

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.

Please note that some material may have been redacted from this document if that material was received on a confidential basis. Redacted material is indicated by occasional gaps in the text or by gray boxes around non-text content. All redacted passages are exempt from disclosure under applicable provisions of the Freedom of Information Act.

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

December 12, 2013

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

Revisions to the Staff Projection since the Previous SEP

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

The staff projection for real GDP growth is about the same as in the September Tealbook on net. The unemployment rate has come in lower than we expected in September. We have taken this lower level on board in the near term, but we still project the unemployment rate to end 2016 at 5¼ percent, in line with the essentially unrevised GDP outlook.

The staff projection for both overall and core PCE inflation has revised a little lower this year relative to the September projection. Beyond this year, however, the projection for both core and headline inflation is about unrevised, with inflation edging gradually higher.

The unemployment rate is still projected to cross the Committee's 6.5 percent threshold in early 2015, and the policy rule that governs our assumption for the federal funds rate calls for the rate to lift off from the effective lower bound in the second quarter of 2015, the same as in September. The trajectory of the federal funds rate after liftoff is also the same.

Staff Economic Projections Compared with the September Tealbook

Variable	2013		2013	2014	2015	2016	Longer run
	H1	H2					
Real GDP ¹	1.8	2.6	2.2	3.1	3.5	3.4	2.3
September Tealbook	2.0	2.5	2.3	3.1	3.4	3.2	2.3
Unemployment rate ²	7.5	7.1	7.1	6.5	5.9	5.3	5.2
September Tealbook	7.5	7.2	7.2	6.6	5.8	5.3	5.2
PCE inflation ¹	.5	1.3	.9	1.4	1.4	1.6	2.0
September Tealbook	.6	1.6	1.1	1.2	1.4	1.6	2.0
Core PCE inflation ¹	1.0	1.3	1.1	1.4	1.6	1.7	n.a.
September Tealbook	1.1	1.4	1.2	1.5	1.6	1.7	n.a.
Federal funds rate ²	.12	.13	.13	.13	.82	1.92	4.00
September Tealbook	.12	.13	.13	.13	.85	1.90	4.00
Memo:							
Federal funds rate,							
end of period	.13	.13	.13	.13	1.00	2.00	4.00
September Tealbook	.13	.13	.13	.13	1.00	2.00	4.00

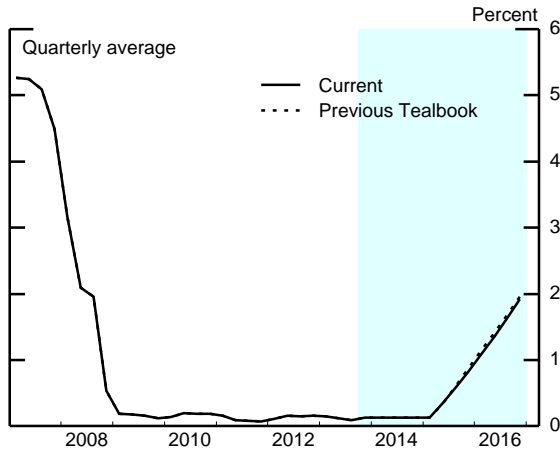
1. Percent change from final quarter of preceding period to final quarter of period indicated.

2. Percent, final quarter of period indicated.

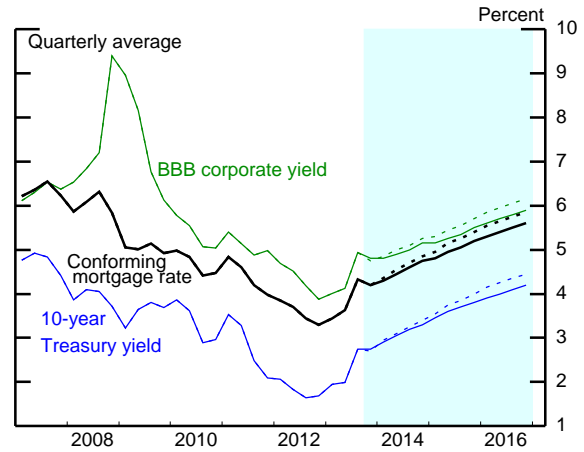
n.a. Not available.

Key Background Factors underlying the Baseline Staff Projection

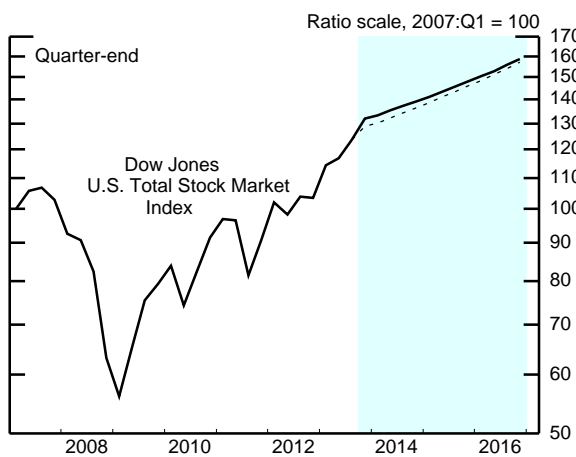
Federal Funds Rate



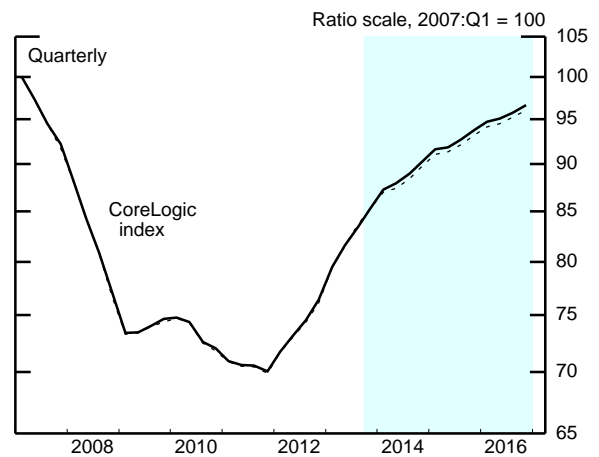
Long-Term Interest Rates



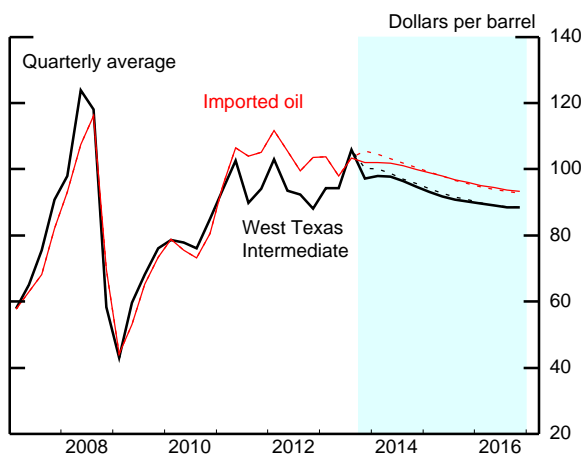
Equity Prices



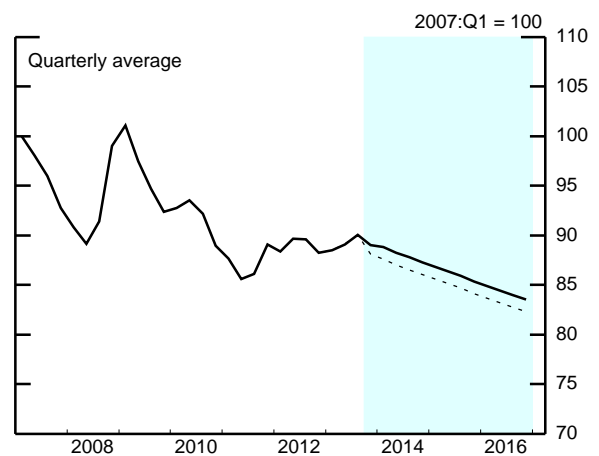
House Prices



Crude Oil Prices



Broad Real Dollar



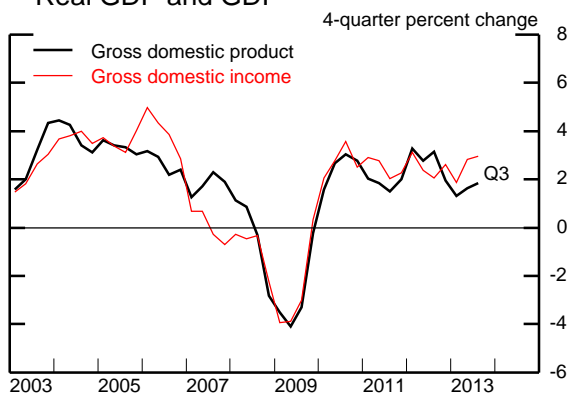
Summary of the Near-Term Outlook
(Percent change at annual rate except as noted)

Measure	2013:Q3		2013:Q4		2014:Q1	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
Real GDP	2.2	3.5	2.1	1.7	3.2	2.8
Private domestic final purchases	2.1	2.1	3.0	3.3	3.5	3.1
Personal consumption expenditures	1.5	1.4	2.6	3.2	2.9	2.8
Residential investment	7.8	13.0	11.0	-1.7	15.9	10.8
Nonres. private fixed investment	4.0	3.5	3.6	5.0	3.8	3.0
Government purchases	-1.7	.4	-4.2	-5.3	-.6	.9
<i>Contributions to change in real GDP</i>						
Inventory investment ¹	.8	1.5	.0	-.1	.3	-.3
Net exports ¹	.0	.1	.4	.1	.0	.3
Unemployment rate	7.3	7.3	7.3	7.1	7.1	6.9
PCE chain price index	2.0	2.0	1.1	.7	1.5	1.5
Ex. food and energy	1.5	1.5	1.4	1.1	1.6	1.4

1. Percentage points.

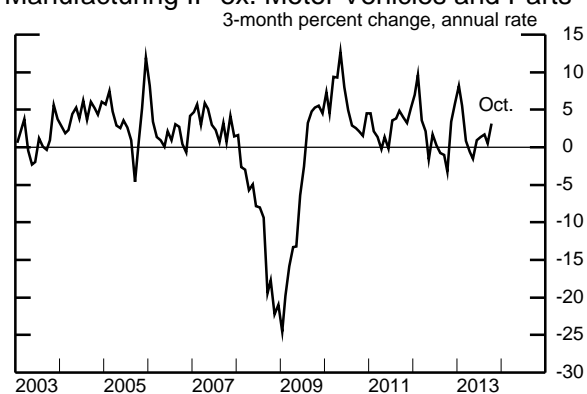
Recent Nonfinancial Developments (1)

Real GDP and GDI



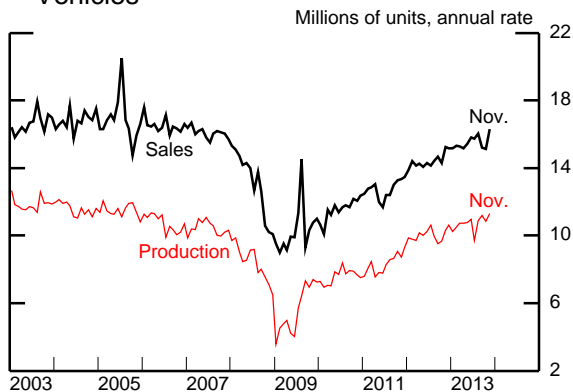
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

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 Communications.

Real PCE Goods ex. Motor Vehicles



Note: Figures for September, October, and November 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	2013	2013		2014	2015	2016
		H1	H2			
Real GDP	2.2	1.8	2.6	3.1	3.5	3.4
Previous Tealbook	2.0	1.8	2.2	3.2	3.5	3.2
Final sales	1.5	1.1	1.9	3.3	3.7	3.5
Previous Tealbook	1.5	1.1	1.8	3.3	3.7	3.3
Personal consumption expenditures	2.2	2.0	2.3	3.3	3.9	3.2
Previous Tealbook	2.0	2.0	2.1	3.4	3.8	3.1
Residential investment	9.3	13.4	5.4	15.5	14.7	8.3
Previous Tealbook	11.4	13.4	9.4	17.5	14.1	5.8
Nonresidential structures	.1	-6.5	7.2	3.9	2.8	2.6
Previous Tealbook	-.1	-6.5	6.7	2.5	2.9	2.6
Equipment and intangibles	2.7	1.9	3.4	4.8	6.2	5.8
Previous Tealbook	2.4	1.9	3.0	5.6	6.1	5.5
Federal purchases	-6.3	-5.1	-7.6	-2.0	-3.7	.0
Previous Tealbook	-6.8	-5.1	-8.6	-4.3	-3.8	.0
State and local purchases	.3	-.4	1.1	.5	1.1	1.5
Previous Tealbook	.2	-.4	.9	.3	1.1	1.5
Exports	4.2	3.2	5.3	4.7	6.0	6.7
Previous Tealbook	3.7	3.2	4.2	5.1	6.5	6.9
Imports	3.7	3.7	3.7	3.5	5.2	4.9
Previous Tealbook	3.0	3.7	2.3	3.8	5.1	4.7
Contributions to change in real GDP (percentage points)						
Inventory change	.7	.7	.7	-.2	-.2	-.1
Previous Tealbook	.5	.7	.4	.0	-.1	-.1
Net exports	.0	-.2	.1	.1	.0	.1
Previous Tealbook	.0	-.2	.2	.1	.0	.2

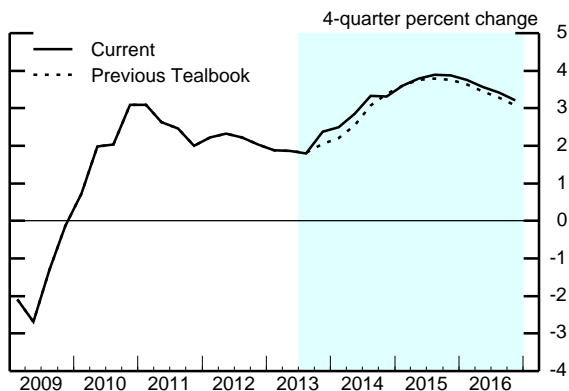
Real GDP



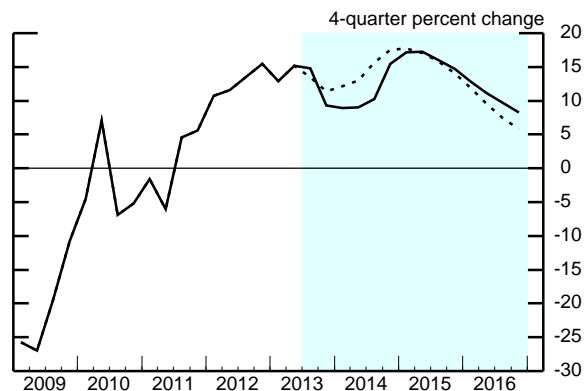
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Components of Final Demand

