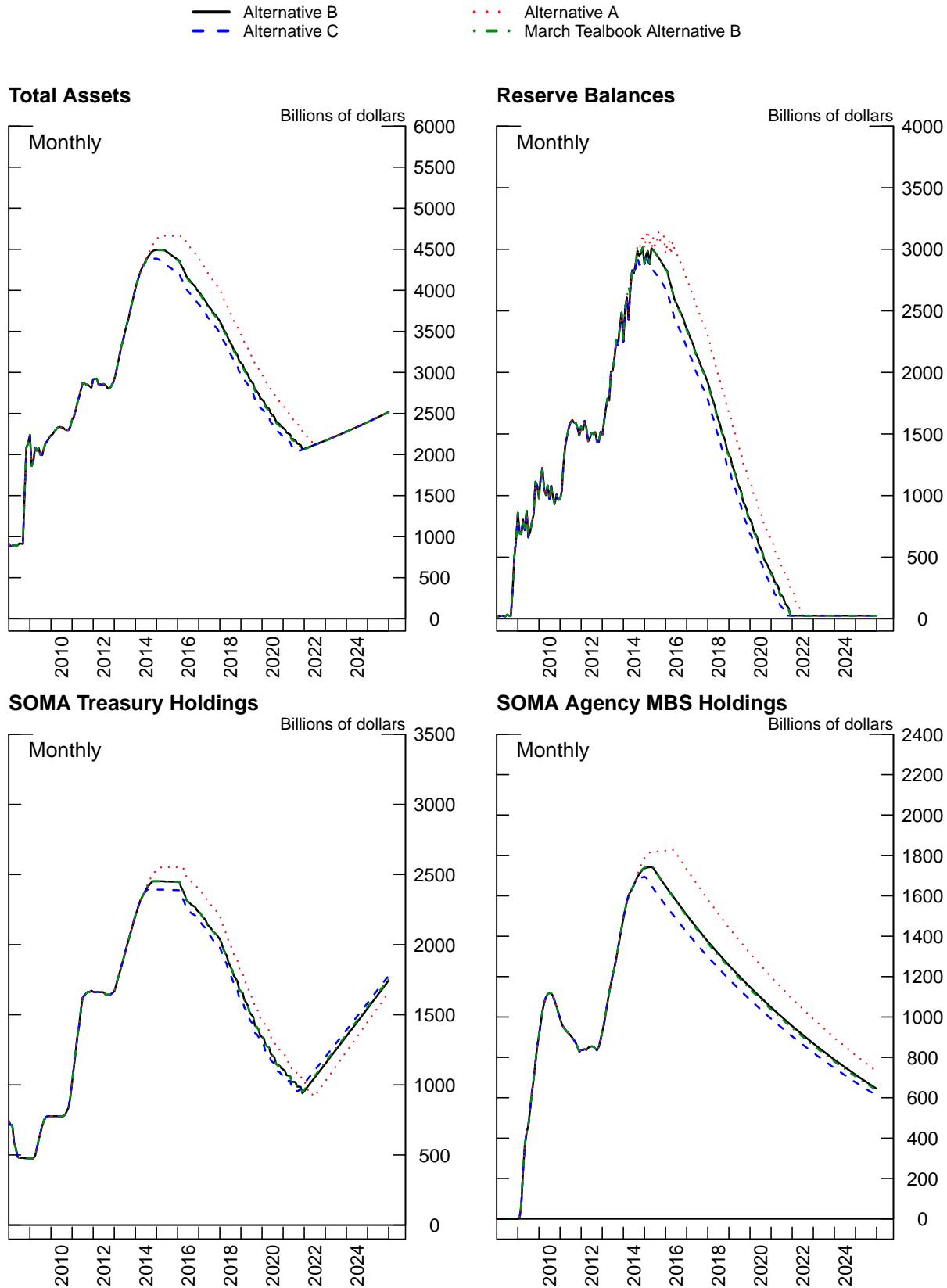
(Percent change, annual rate, from end of preceding period except as noted)