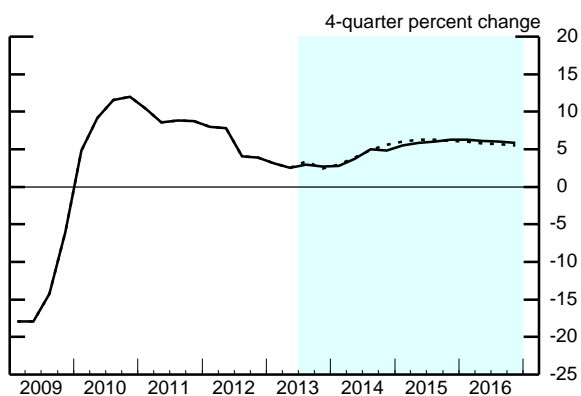
Personal Consumption Expenditures



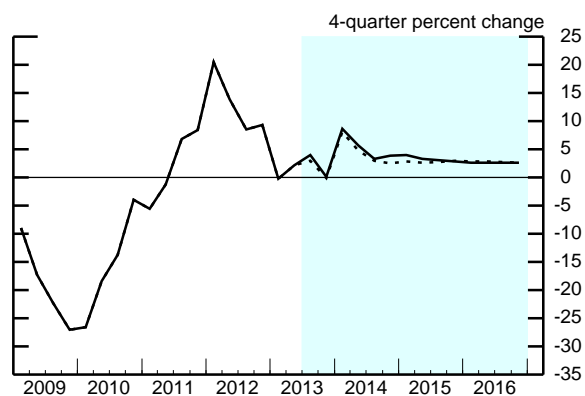
Residential Investment



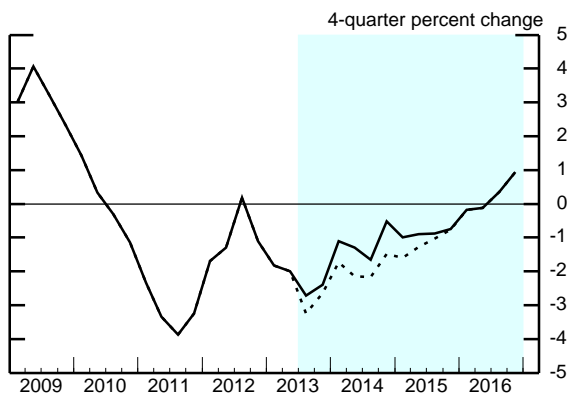
Equipment and Intangibles



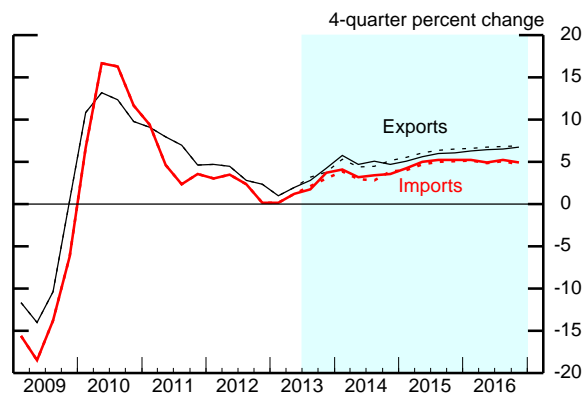
Nonresidential Structures



Government Consumption & Investment

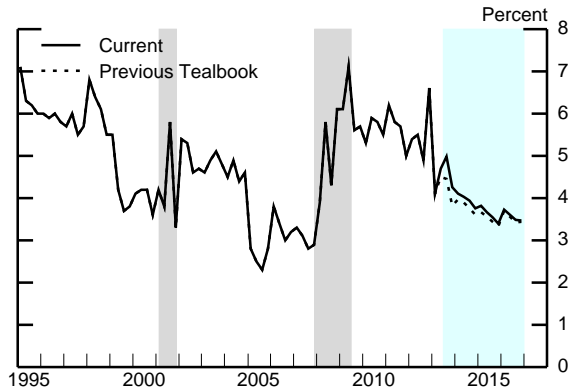


Exports and Imports



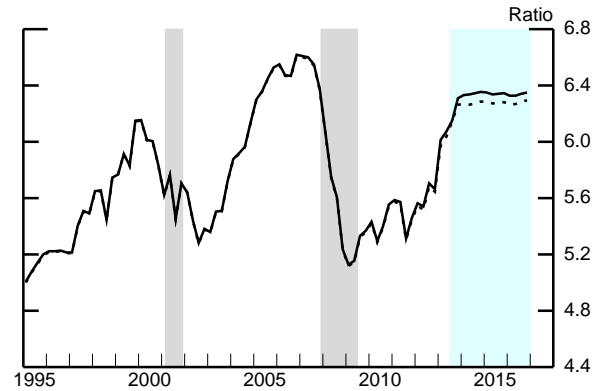
Aspects of the Medium-Term Projection

Personal Saving Rate



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

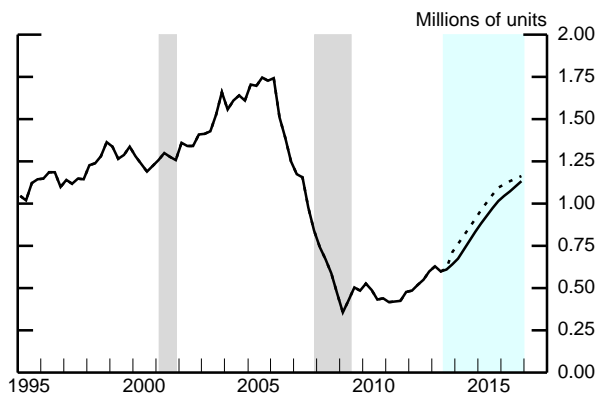
Wealth-to-Income Ratio



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

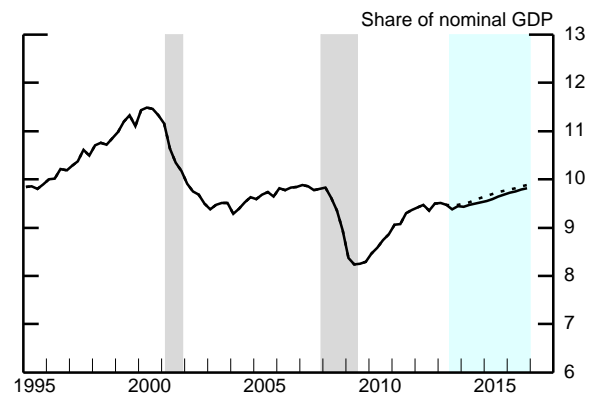
Source: For net worth, Federal Reserve Board, Financial Accounts of the United States; for income, U.S. Dept. of Commerce, Bureau of Economic Analysis.

Single-Family Housing Starts



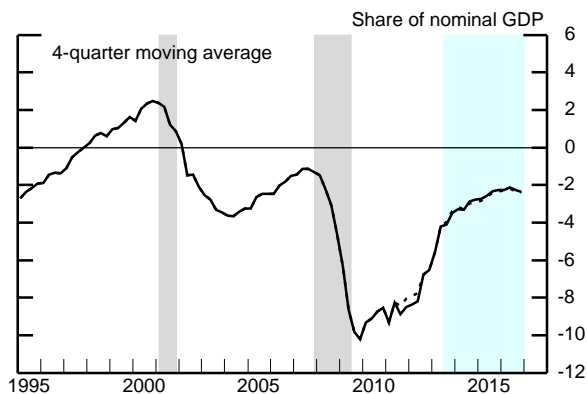
Source: U.S. Census Bureau.

Equipment and Intangibles Spending



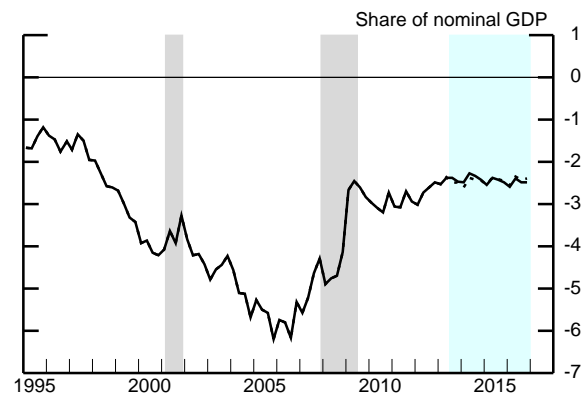
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

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	2001-11	2012	2013	2014	2015	2016
Potential real GDP	3.1	3.4	2.2	1.9	2.1	2.2	2.2	2.1
Previous Tealbook	3.1	3.4	2.2	1.9	2.1	2.2	2.2	2.1
<i>Selected contributions¹</i>								
Structural NFB labor productivity ²	1.5	2.7	2.2	1.4	1.5	1.7	1.8	1.9
Previous Tealbook	1.5	2.7	2.2	1.4	1.5	1.7	1.8	1.9
Structural hours	1.5	1.0	.5	.6	.6	.6	.6	.5
Previous Tealbook	1.5	1.0	.6	.7	.7	.6	.6	.5
Labor force participation	.4	.0	-.3	-.4	-.6	-.3	-.3	-.3
Previous Tealbook	.4	.0	-.3	-.3	-.5	-.3	-.3	-.3
Memo:								
GDP gap ³	-2.4	1.9	-3.6	-3.6	-3.4	-2.5	-1.3	-.1
Previous Tealbook	-2.4	1.9	-3.6	-3.6	-3.6	-2.6	-1.3	-.3

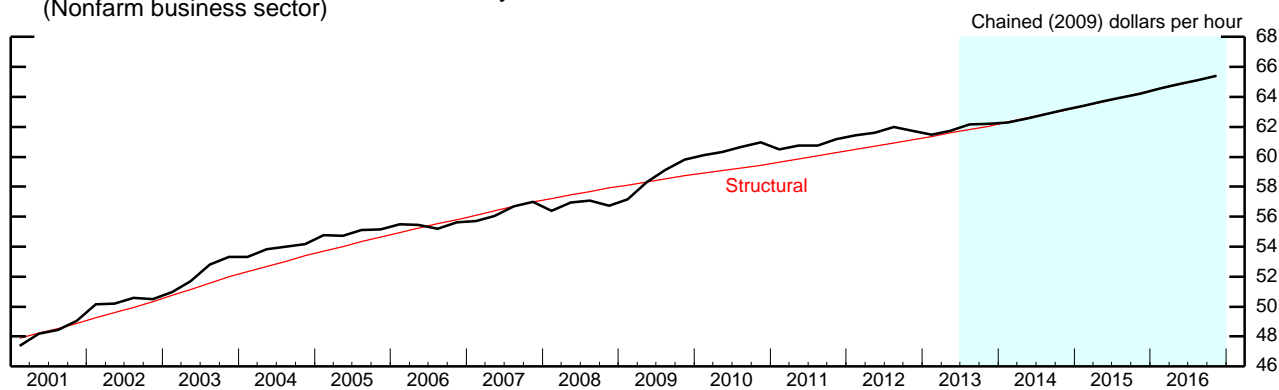
Note: For multiyear periods, the percent change is the annual average from Q4 of the year preceding the first year shown to Q4 of the last year shown.

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.

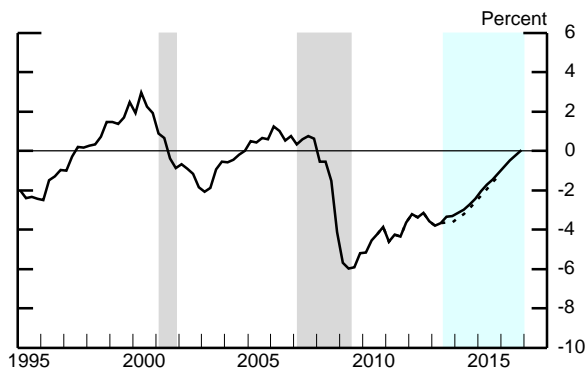
3. Percent difference between actual and potential GDP in the final quarter of the period indicated. A negative number indicates that the economy is operating below potential.

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.

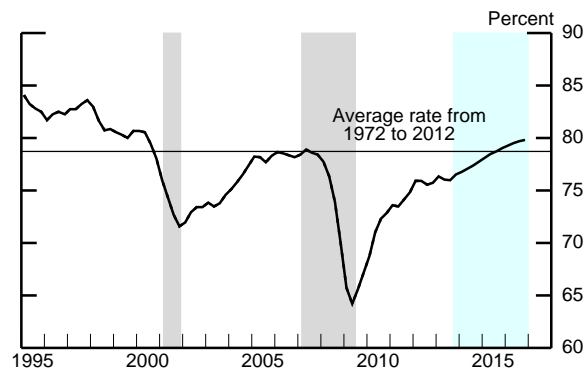
GDP Gap



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	2013	2013		2014	2015	2016
		H1	H2			
Output per hour, nonfarm business ¹	.7	.0	1.5	1.5	1.8	1.9
Previous Tealbook	.8	.0	1.7	1.4	1.8	1.9
Nonfarm private employment ²	190	201	179	210	245	220
Previous Tealbook	173	201	145	199	245	195
Labor force participation rate ³	62.9	63.4	62.9	63.0	62.9	62.8
Previous Tealbook	63.2	63.4	63.2	63.2	63.1	63.0
Civilian unemployment rate ³	7.1	7.5	7.1	6.5	5.9	5.3
Previous Tealbook	7.3	7.5	7.3	6.6	5.9	5.4

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	2013		2014	2015	2016
		H1	H2			
PCE chain-weighted price index	.9	.5	1.3	1.4	1.4	1.6
Previous Tealbook	1.0	.5	1.6	1.4	1.5	1.6
Food and beverages	.9	.9	.9	.7	1.3	1.4
Previous Tealbook	1.1	.9	1.2	.6	1.3	1.4
Energy	-2.5	-7.8	3.1	1.1	-.8	-.5
Previous Tealbook	-2.4	-7.8	3.2	-.7	-1.1	-.5
Excluding food and energy	1.1	1.0	1.3	1.4	1.6	1.7
Previous Tealbook	1.2	1.0	1.5	1.5	1.6	1.7
Prices of core goods imports ¹	-1.1	-1.0	-1.2	1.5	1.6	1.7
Previous Tealbook	-1.1	-1.0	-1.1	1.7	1.6	1.6

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

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

Labor Market Data and Projections

Indicator	Aug. 2012 ¹	Projection for mid-2014 ² in the Tealbook dated:			
		Sept. 2012	Dec. 2012	Sept. 2013 ³	Dec. 2013 ³
Unemployment rate (percent)	8.1	7.8	7.6	6.8	6.7
Labor force participation rate (percent)	63.5	63.7	63.7	63.3	63.0
<i>Monthly change in payroll employment (thousands, three-month averages)</i>					
Total	94	212	197	197	203
Private	109	210	195	205	207
Level of total payroll employment (millions)	133.3	137.0	137.1	138.0	138.2
Total hours worked (percent change) ⁴	1.0	2.3	2.0	2.5	2.0
Total hours worked (billions) ⁴	184.6	190.3	190.8	193.0	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.