Measure and policy	2013					
	H2	2014	2015	2016	2017	2018
<i>Real GDP</i>						
Extended Tealbook baseline	3.4	2.8	3.2	3.1	2.6	2.1
Taylor (1993)	3.4	2.7	2.9	2.9	2.8	2.3
Taylor (1999)	3.4	2.7	3.0	2.8	2.7	2.3
Outcome based	3.4	2.7	3.1	2.9	2.6	2.2
First difference	3.4	2.8	3.3	3.1	2.7	2.2
Nominal income targeting	3.4	2.9	3.7	3.5	2.8	1.9
Constrained optimal control	3.4	2.8	3.3	3.1	2.6	2.0
<i>Unemployment rate²</i>						
Extended Tealbook baseline	7.0	6.2	5.6	5.1	4.8	4.8
Taylor (1993)	7.0	6.2	5.8	5.5	5.1	5.0
Taylor (1999)	7.0	6.2	5.8	5.5	5.2	5.0
Outcome based	7.0	6.2	5.7	5.4	5.1	5.0
First difference	7.0	6.2	5.6	5.2	4.8	4.8
Nominal income targeting	7.0	6.2	5.4	4.7	4.3	4.4
Constrained optimal control	7.0	6.2	5.6	5.1	4.8	4.9
<i>Total PCE prices</i>						
Extended Tealbook baseline	1.5	1.6	1.5	1.6	1.8	2.0
Taylor (1993)	1.5	1.5	1.5	1.6	1.8	1.9
Taylor (1999)	1.5	1.5	1.4	1.5	1.7	1.9
Outcome based	1.5	1.5	1.4	1.5	1.7	1.8
First difference	1.5	1.6	1.6	1.7	1.9	2.1
Nominal income targeting	1.5	1.6	1.6	1.8	2.0	2.2
Constrained optimal control	1.5	1.6	1.5	1.6	1.8	2.0
<i>Core PCE prices</i>						
Extended Tealbook baseline	1.3	1.5	1.7	1.8	1.9	2.0
Taylor (1993)	1.3	1.5	1.7	1.7	1.8	1.9
Taylor (1999)	1.3	1.5	1.6	1.7	1.8	1.9
Outcome based	1.3	1.5	1.6	1.7	1.8	1.8
First difference	1.3	1.5	1.8	1.9	2.0	2.1
Nominal income targeting	1.3	1.6	1.8	2.0	2.1	2.2
Constrained optimal control	1.3	1.5	1.7	1.8	1.9	2.0
<i>Effective nominal federal funds rate²</i>						
Extended Tealbook baseline	0.1	0.1	1.1	2.4	3.5	4.1
Taylor (1993)	0.1	0.1	3.0	3.6	4.1	4.3
Taylor (1999)	0.1	0.1	2.5	3.5	4.2	4.4
Outcome based	0.1	0.1	1.4	3.5	4.2	4.3
First difference	0.1	0.1	1.2	3.0	3.7	3.8
Nominal income targeting	0.1	0.1	0.2	1.2	2.3	3.1
<u>Constrained optimal control</u>	<u>0.1</u>	<u>0.2</u>	<u>0.7</u>	<u>2.1</u>	<u>3.4</u>	<u>4.2</u>

1. With the exception of constrained optimal control, monetary policy is specified to keep the federal funds rate at an effective lower bound of 12½ basis points as long as the unemployment rate is 6 percent or more. Once the threshold is crossed, the federal funds rate follows the prescriptions of the specified rule.