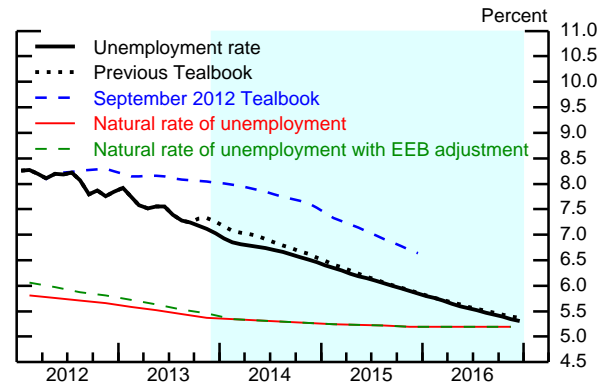
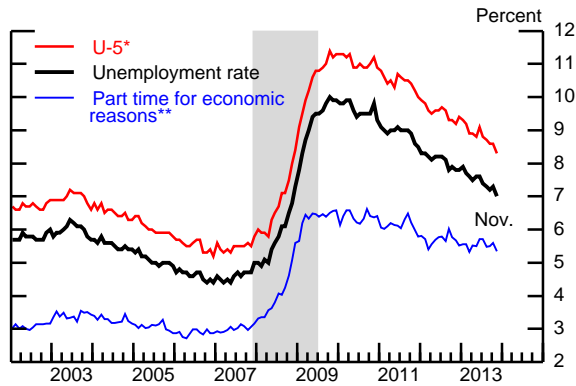
3. Projections of payrolls and hours worked include the effects of the benchmark revision to the payroll survey.

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.

Labor Market Developments and Outlook

Measures of Labor Underutilization



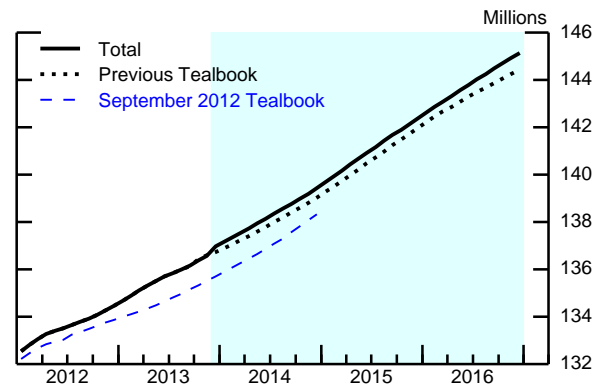
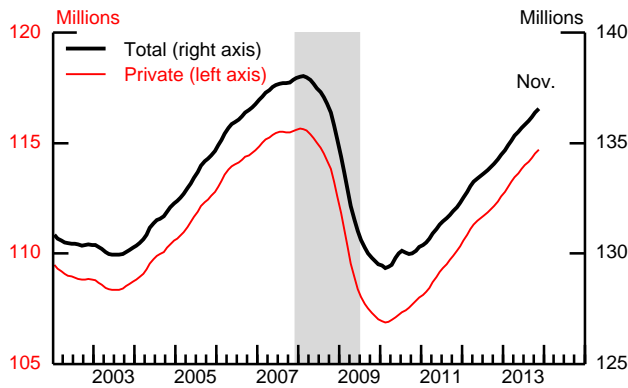
* U-5 measures total unemployed plus all marginally attached to the labor force, as a percent of the labor force plus persons marginally attached to the labor force.

** Percent of Current Population Survey employment.

EEB Extended and emergency unemployment benefits.

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

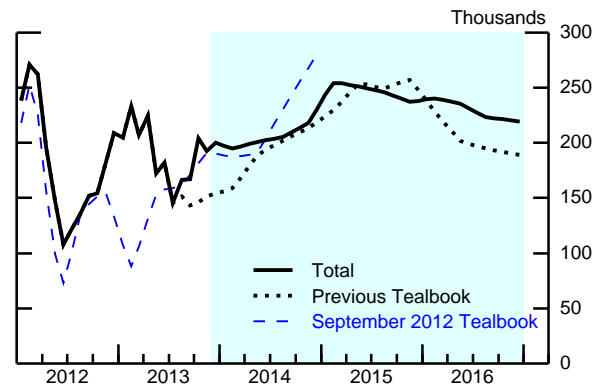
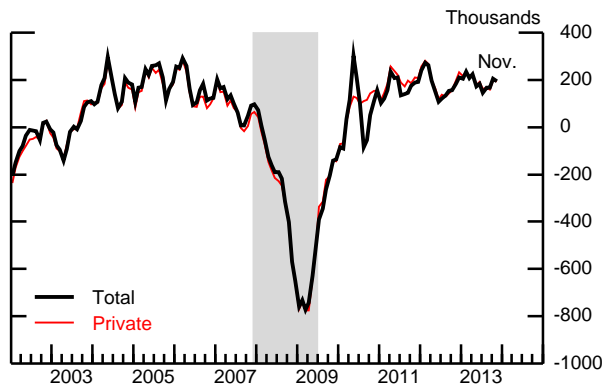
Level of Payroll Employment*



* 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.

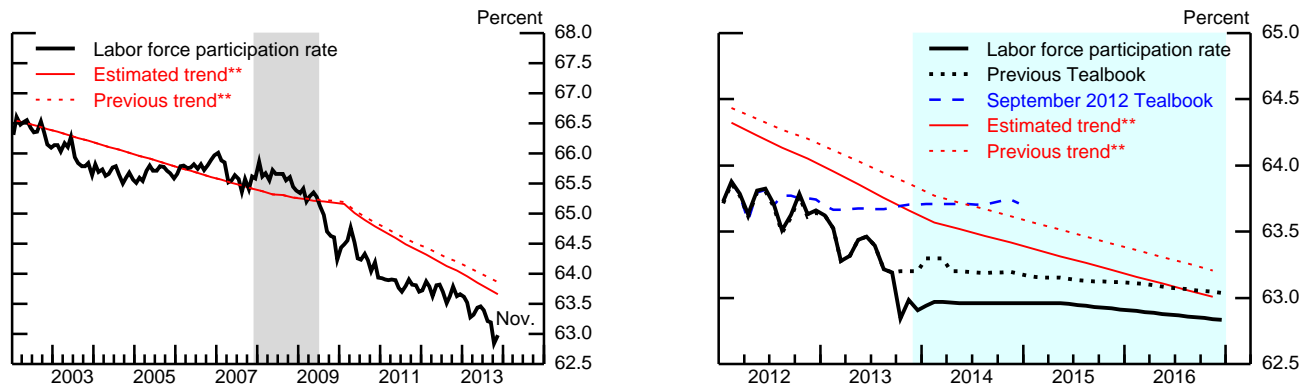
Source: U.S. Department of Labor, Bureau of Labor Statistics.

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.

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*

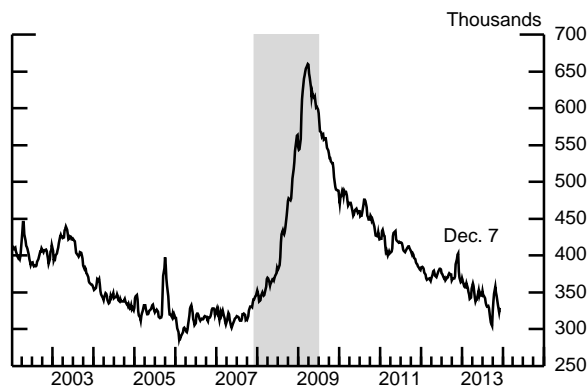


* Published data adjusted by staff to account for changes in population weights.

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

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

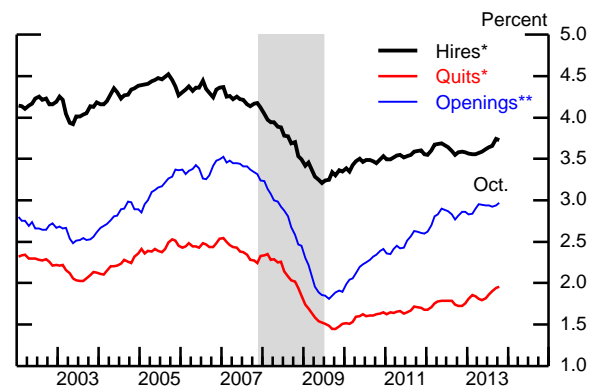
Initial Unemployment Insurance Claims*



* 4-week moving average.

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

Private Hires, Quits, and Job Openings

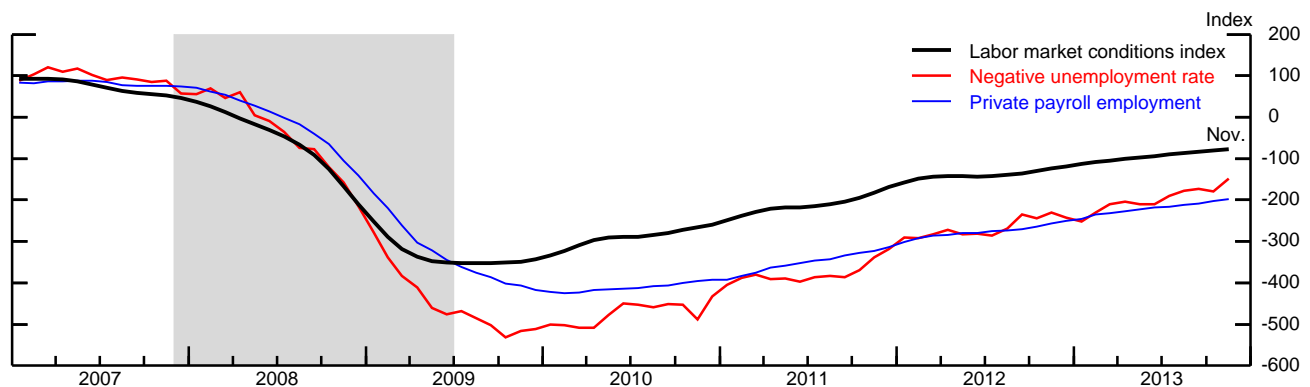


* Percent of private nonfarm payroll employment, 3-month moving average.

** 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



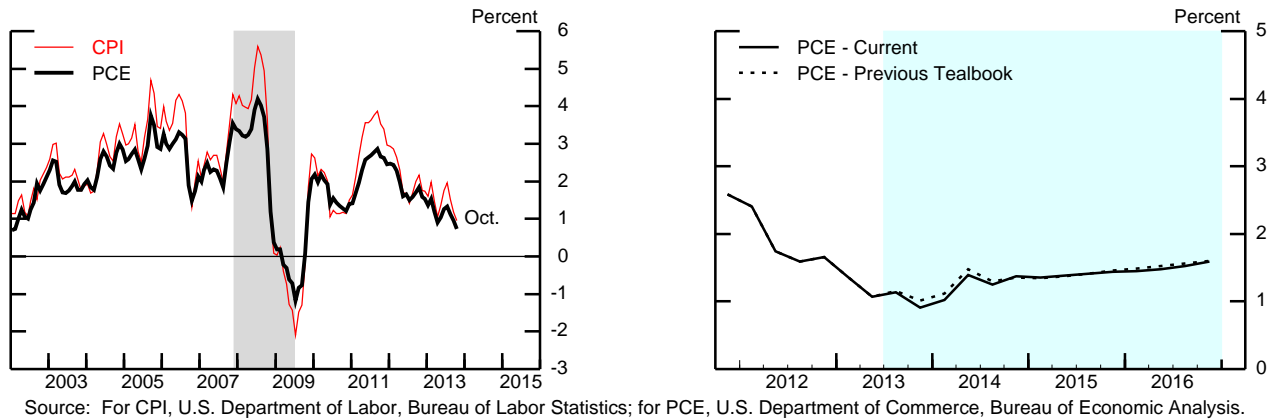
Note: Labor market conditions index estimated by staff; indexes for unemployment rate and private payroll employment are deviation from estimated trend normalized to have mean zero and unit standard deviation over the period July 1976 to September 2008, multiplied by 100.

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

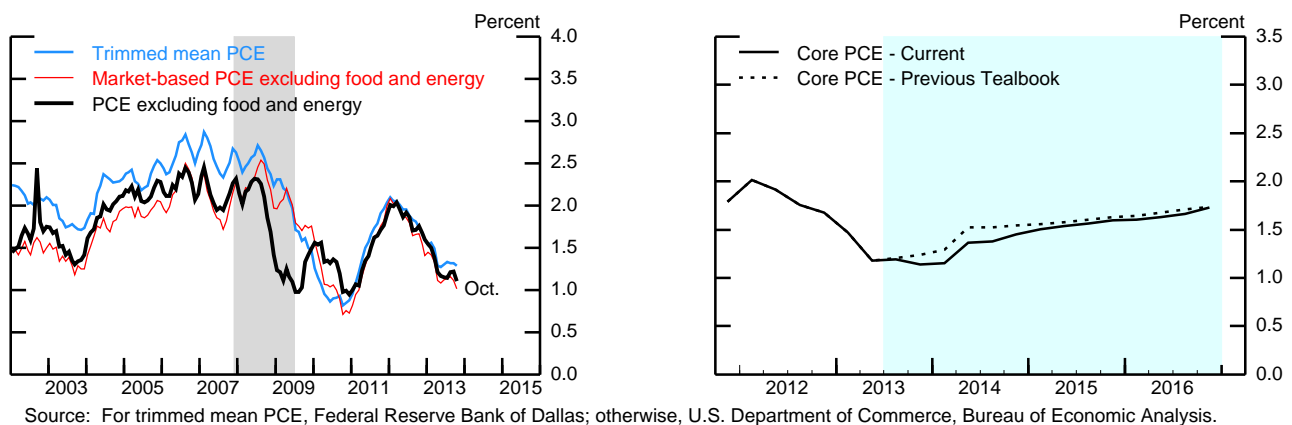
Inflation Developments and Outlook

(Percent change from year-earlier period)

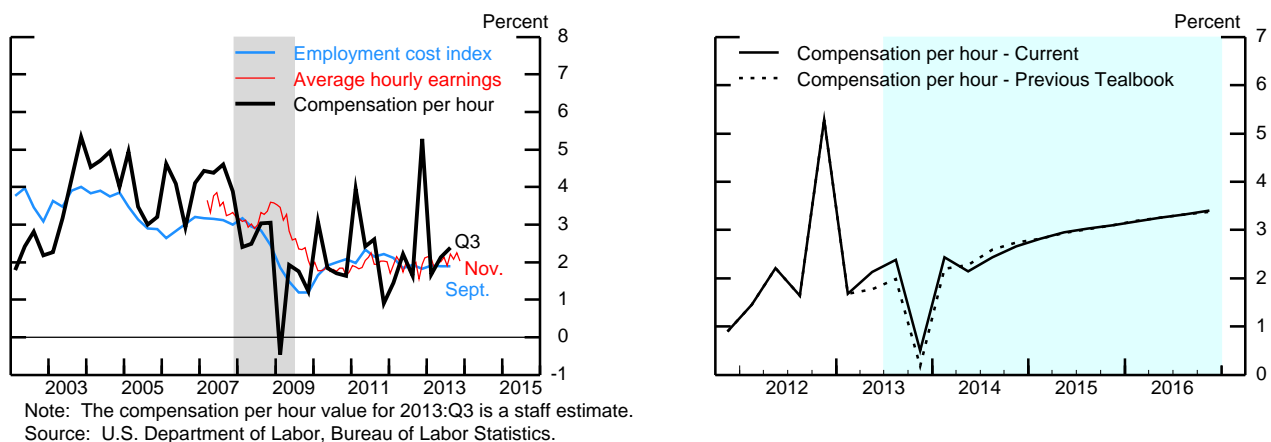
Headline Consumer Price Inflation



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.