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

Total Assets and Selected Balance Sheet Items

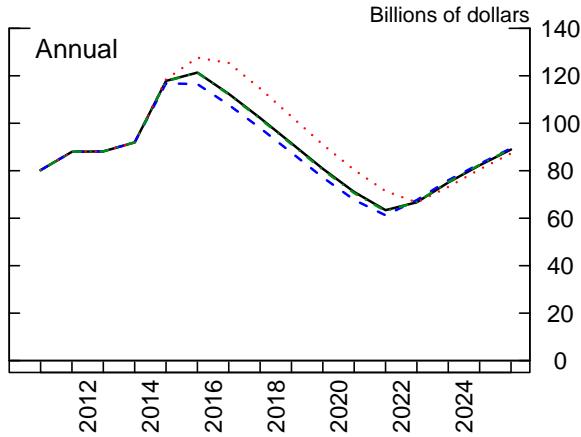


Income Projections

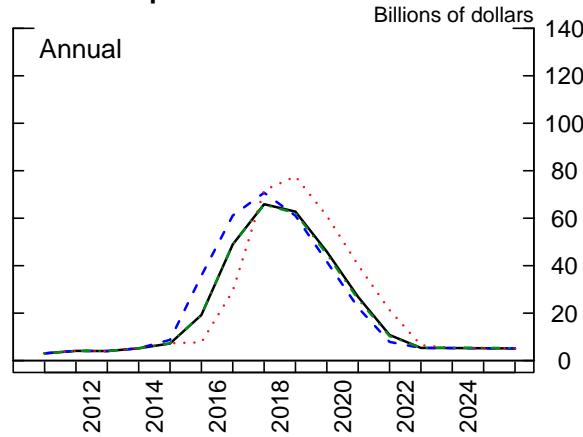
Projections

— Alternative B ··· Alternative A
— Alternative C · March Tealbook Alternative B

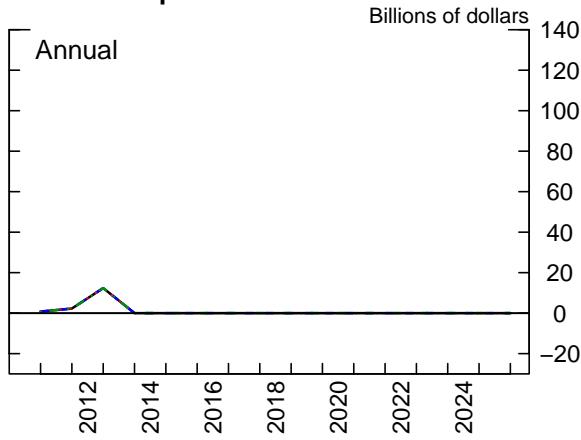
Interest Income



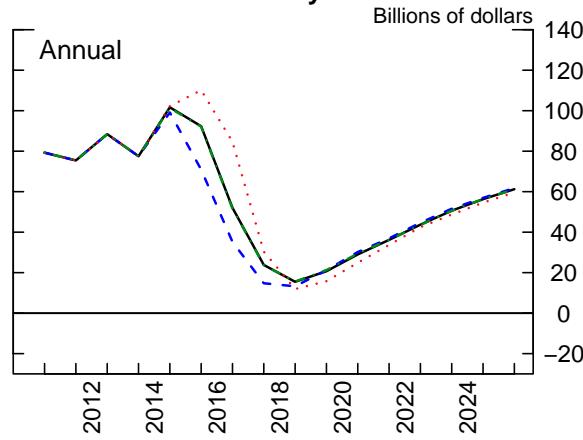
Interest Expense



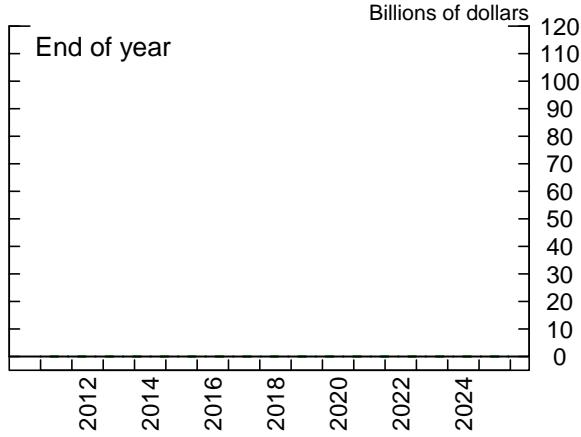
Realized Capital Gains



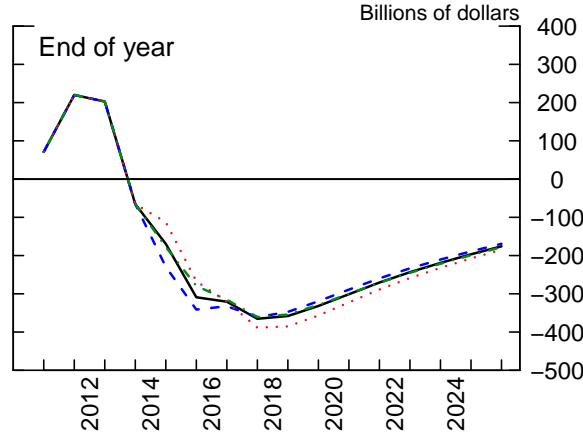
Remittances to Treasury



Deferred Asset



Memo: Unrealized Gains/Losses



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

Billions of dollars

		<u>Mar 31, 2014</u>	<u>2015</u>	<u>2017</u>	<u>2019</u>	<u>2021</u>	<u>2023</u>	<u>2025</u>
Total assets		4,235	4,376	3,626	2,669	2,069	2,278	2,518
Selected assets								
Loans and other credit extensions*		3	0	0	0	0	0	0
Securities held outright		3,970	4,129	3,417	2,492	1,913	2,138	2,391
U.S. Treasury securities		2,320	2,448	2,039	1,341	956	1,347	1,744
Agency debt securities		47	33	4	2	2	2	2
Agency mortgage-backed securities		1,603	1,648	1,374	1,148	955	789	645
Unamortized premiums		210	193	151	117	93	76	62
Unamortized discounts		-17	-18	-14	-11	-9	-7	-7
Total other assets		70	72	72	72	72	72	72
Total liabilities		4,179	4,315	3,548	2,571	1,945	2,122	2,320
Selected liabilities								
Federal Reserve notes in circulation		1,225	1,358	1,515	1,654	1,812	1,990	2,189
Reverse repurchase agreements		341	100	100	100	100	100	100
Deposits with Federal Reserve Banks		2,605	2,851	1,932	818	37	37	37
Reserve balances held by depository institutions		2,430	2,839	1,920	806	25	25	25
U.S. Treasury, General Account		142	5	5	5	5	5	5
Other Deposits		32	7	7	7	7	7	7
Interest on Federal Reserve Notes due to U.S. Treasury		3	0	0	0	0	0	0
Total capital		56	62	77	98	123	156	198

Projections

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

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

* Loans and other credit extensions includes primary, secondary, and seasonal credit; central bank liquidity swaps; Term Asset-Backed Securities Loan Facility (TALF); net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC; and net portfolio holdings of TALF LLC.