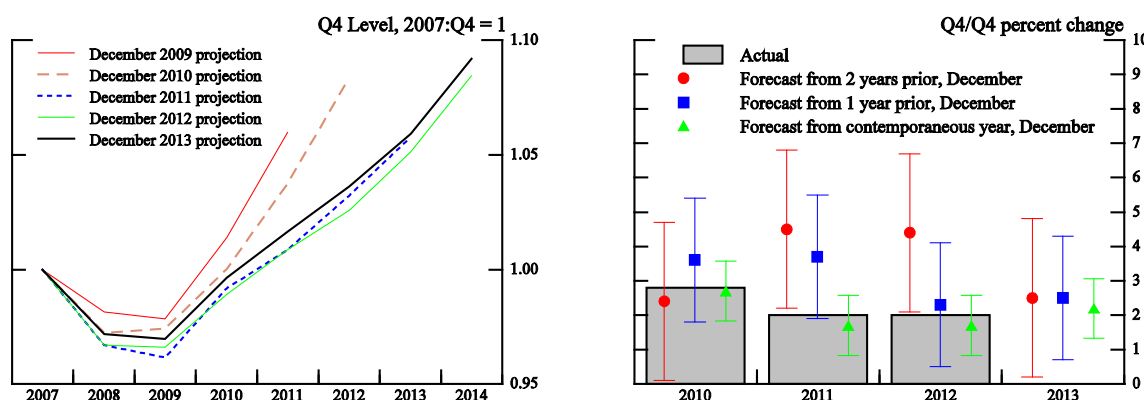
Tealbook Forecast Errors over the Recovery So Far

In 2009 and 2010, staff forecasts of real GDP growth were too optimistic, while our forecasts of the unemployment rate were relatively accurate. Starting in 2011, circumstances have reversed: Our forecasts of real GDP have thus far proven quite accurate, while we were not able to anticipate the extent of the decline in the unemployment rate that has taken place. Responding to this constellation of forecast errors, we have substantially downgraded our assessment of the supply side of the economy. Meanwhile, inflation in 2011 and 2012 came in well above the staff's expectations; in 2013, by contrast, we have been surprised by how low inflation has been. In this box we present and discuss these recent forecast errors.

Staff projections for the level of real GDP from the current and past four December Tealbooks are plotted in the left panel of figure 1. The solid red and dashed orange lines show the overly optimistic projections made by the staff in 2009 and 2010. In mid-2010 and mid-2011, the BEA released revised estimates of real GDP that painted a considerably darker picture of the severity of the recession and the immediate post-recession period, and the staff substantially marked down its GDP forecast in 2011. Since then, revisions to the projected level of real GDP have been relatively minor.

The right-hand panel presents the same information in growth-rate terms, and rather than focusing on the year in which the forecast was made, it focuses instead on the year in which the economic outcome took place. The gray bars in this panel show the currently published Q4/Q4 percent changes in real GDP in 2010, 2011, and 2012, while the red dots, blue squares, and green triangles over each bar show forecasts for growth that year from December Tealbooks two years prior, one year prior, and the contemporaneous year, respectively. The whisker bands around the dots, squares, and triangles demarcate approximate 70 percent confidence bands using staff forecast errors over the past

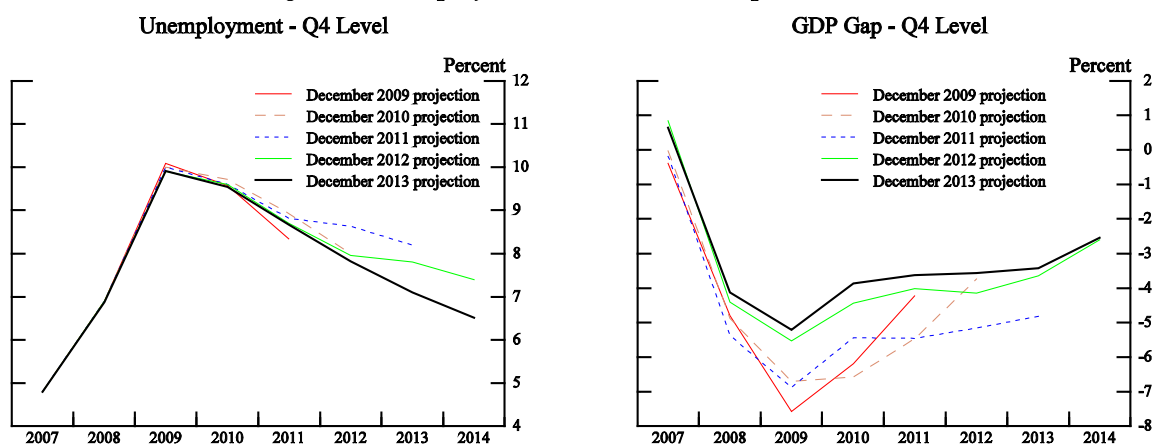
Figure 1: Real GDP Forecasts



20 years.¹ Unusually large forecast errors are represented by cases where the top of a gray bar (the actual value) falls outside one of the whisker bands, as was true for the two-year-ahead projections for growth in 2011 and 2012, both too high by an unusually large 2½ percentage points (p.p.). Attempts to identify the cause of these forecast errors are fraught with uncertainty, but the current GDP data show that PCE is the category that contributed most to these two-year-ahead forecast misses (about 1 p.p. to the 2011 GDP growth miss and 1½ p.p. to the 2012 miss). Growth in real PCE may have been held down by a surge in energy prices in 2011, which acted like a tax on consumers, contributing to lower-than-expected real disposable personal income.²

The left panel of figure 2 shows the staff's forecasts of the unemployment rate from the current and past four December Tealbooks. The overly pessimistic projections in December 2011 and December 2012 are particularly striking; in each case, the unemployment rate was ¾ p.p. lower one year later than the staff had projected. These larger-than-expected declines in the unemployment rate in the face of only modest measured GDP growth led the staff to substantially mark down its estimates of potential GDP, leading to a sizable narrowing of the estimated GDP gap despite only minor revisions to real GDP since 2011 (see the right panel of figure 2). Even conditional on our revised potential output path, the unemployment rate has declined somewhat more than we would have expected based on GDP growth alone. In our current view, possible explanations for that development might include excessive, panicked firing in 2009 followed by subsequent normalization in the labor market; measurement error in GDP

Figure 2: Unemployment Rate and GDP Gap Forecasts



¹ These bands are plus or minus the root mean square error of the forecast for each horizon over the past 20 years, so an implicit assumption has been made here that forecast errors follow a normal distribution. Other procedures yield somewhat different error bands.

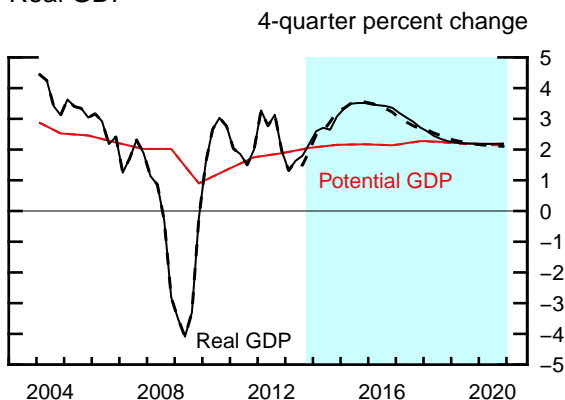
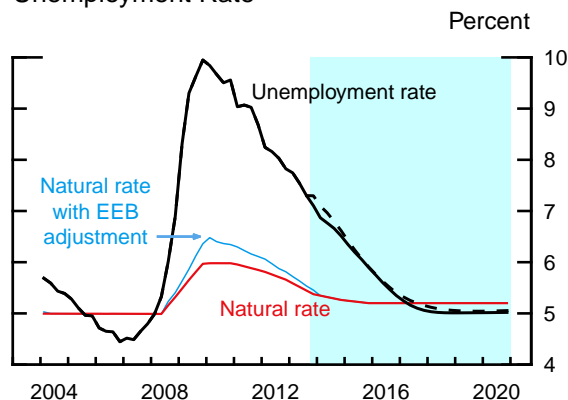
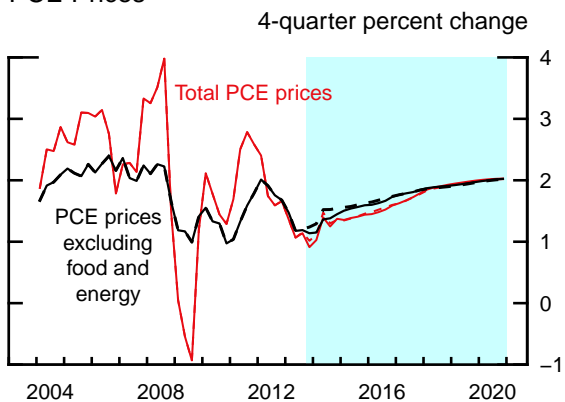
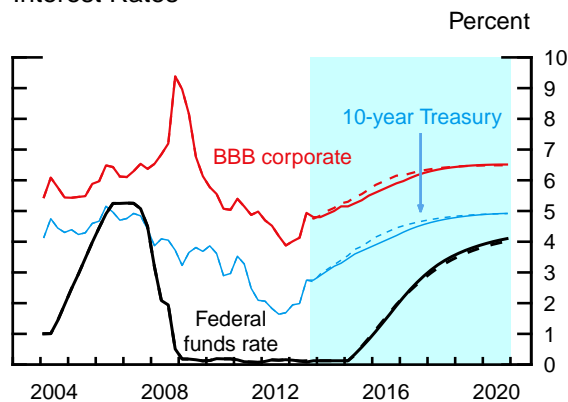
² Among other expenditures categories, government purchases contributed about 1 p.p. to the forecast miss for 2011, as defense spending and state and local purchases fell much more sharply than expected. The contribution to the GDP forecast error from overall fiscal policy was smaller than that from government purchases, as the federal government unexpectedly put in place a payroll tax cut in 2011 that we think boosted aggregate demand somewhat.

The Long-Term Outlook

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

Measure	2013	2014	2015	2016	2017	2018	Longer run
Real GDP	2.2	3.1	3.5	3.4	2.7	2.3	2.3
Previous Tealbook	2.0	3.2	3.5	3.2	2.7	2.4	2.3
Civilian unemployment rate ¹	7.1	6.5	5.9	5.3	5.1	5.0	5.2
Previous Tealbook	7.3	6.6	5.9	5.4	5.2	5.1	5.2
PCE prices, total	.9	1.4	1.4	1.6	1.8	1.9	2.0
Previous Tealbook	1.0	1.4	1.5	1.6	1.8	1.9	2.0
Core PCE prices	1.1	1.4	1.6	1.7	1.8	1.9	2.0
Previous Tealbook	1.2	1.5	1.6	1.7	1.8	1.9	2.0
Federal funds rate ¹	.1	.1	.8	1.9	2.9	3.5	4.0
Previous Tealbook	.1	.1	.9	2.0	2.8	3.4	4.0
10-year Treasury yield ¹	2.8	3.3	3.8	4.2	4.6	4.8	4.8
Previous Tealbook	2.7	3.4	4.0	4.4	4.7	4.8	4.8

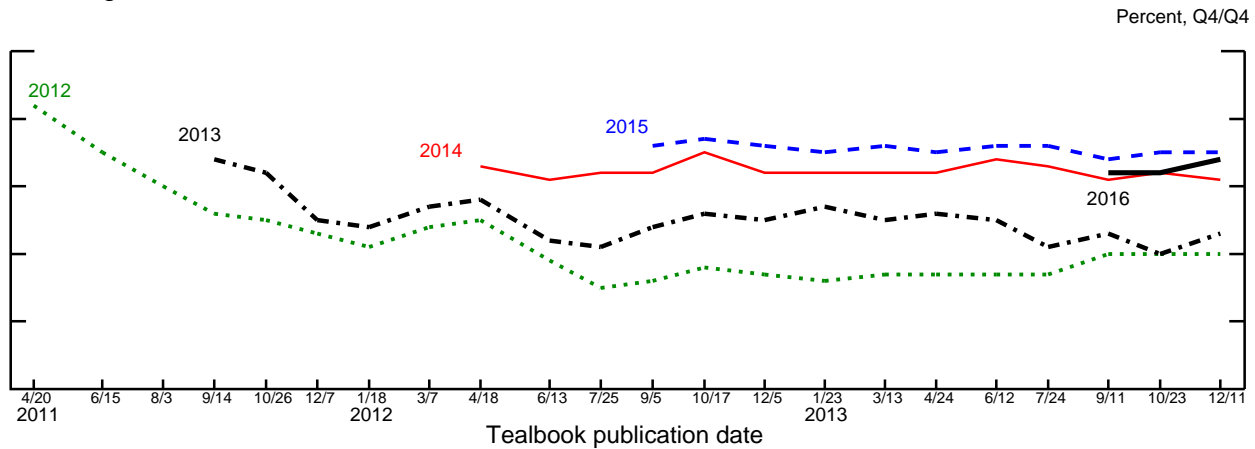
1. Percent, average for the final quarter of the period.

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

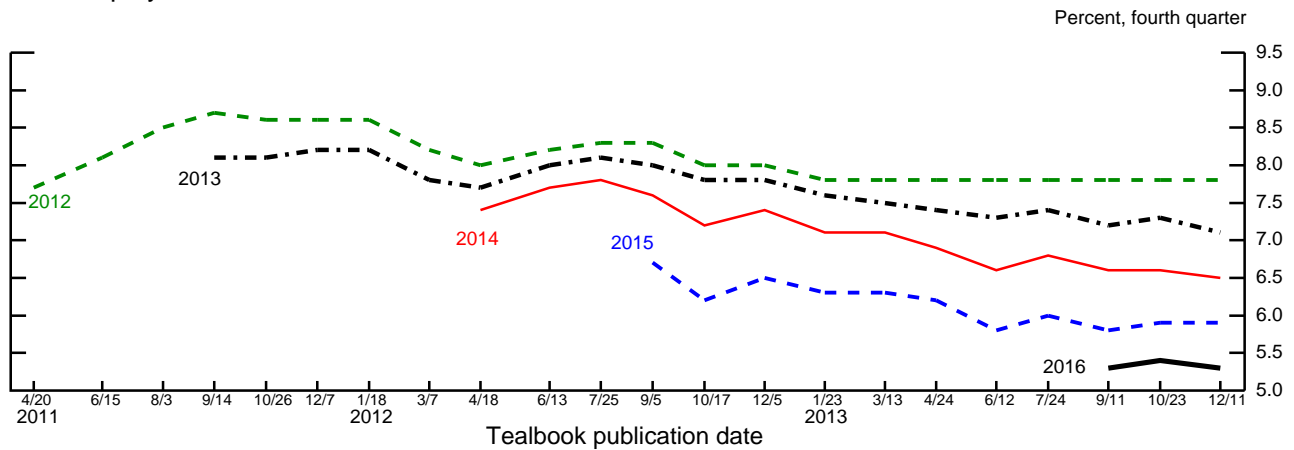
Note: In each panel, shading represents the projection period, and dashed lines are the previous Tealbook.

Evolution of the Staff Forecast

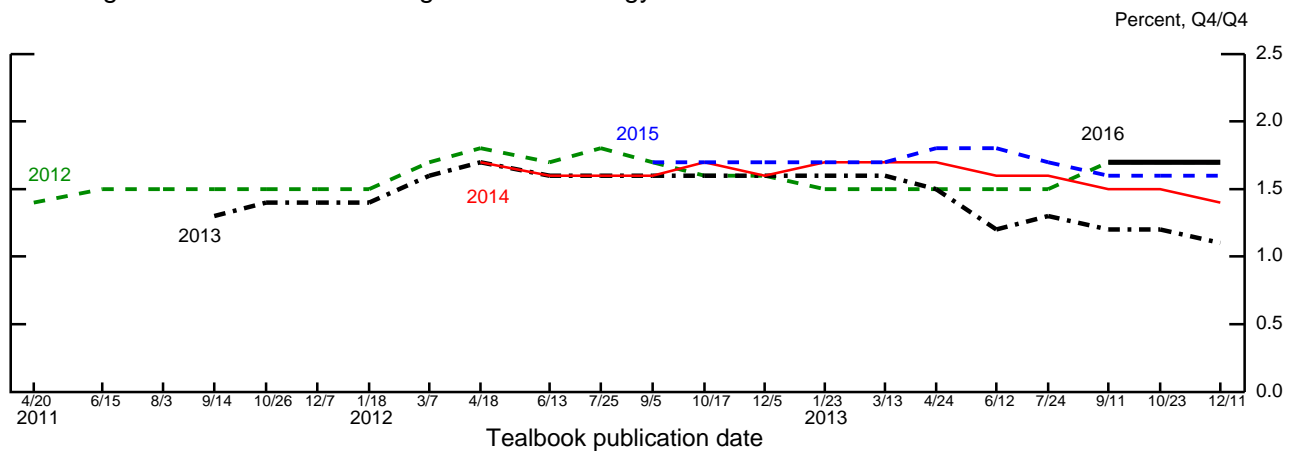
Change in Real GDP



Unemployment Rate



Change in PCE Prices excluding Food and Energy



The Foreign GDP Outlook

Real GDP*

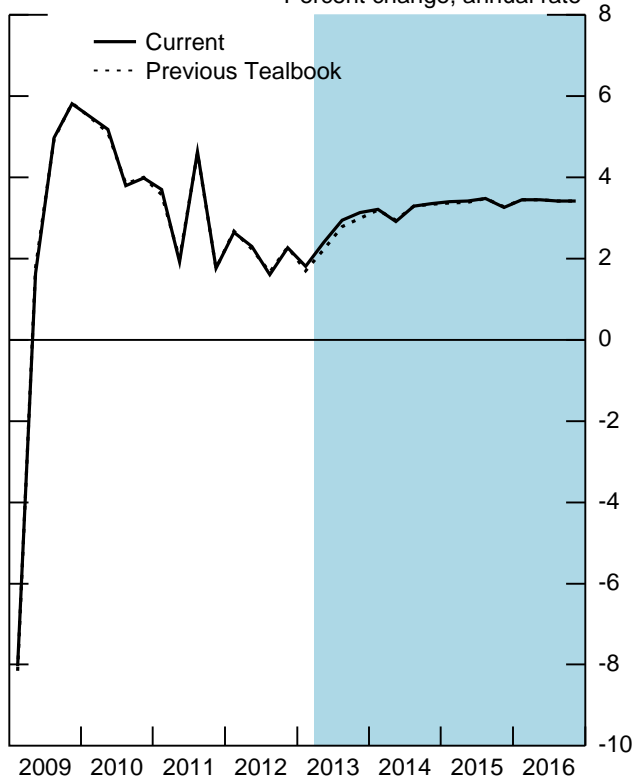
Percent change, annual rate

	2013			2014			2015	2016
	H1	Q3	Q4	Q1	Q2	H2		
1. Total Foreign	2.1	3.0	3.1	3.2	2.9	3.3	3.4	3.4
<i>Previous Tealbook</i>	2.0	2.8	3.0	3.2	2.9	3.3	3.4	3.4
2. Advanced Foreign Economies	1.7	1.8	2.0	2.2	1.5	2.2	2.2	2.3
<i>Previous Tealbook</i>	1.6	1.8	1.9	2.1	1.5	2.1	2.2	2.3
3. Canada	2.0	2.7	2.2	2.4	2.5	2.6	2.7	2.7
4. Euro Area	0.2	0.3	0.8	1.0	1.2	1.3	1.9	2.0
5. Japan	4.0	1.1	3.6	4.4	-3.5	2.1	1.0	1.3
6. United Kingdom	2.1	3.2	3.0	2.8	2.8	2.7	2.6	2.4
7. Emerging Market Economies	2.6	4.1	4.3	4.3	4.4	4.5	4.6	4.6
<i>Previous Tealbook</i>	2.3	3.8	4.1	4.3	4.4	4.5	4.6	4.6
8. China	7.0	9.4	8.5	8.0	7.8	7.7	7.6	7.5
9. Emerging Asia ex. China	2.9	4.1	4.1	3.9	4.1	4.3	4.6	4.6
10. Mexico	-0.7	3.4	3.5	3.4	3.6	3.6	3.6	3.5
11. Brazil	3.5	-1.9	1.3	2.6	3.0	3.2	3.4	3.4

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

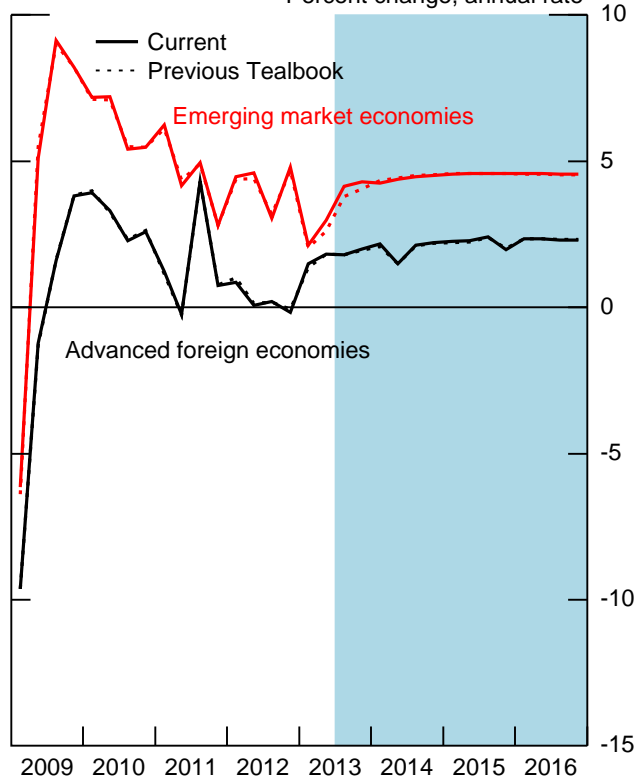
Total Foreign GDP

Percent change, annual rate



Foreign GDP

Percent change, annual rate



The Foreign Inflation Outlook

Consumer Prices*

Percent change, annual rate

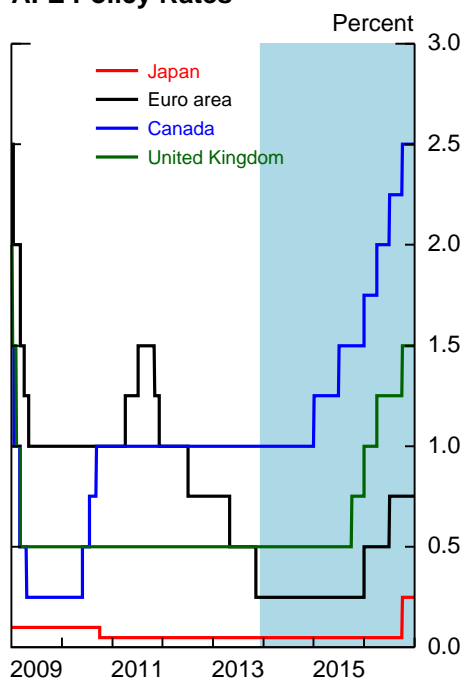
	2013			2014			2015	2016
	H1	Q3	Q4	Q1	Q2	H2		
1. Total Foreign	2.1	2.8	2.3	2.5	3.0	2.4	2.6	2.6
<i>Previous Tealbook</i>	2.0	2.8	2.6	2.5	3.1	2.5	2.7	2.6
2. Advanced Foreign Economies	0.7	2.0	0.6	1.2	2.7	1.4	1.8	1.7
<i>Previous Tealbook</i>	0.7	2.1	1.4	1.3	2.8	1.5	1.8	1.8
3. Canada	0.8	1.5	0.3	1.4	1.5	1.6	1.7	1.9
4. Euro Area	0.7	1.8	0.3	1.1	1.3	1.3	1.5	1.5
5. Japan	0.2	3.1	1.0	1.0	8.8	0.8	2.6	1.7
6. United Kingdom	1.9	3.0	1.6	1.7	1.7	2.0	1.9	1.8
7. Emerging Market Economies	3.1	3.3	3.7	3.5	3.3	3.3	3.3	3.3
<i>Previous Tealbook</i>	3.1	3.3	3.5	3.3	3.3	3.3	3.3	3.3
8. China	2.6	3.4	3.4	2.9	3.0	3.0	3.0	3.0
9. Emerging Asia ex. China	2.7	4.0	3.8	3.3	3.2	3.4	3.4	3.4
10. Mexico	4.2	2.0	3.9	4.7	3.7	3.4	3.4	3.4
11. Brazil	6.4	4.6	5.5	5.7	5.6	5.3	5.3	5.3