Alternative Projections for the 10-Year Treasury Term Premium Effect

Date	Alternative B	Alternative C	Alternative A	March Alternative B
Basis Points				
Quarterly Averages				
2014: Q2	-122	-117	-134	-121
Q3	-117	-111	-129	-116
Q4	-112	-106	-124	-111
2015: Q1	-106	-101	-119	-106
Q2	-101	-96	-114	-101
Q3	-96	-91	-109	-95
Q4	-91	-86	-103	-90
2016: Q1	-86	-81	-98	-86
Q2	-82	-77	-94	-81
Q3	-77	-73	-89	-77
Q4	-73	-69	-84	-73
2017: Q4	-59	-55	-67	-58
2018: Q4	-47	-44	-54	-46
2019: Q4	-37	-35	-43	-37
2020: Q4	-30	-28	-34	-29
2021: Q4	-24	-23	-26	-24
2022: Q4	-19	-19	-21	-19
2023: Q4	-15	-15	-16	-15
2024: Q4	-12	-11	-13	-12
2025: Q4	-8	-8	-9	-8

Projections

Alternative Projections for the Monetary Base

Percent change, annual rate; not seasonally adjusted

Date	Alternative B	Alternative C	Alternative A	March Alternative B
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Quarterly

2014: Q2	39.9	39.3	40.3	18.9
Q3	21.3	17.9	24.0	19.3
Q4	6.5	4.0	11.8	6.8
2015: Q1	-0.3	3.2	5.1	-0.3
Q2	5.4	-4.1	-3.0	5.6
Q3	-1.6	-4.2	5.3	-2.1
Q4	-4.2	-4.1	0.1	-4.6
2016: Q1	-6.2	-6.3	-1.5	-6.8
Q2	-11.9	-12.1	1.1	-12.6
Q3	-9.2	-9.3	-6.2	-9.9
Q4	-7.7	-7.7	-7.4	-8.3

Annual

2017	-8.9	-9.0	-8.5	-9.5
2018	-13.5	-13.8	-13.1	-14.5
2019	-14.6	-14.8	-14.4	-15.8
2020	-13.6	-13.7	-13.2	-15.0
2021	-11.7	-9.1	-12.5	-12.7
2022	2.5	4.2	-7.3	3.3
2023	4.3	4.3	4.3	4.8
2024	4.3	4.3	4.3	4.8
2025	4.3	4.3	4.4	4.8

Note: For years, Q4 to Q4; for quarters, calculated from corresponding average levels.

MONEY

After expanding significantly faster than nominal GDP for several years, M2 is projected to increase at about the same rate as nominal GDP throughout the remainder of this year and then to contract modestly in 2015 and 2016. This pattern results primarily from the assumed increase in the target federal funds rate over the forecast period and the associated rise in the opportunity cost of holding M2. In addition, the staff assumes that investors will shift their portfolios away from the safe and liquid assets in M2 toward riskier non-M2 assets as the economic recovery progresses.¹¹

M2 Monetary Aggregate Projections (Percent change, annual rate; seasonally adjusted)*		
<i>Quarterly</i>		
2014:	Q1	6.3
	Q2	5.0
	Q3	5.2
	Q4	5.4
2015:	Q1	0.0
	Q2	-1.7
	Q3	-2.3
	Q4	-2.1
2016:	Q1	-1.5
	Q2	-1.0
	Q3	-0.3
	Q4	0.3
<i>Annual</i>		
	2014	5.6
	2015	-1.5
	2016	-0.6

Note: Actual data through April 14, 2014; projections thereafter.

* Quarterly growth rates are computed from quarter averages. Annual growth rates are fourth quarter over fourth quarter.

¹¹ Projections for the monetary aggregates are based on the historical relationship between the aggregates, interest rates, and nominal GDP. These projections are consistent with interest rates and nominal GDP in the Tealbook forecast but do not account for the specifics of the normalization process. The monetary aggregates could be affected by tools that the Federal Reserve employs during the normalization period, although the size and direction of the effects are difficult to judge. For example, if the ON RRP rate was raised close to the interest rate on excess reserves, money funds could pay higher returns than those available on bank deposits. As a result, cash managers could reallocate from bank deposits to institutional money market fund shares and thus decrease M2. In these projections, we do not take account of such effects.