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

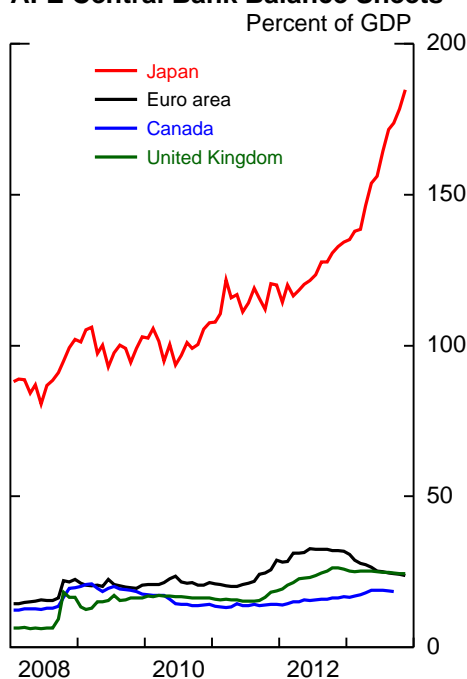
Int'l Econ Devel & Outlook

Foreign Monetary Policy

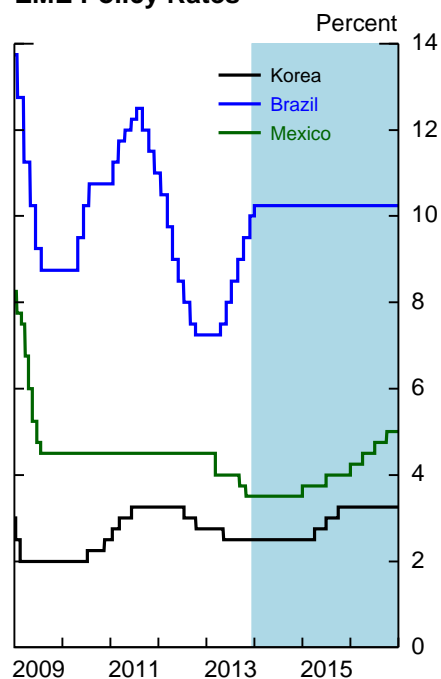
AFE Policy Rates



AFE Central Bank Balance Sheets

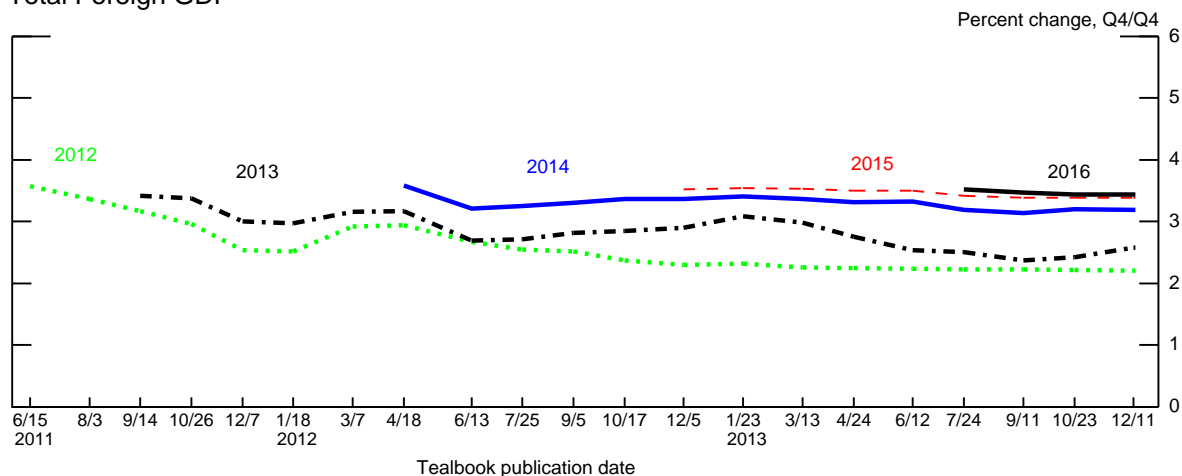


EME Policy Rates

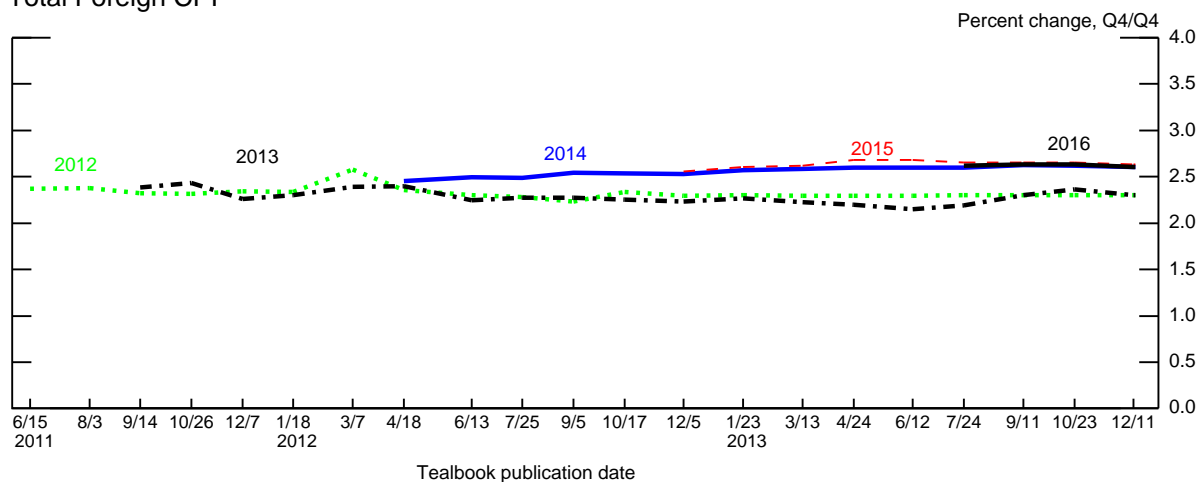


Evolution of Staff's International Forecast

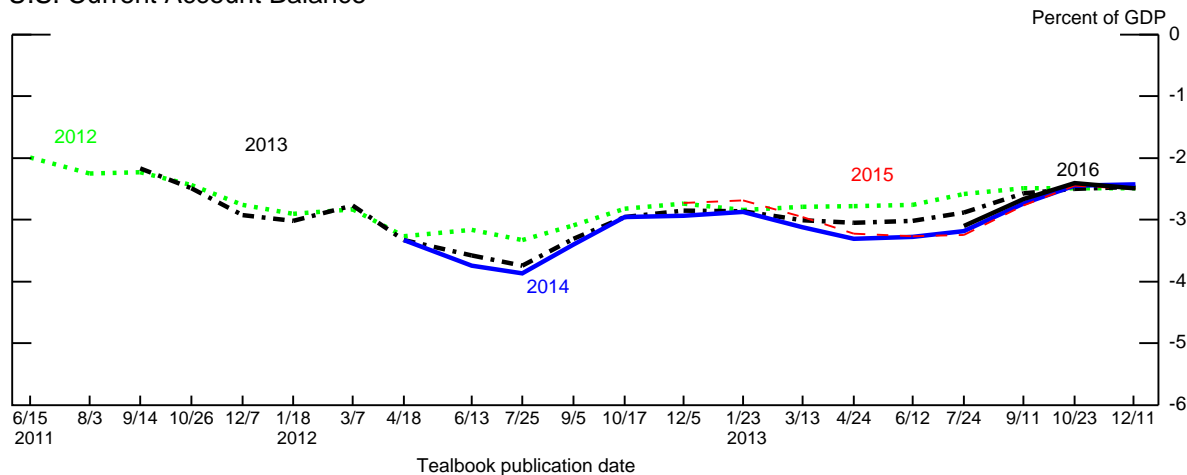
Total Foreign GDP



Total Foreign CPI

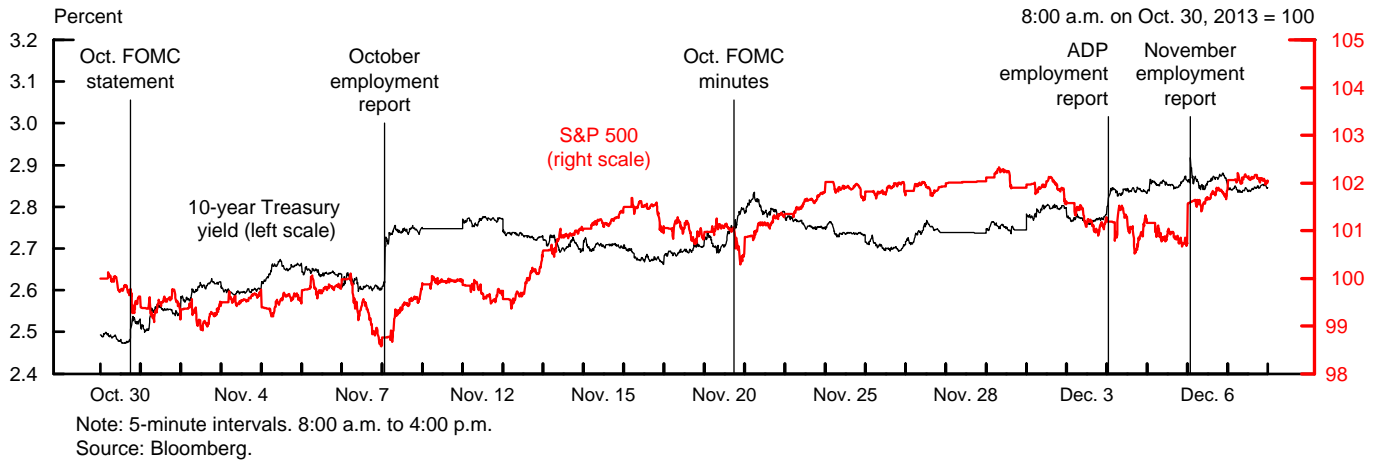


U.S. Current Account Balance

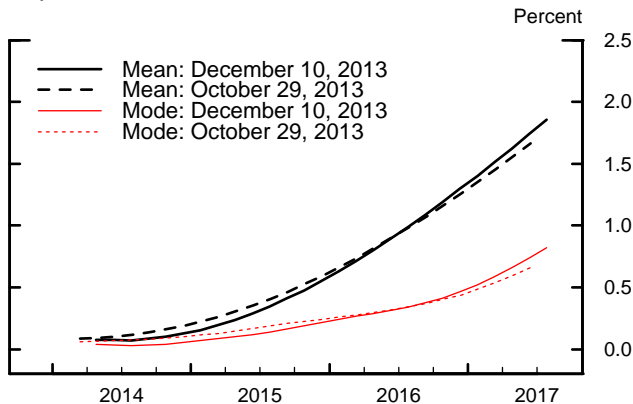


Policy Expectations and Asset Prices

S&P 500 Index and 10-year Treasury Yield

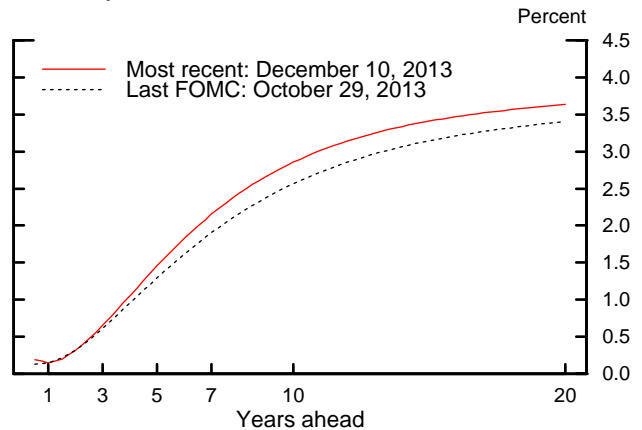


Implied Federal Funds Rate



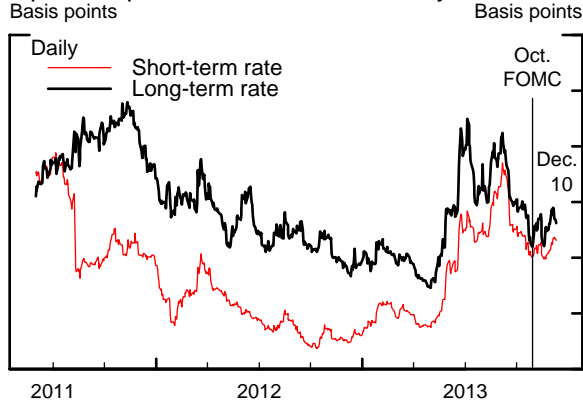
Note: Mean is estimated using overnight index swap quotes. Mode is estimated from the distribution of federal funds rate implied by interest rate caps. Both include a term premium of zero basis points per month.
Source: Bloomberg; CME Group.

Treasury Yield Curve



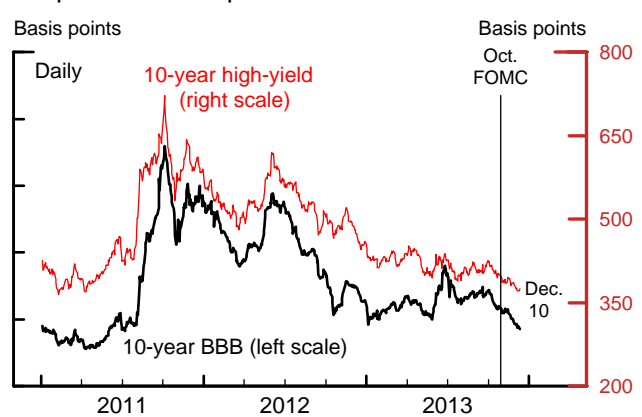
Note: Smoothed yield curve estimated from off-the-run Treasury coupon securities. Yields shown are those on notional par Treasury securities with semiannual coupons.
Source: Federal Reserve Board.

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 6 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.

Corporate Bond Spreads



Note: Spreads over 10-year Treasury yield.
Source: Staff estimates of smoothed corporate yield curves based on Merrill Lynch data and smoothed Treasury yield curve.

Alternative Scenarios

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

Measure and scenario	2013	2014	2015	2016	2017-18
	H2				
<i>Real GDP</i>					
Extended Tealbook baseline	2.6	3.1	3.5	3.4	2.5
Hysteresis	2.6	3.0	2.9	2.7	2.3
Weak housing market	2.6	2.6	3.0	3.4	2.7
Corporate credit boom and bust	4.2	5.1	2.3	-1.1	2.1
Faster recovery	3.3	4.1	3.8	3.3	2.3
Low inflation	2.5	3.1	3.4	3.3	2.5
EME financial crisis	2.6	1.9	3.4	3.9	2.8
Lower oil prices	2.6	3.3	3.9	3.7	2.5
<i>Unemployment rate¹</i>					
Extended Tealbook baseline	7.1	6.5	5.9	5.3	5.0
Hysteresis	7.1	6.2	5.6	5.3	5.3
Weak housing market	7.1	6.7	6.4	5.9	5.3
Corporate credit boom and bust	7.0	5.4	4.8	6.5	6.9
Faster recovery	7.0	6.0	5.1	4.6	4.7
Low inflation	7.1	6.5	6.0	5.4	5.1
EME financial crisis	7.1	6.9	6.5	5.8	5.2
Lower oil prices	7.1	6.5	5.7	5.0	4.7
<i>Total PCE prices</i>					
Extended Tealbook baseline	1.3	1.4	1.4	1.6	1.9
Hysteresis	1.3	1.5	1.5	1.7	2.0
Weak housing market	1.3	1.4	1.4	1.5	1.8
Corporate credit boom and bust	1.3	1.4	1.4	1.6	1.9
Faster recovery	1.3	1.4	1.4	1.7	2.0
Low inflation	1.2	.6	.3	.2	.4
EME financial crisis	1.2	-.1	1.2	1.9	2.2
Lower oil prices	1.2	.4	1.3	1.6	1.8
<i>Core PCE prices</i>					
Extended Tealbook baseline	1.3	1.4	1.6	1.7	1.9
Hysteresis	1.3	1.5	1.7	1.8	2.0
Weak housing market	1.3	1.4	1.6	1.6	1.8
Corporate credit boom and bust	1.3	1.4	1.6	1.8	1.9
Faster recovery	1.3	1.4	1.6	1.8	2.0
Low inflation	1.2	.6	.5	.3	.4
EME financial crisis	1.3	.9	1.3	1.7	2.1
Lower oil prices	1.3	1.2	1.4	1.6	1.9
<i>Federal funds rate¹</i>					
Extended Tealbook baseline	.1	.1	.8	1.9	3.5
Hysteresis	.1	.6	2.0	3.0	3.7
Weak housing market	.1	.1	.4	1.4	2.8
Corporate credit boom and bust	.1	1.1	2.4	1.9	1.2
Faster recovery	.1	.6	1.9	3.2	4.4
Low inflation	.1	.1	.3	.8	1.6
EME financial crisis	.1	.1	.1	1.2	3.3
Lower oil prices	.1	.1	.7	1.9	3.7

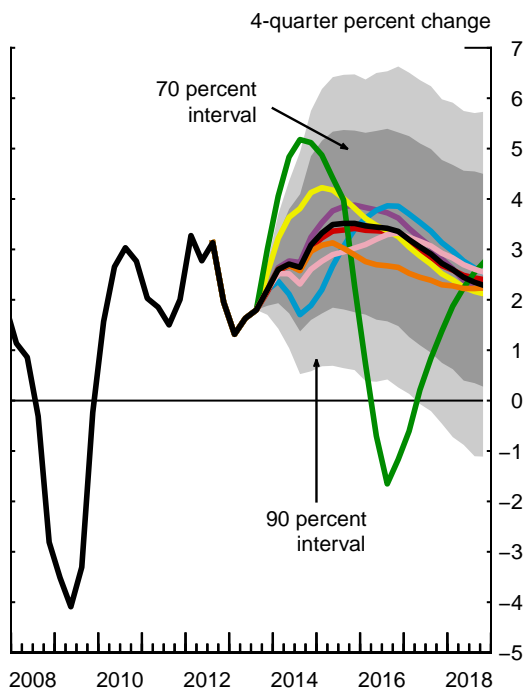
1. Percent, average for the final quarter of the period.

Forecast Confidence Intervals and Alternative Scenarios

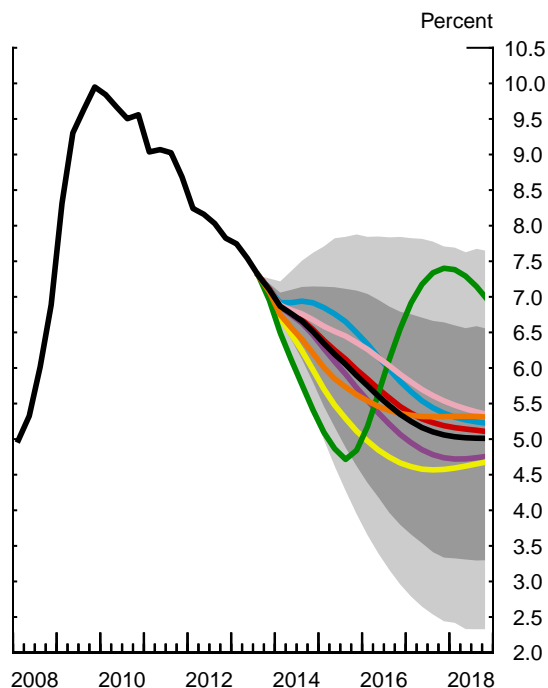
Confidence Intervals Based on FRB/US Stochastic Simulations

- Extended Tealbook baseline
- Corporate credit boom and bust
- EME financial crisis
- Hysteresis
- Faster recovery
- Lower oil prices
- Weak housing market
- Low inflation

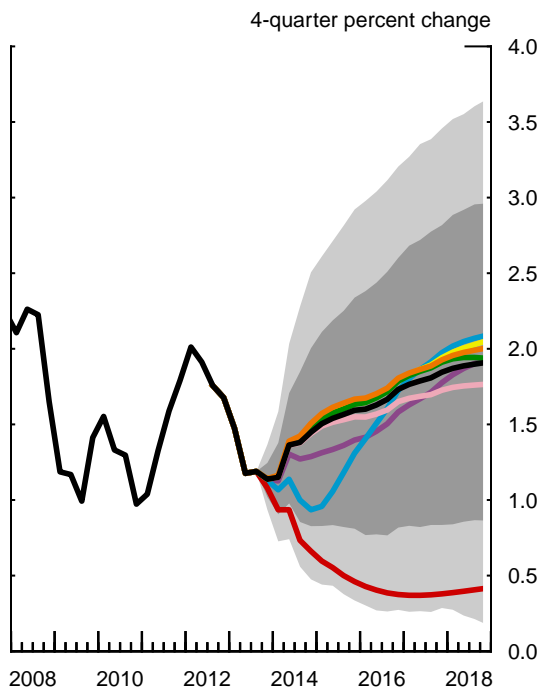
Real GDP



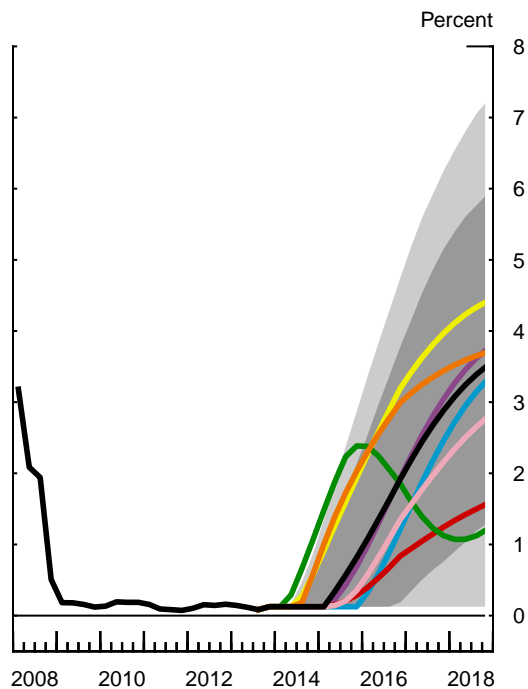
Unemployment Rate



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	2018
<i>Real GDP</i> (percent change, Q4 to Q4)						
Projection	2.2	3.1	3.5	3.4	2.7	2.3
Confidence interval						
Tealbook forecast errors	1.7–2.7	1.3–4.8	1.5–5.5	...	...	...
FRB/US stochastic simulations	1.9–2.5	1.6–4.8	1.8–5.4	1.5–5.3	.7–4.8	.3–4.5
<i>Civilian unemployment rate</i> (percent, Q4)						
Projection	7.1	6.5	5.9	5.3	5.1	5.0
Confidence interval						
Tealbook forecast errors	7.0–7.2	5.8–7.2	4.9–6.9	...	...	...
FRB/US stochastic simulations	7.0–7.2	5.8–7.1	4.6–7.1	3.8–6.8	3.3–6.6	3.3–6.5
<i>PCE prices, total</i> (percent change, Q4 to Q4)						
Projection	.9	1.4	1.4	1.6	1.8	1.9
Confidence interval						
Tealbook forecast errors	.7–1.1	.1–2.6	.2–2.7	...	...	...
FRB/US stochastic simulations	.7–1.1	.5–2.2	.4–2.5	.5–2.7	.6–2.9	.7–3.2
<i>PCE prices excluding food and energy</i> (percent change, Q4 to Q4)						
Projection	1.1	1.4	1.6	1.7	1.8	1.9
Confidence interval						
Tealbook forecast errors	.9–1.4	.8–2.1	.8–2.4	...	...	...
FRB/US stochastic simulations	1.0–1.2	.8–2.0	.8–2.3	.8–2.6	.8–2.8	.9–3.0
<i>Federal funds rate</i> (percent, Q4)						
Projection	.1	.1	.8	1.9	2.9	3.5
Confidence interval						
FRB/US stochastic simulations	.1–.1	.1–.6	.1–2.1	.2–3.8	.8–5.2	1.3–5.9

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	2.0	2.2	3.2	3.1	3.5	3.5
FRB/US	1.5	2.2	2.2	2.1	2.6	2.6
EDO	2.1	2.2	3.1	3.0	3.0	2.9
Blue Chip	2.0	2.2	2.8	2.8	...	...
<i>Unemployment rate¹</i>						
Staff	7.3	7.1	6.6	6.5	5.9	5.9
FRB/US	7.4	7.1	7.4	7.0	7.1	6.6
EDO	7.4	7.1	7.2	7.1	7.0	6.9
Blue Chip	7.3	7.2	6.8	6.7	...	...
<i>Total PCE prices</i>						
Staff	1.0	.9	1.4	1.4	1.5	1.4
FRB/US	.9	.9	.9	1.0	1.0	1.0
EDO	1.1	.9	1.3	1.3	1.5	1.5
Blue Chip ²	1.4	1.3	2.0	2.0	...	...
<i>Core PCE prices</i>						
Staff	1.2	1.1	1.5	1.4	1.6	1.6
FRB/US	1.2	1.1	1.1	1.1	1.1	1.1
EDO	1.2	1.1	1.3	1.3	1.5	1.5
Blue Chip	...	...	...	...	...	...
<i>Federal funds rate¹</i>						
Staff	.1	.1	.1	.1	.9	.8
FRB/US	.1	.1	.1	.1	.1	.1
EDO	.4	.1	1.4	1.2	2.1	2.0
Blue Chip ³	.1	.1	.2	.2	...	...

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

1. Percent, average for Q4.

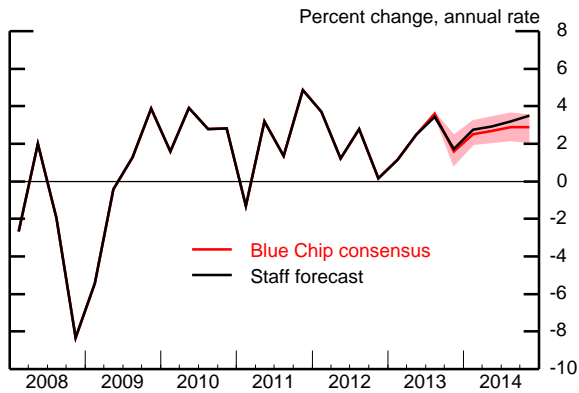
2. Consumer price index.

3. Treasury bill rate.

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

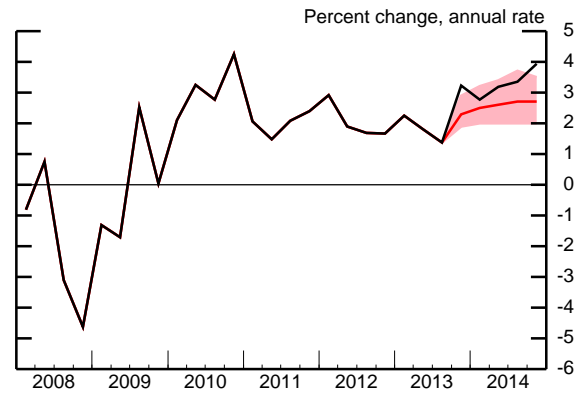
Tealbook Forecast Compared with Blue Chip (Blue Chip survey released December 10, 2013)

Real GDP

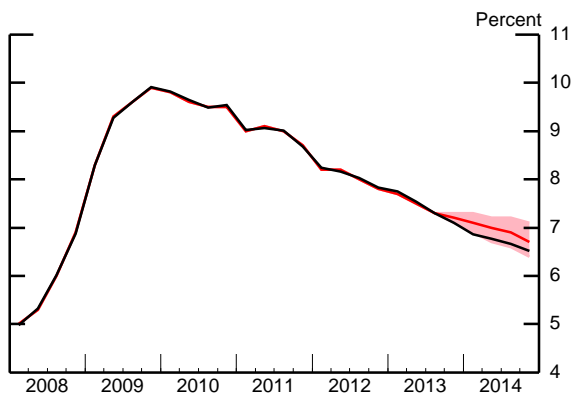


Note: The shaded area represents the area between the Blue Chip top 10 and bottom 10 averages.

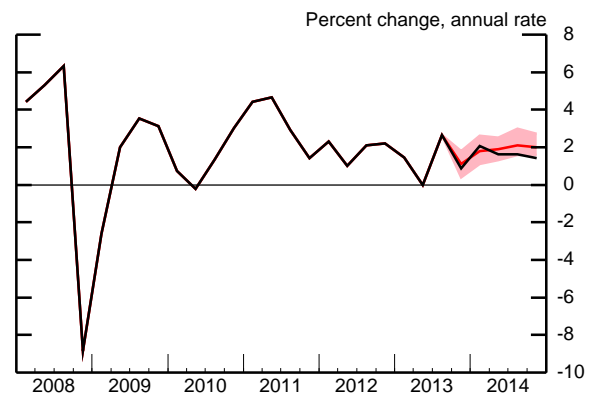
Real PCE



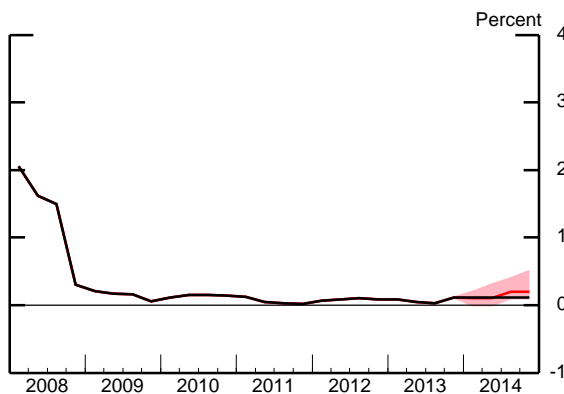
Unemployment Rate



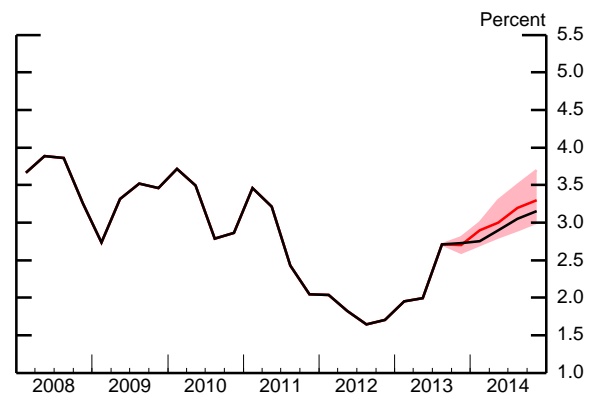
Consumer Price Index



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:Q4)

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	.03	.02	.09	.02
Previous Tealbook	.03	.01	.06	.05
<i>Less than 1 percent</i>				
Current Tealbook	.31	.47	.35	.27
Previous Tealbook	.34	.53	.36	.20

Probability of Unemployment Events

(4 quarters ahead—2014:Q4)

Probability that the unemployment rate will ...	Staff	FRB/US	EDO	BVAR
<i>Increase by 1 percentage point</i>				
Current Tealbook	.01	.04	.23	.01
Previous Tealbook	.01	.08	.19	.02
<i>Decrease by 1 percentage point</i>				
Current Tealbook	.27	.08	.14	.18
Previous Tealbook	.21	.03	.21	.19

Probability of Near-Term Recession

Probability that real GDP declines in each of 2014:Q1 and 2014:Q2	Staff	FRB/US	EDO	BVAR	Factor Model
Current Tealbook	.02	.05	.05	.04	.04
Previous Tealbook	.02	.05	.05	.06	.09

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	
	10/23/13	12/11/13	10/23/13	12/11/13	10/23/13	12/11/13	10/23/13	12/11/13	10/23/13	12/11/13
<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	-1	-1	.6	.6	7.5	7.5
Q3	4.2	5.5	2.2	3.5	2.0	2.0	1.5	1.5	7.3	7.3
Q4	3.3	2.8	2.1	1.7	1.1	.7	1.4	1.1	7.3	7.1
2014:Q1	4.4	4.2	3.2	2.8	1.5	1.5	1.6	1.4	7.1	6.9
Q2	4.5	4.4	3.0	2.9	1.3	1.3	1.6	1.5	7.0	6.8
Q3	4.9	4.7	3.4	3.2	1.3	1.4	1.5	1.5	6.8	6.7
Q4	5.0	4.9	3.5	3.5	1.3	1.2	1.5	1.4	6.6	6.5
2015:Q1	5.4	5.5	3.6	3.7	1.4	1.5	1.6	1.6	6.4	6.3
Q2	5.2	5.3	3.6	3.6	1.4	1.5	1.6	1.6	6.2	6.2
Q3	5.3	5.0	3.6	3.3	1.5	1.5	1.6	1.6	6.1	6.1
Q4	5.1	5.1	3.4	3.5	1.5	1.3	1.6	1.5	5.9	5.9
<i>Two-quarter²</i>										
2013:Q2	3.0	3.0	1.8	1.8	.5	.5	1.0	1.0	-3	-3
Q4	3.8	4.1	2.2	2.6	1.6	1.3	1.5	1.3	-2	-4
2014:Q2	4.4	4.3	3.1	2.8	1.4	1.4	1.6	1.5	-3	-3
Q4	4.9	4.8	3.4	3.3	1.3	1.3	1.5	1.4	-4	-3
2015:Q2	5.3	5.4	3.6	3.6	1.4	1.5	1.6	1.6	-4	-3
Q4	5.2	5.0	3.5	3.4	1.5	1.4	1.6	1.6	-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	3.4	3.5	2.0	2.2	1.0	.9	1.2	1.1	-5	-7
2014:Q4	4.7	4.6	3.2	3.1	1.4	1.4	1.5	1.4	-7	-6
2015:Q4	5.2	5.2	3.5	3.5	1.5	1.4	1.6	1.6	-7	-6
2016:Q4	5.0	5.1	3.2	3.4	1.6	1.6	1.7	1.7	-5	-6
<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	3.1	3.2	1.6	1.7	1.1	1.1	1.3	1.2	7.5	7.4
2014	4.2	4.2	2.8	2.8	1.3	1.3	1.5	1.3	6.9	6.7
2015	5.1	5.1	3.5	3.5	1.4	1.4	1.6	1.6	6.2	6.1
2016	5.1	5.2	3.4	3.4	1.5	1.5	1.7	1.7	5.6	5.5

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	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 2.5	3.5 2.2	1.7 2.1	2.8 3.2	2.9 3.0	3.2 3.4	3.5 3.5	3.7 3.6	3.6 3.6	3.3 3.6	3.5 3.4	2.2 2.0	3.1 3.2	3.5 3.5	3.4 3.2
Final sales <i>Previous Tealbook</i>	2.1	1.9	1.9	3.0	3.1	3.4	3.7	3.8	3.7	3.7	3.7	1.5	3.3	3.7	3.5
Priv. dom. final purch. <i>Previous Tealbook</i>	2.1 2.6 2.6	1.4 2.1 2.1	2.2 3.3 3.0	2.9 3.1 3.5	3.0 3.9 4.0	3.6 4.2 4.5	3.7 4.7 4.6	3.7 4.7 4.6	3.7 4.7 4.6	3.8 4.5 4.4	3.6 4.5 4.2	1.5 2.4 2.3	3.3 4.0 4.2	3.7 4.6 4.5	3.3 3.7 3.5
Personal cons. expend. <i>Previous Tealbook</i>	1.8 1.8	1.4 1.5	3.2 2.6	2.8 2.9	3.2 3.2	3.4 3.6	3.9 3.8	3.9 3.8	4.0 3.8	3.8 3.8	3.9 3.6	2.2 2.0	3.3 3.4	3.9 3.8	3.2 3.1
Durables	6.2	7.7	7.8	8.3	8.9	9.0	9.8	9.2	9.1	8.8	8.8	6.9	9.0	9.0	6.4
Nondurables	1.6	2.4	4.7	1.6	2.5	2.6	3.1	3.1	3.2	3.0	3.1	2.9	2.4	3.1	2.6
Services	1.2	.0	2.0	2.3	2.5	2.7	3.3	3.3	3.4	3.2	3.3	1.2	2.7	3.3	2.8
Residential investment <i>Previous Tealbook</i>	14.2 14.2	13.0 7.8	-1.7 11.0	10.8 15.9	14.8 17.7	18.2 18.3	18.4 18.3	17.4 16.8	15.1 14.9	13.4 13.5	12.9 11.2	9.3 11.4	15.5 17.5	14.7 14.1	8.3 5.8
Nonres. priv. fixed invest. <i>Previous Tealbook</i>	4.7	3.5	5.0	3.0	5.2	5.0	5.1	5.3	5.5	5.5	5.5	2.1	4.6	5.4	5.1
Equipment & intangibles <i>Previous Tealbook</i>	4.7	4.0	3.6	3.8	5.0	5.4	5.4	5.3	5.6	5.4	5.2	1.8	4.9	5.4	4.9
Nonres. structures <i>Previous Tealbook</i>	1.3 1.3 17.6 17.6	.7 2.4 13.8 9.6	6.3 3.5 1.0 3.9	3.0 4.5 3.0 1.6	5.1 5.3 5.4 4.0	5.5 6.3 3.6 2.1	5.6 6.4 3.6 2.3	5.9 6.0 3.3 2.8	6.3 6.4 2.6 3.0	6.3 6.2 2.6 2.9	6.4 5.9 2.6 2.9	2.7 2.4 .1 -1	4.8 5.6 3.9 2.5	6.2 6.1 2.8 2.9	5.8 5.5 2.6 2.6
Net exports ² <i>Previous Tealbook</i> ²	-424 -424	-423 -425	-417 -410	-408 -410	-407 -408	-404 -402	-408 -399	-408 -395	-414 -397	-410 -392	-412 -389	-422 -420	-407 -405	-411 -394	-401 -372
Exports	8.0	3.7	6.8	4.3	3.9	5.0	5.5	5.8	6.1	6.3	6.0	4.2	4.7	6.0	6.7
Imports	6.9	2.7	4.7	2.0	3.2	3.7	5.3	4.8	6.1	4.7	5.4	3.7	3.5	5.2	4.9
Gov't. cons. & invest. <i>Previous Tealbook</i>	-.4 -.4	.4 -1.7	-5.3 -4.2	.9 -.6	-1.2 -2.1	-1.0 -1.8	-.8 -1.5	-1.0 -1.0	-.8 -.8	-1.0 -.8	-.2 -.4	-2.4 -2.6	-.5 -1.5	-.7 -.8	.9 .9
Federal	-1.6	-1.4	-13.4	1.6	-3.6	-3.3	-2.8	-4.1	-3.9	-4.4	-2.5	-6.3	-2.0	-3.7	.0
Defense	-.6	-.4	-14.3	-2.2	-5.3	-5.2	-2.9	-4.8	-4.2	-4.8	-2.4	-6.8	-3.9	-4.1	-.1
Nondefense	-3.1	-3.1	-11.9	8.0	-.9	-.3	-2.5	-3.1	-3.3	-3.7	-2.6	-5.5	1.0	-3.2	.1
State & local	.4	1.7	.5	.5	.4	.4	.5	1.0	1.1	1.1	1.1	.3	.5	1.1	1.5
Change in priv. inventories ² <i>Previous Tealbook</i> ²	57 57	107 82	102 81	96 94	92 93	85 87	78 78	83 77	81 74	65 68	57 63	77 65	88 88	72 70	50 59
Nonfarm ²	33	85	79	79	78	73	65	81	79	63	54	55	74	69	48
Farm ²	19	22	23	17	14	13	13	2	2	2	2	20	14	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 1.9	-2.8 -2.8	-2 -2	2.8 2.8	2.0 2.0	2.0 2.0	2.2 2.0	3.1 3.2	3.5 3.5	3.4 3.2
Final sales <i>Previous Tealbook</i>	2.0 2.0	-2.2 -2.2	-4 -4	2.0 2.0	1.8 1.8	2.5 2.5	1.5 1.5	3.3 3.3	3.7 3.7	3.5 3.3
Priv. dom. final purch. <i>Previous Tealbook</i>	.8 .8	-4.1 -4.1	-2.3 -2.3	3.5 3.5	3.0 3.0	2.9 2.9	2.4 2.3	4.0 4.2	4.6 4.5	3.7 3.5
Personal cons. expend. <i>Previous Tealbook</i>	1.5 1.5	-2.0 -2.0	-1 -1	3.1 3.1	2.0 2.0	2.0 2.0	2.2 2.0	3.3 3.4	3.9 3.8	3.2 3.1
Durables	4.1	-12.9	2.5	9.3	5.7	7.8	6.9	9.0	9.0	6.4
Nondurables	.1	-2.7	.2	3.3	.7	1.6	2.9	2.4	3.1	2.6
Services	1.5	.2	-6	2.1	1.9	1.3	1.2	2.7	3.3	2.8
Residential investment <i>Previous Tealbook</i>	-21.3 -21.3	-24.3 -24.3	-10.8 -10.8	-5.2 -5.2	5.6 5.6	15.5 15.5	9.3 11.4	15.5 17.5	14.7 14.1	8.3 5.8
Nonres. priv. fixed invest. <i>Previous Tealbook</i>	7.1 7.1	-8.9 -8.9	-12.2 -12.2	8.1 8.1	8.6 8.6	5.0 5.0	2.1 1.8	4.6 4.9	5.4 5.4	5.1 4.9
Equipment & intangibles <i>Previous Tealbook</i>	3.9 3.9	-11.8 -11.8	-6.0 -6.0	12.0 12.0	8.7 8.7	3.9 3.9	2.7 2.4	4.8 5.6	6.2 6.1	5.8 5.5
Nonres. structures <i>Previous Tealbook</i>	17.1 17.1	-1.2 -1.2	-27.1 -27.1	-4.0 -4.0	8.3 8.3	9.3 9.3	.1 -1	3.9 2.5	2.8 2.9	2.6 2.6
Net exports ¹ <i>Previous Tealbook</i> ¹	-704 -704	-547 -547	-392 -392	-463 -463	-446 -446	-431 -431	-422 -420	-407 -405	-411 -394	-401 -372
Exports	9.8	-2.9	.4	9.8	4.6	2.4	4.2	4.7	6.0	6.7
Imports	.7	-5.9	-6.2	11.7	3.5	.1	3.7	3.5	5.2	4.9
Gov't. cons. & invest. <i>Previous Tealbook</i>	1.8 1.8	3.3 3.3	2.3 2.3	-1.1 -1.1	-3.3 -3.3	-1.1 -1.1	-2.4 -2.6	-.5 -1.5	-.7 -.8	.9 .9
Federal	2.7	8.4	3.9	3.2	-3.9	-2.3	-6.3	-2.0	-3.7	.0
Defense	2.5	9.4	3.6	2.0	-4.2	-5.0	-6.8	-3.9	-4.1	-1
Nondefense	2.9	6.5	4.6	5.5	-3.3	2.6	-5.5	1.0	-3.2	.1
State & local	1.2	.2	1.3	-4.0	-2.8	-.3	.3	.5	1.1	1.5
Change in priv. inventories ¹ <i>Previous Tealbook</i> ¹	36 36	-34 -34	-148 -148	58 58	34 34	58 58	77 65	88 88	72 70	50 59
Nonfarm ¹	37	-35	-146	66	40	69	55	74	69	48
Farm ¹	-1	1	-2	-7	-4	-7	20	14	2	2

1. Billions of chained (2009) dollars.

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 2.5	3.5 2.2	1.7 2.1	2.8 3.2	2.9 3.0	3.2 3.4	3.5 3.5	3.7 3.6	3.6 3.6	3.3 3.6	3.5 3.4	2.2 2.0	3.1 3.2	3.5 3.5	3.4 3.2
Final sales <i>Previous Tealbook</i>	2.1	1.9	1.9	3.0	3.1	3.4	3.7	3.7	3.6	3.7	3.7	1.5	3.3	3.7	3.5
Priv. dom. final purch. <i>Previous Tealbook</i>	2.1	1.4	2.1	2.9	3.0	3.5	3.7	3.8	3.7	3.7	3.6	1.5	3.3	3.7	3.3
	2.2	1.8	2.7	2.6	3.3	3.5	3.9	3.9	3.9	3.8	3.8	2.0	3.3	3.9	3.2
	2.2	1.8	2.5	3.0	3.3	3.7	3.9	3.9	3.9	3.8	3.6	2.0	3.5	3.8	3.0
Personal cons. expend. <i>Previous Tealbook</i>	1.2	1.0	2.2	1.9	2.2	2.3	2.7	2.7	2.7	2.6	2.6	1.5	2.3	2.7	2.2
Durables	1.2	1.1	1.8	2.0	2.2	2.5	2.6	2.6	2.6	2.6	2.5	1.4	2.3	2.6	2.1
Nondurables	.5	.6	.6	.6	.7	.7	.7	.7	.7	.7	.7	.5	.7	.7	.5
Services	.3	.4	.7	.3	.4	.4	.5	.5	.5	.5	.5	.4	.4	.5	.4
	.5	.0	.9	1.0	1.1	1.2	1.5	1.5	1.5	1.5	1.5	.5	1.2	1.5	1.3
Residential investment <i>Previous Tealbook</i>	.4	.4	-.1	.3	.5	.6	.6	.6	.5	.5	.5	.3	.5	.5	.3
	.4	.2	.3	.5	.6	.6	.6	.6	.6	.5	.4	.3	.6	.5	.2
Nonres. priv. fixed invest. <i>Previous Tealbook</i>	.6	.4	.6	.4	.6	.6	.6	.6	.7	.7	.7	.3	.6	.7	.6
Equipment & intangibles <i>Previous Tealbook</i>	.6	.5	.4	.5	.6	.7	.7	.6	.7	.7	.7	.2	.6	.7	.6
	.1	.1	.6	.3	.5	.5	.5	.6	.6	.6	.6	.3	.5	.6	.6
<i>Previous Tealbook</i>	.1	.2	.3	.4	.5	.6	.6	.6	.6	.6	.6	.2	.5	.6	.5
Nonres. structures <i>Previous Tealbook</i>	.4	.4	.0	.1	.2	.1	.1	.1	.1	.1	.1	.0	.1	.1	.1
	.4	.3	.1	.0	.1	.1	.1	.1	.1	.1	.1	.0	.1	.1	.1
Net exports <i>Previous Tealbook</i>	-.1	.1	.1	.3	.0	.1	-.1	.0	-.2	.1	-.1	.0	.1	.0	.1
Exports	-.1	.0	.4	.0	.1	.1	.1	.1	-.1	.1	.1	.0	.1	.0	.2
Imports	1.0	.5	.9	.6	.5	.7	.7	.8	.8	.9	.8	.6	.6	.8	.9
	-1.1	-.4	-.8	-.3	-.5	-.6	-.9	-.8	-1.0	-.8	-.9	-.6	-.6	-.9	-.8
Gov't. cons. & invest. <i>Previous Tealbook</i>	-.1	.1	-1.0	.2	-.2	-.2	-.1	-.2	-.1	-.2	.0	-.5	-.1	-.1	.2
Federal	-.1	-.3	-.8	-.1	-.4	-.3	-.3	-.2	-.1	-.1	-.1	-.5	-.3	-.1	.2
Defense	-.1	-.1	-1.0	.1	-.3	-.2	-.2	-.3	-.3	-.3	-.2	-.5	-.1	-.3	.0
Nondefense	.0	.0	-.7	-.1	-.2	-.2	-.1	-.2	-.2	-.2	-.1	-.3	-.2	-.2	.0
State & local	-.1	-.1	-.4	.2	.0	.0	-.1	-.1	-.1	-.1	-.1	-.2	.0	-.1	.0
	.1	.2	.1	.1	.1	.1	.1	.1	.1	.1	.1	.0	.1	.1	.2
Change in priv. inventories <i>Previous Tealbook</i>	.4	1.5	-.1	-.3	-.2	-.2	-.2	.0	-.1	-.4	-.2	.7	-.2	-.2	-.1
Nonfarm	.4	.8	.0	.3	-.1	-.2	-.3	-.2	-.1	-.2	-.1	.5	.0	-.1	-.1
Farm	.3	1.4	-.2	.0	.0	-.1	-.2	.4	-.1	-.4	-.2	.4	-.1	-.1	-.1
	.1	.1	.0	-.3	-.1	.0	.0	-.4	.0	.0	.0	.3	-.1	-.1	.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				2013 ¹	2014 ¹	2015 ¹	2016 ¹
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
GDP chain-wt. price index <i>Previous Tealbook</i>	.6 .6	2.0 2.0	1.1 1.2	1.4 1.2	1.5 1.5	1.5 1.4	1.4 1.5	1.8 1.7	1.6 1.6	1.6 1.6	1.5 1.6	1.3 1.3	1.4 1.4	1.6 1.6	1.7 1.7
PCE chain-wt. price index <i>Previous Tealbook</i>	-1 -1	2.0 2.0	.7 1.1	1.5 1.5	1.3 1.3	1.4 1.3	1.2 1.3	1.5 1.4	1.5 1.4	1.5 1.5	1.3 1.5	.9 1.0	1.4 1.4	1.4 1.5	1.6 1.6
Energy <i>Previous Tealbook</i>	-11.9 -11.9	11.7 11.1	-4.8 -4.2	4.9 1.3	.1 -1.5	.1 -1.2	-4 -1.2	-5 -1.0	-9 -1.3	-9 -1.2	-8 -1.0	-2.5 -2.4	1.1 -.7	-8 -1.1	-5 -5
Food <i>Previous Tealbook</i>	.5 .5	1.2 1.5	.5 .9	.7 .6	.6 .6	.7 .7	.7 .7	1.0 1.0	1.3 1.3	1.3 1.3	1.4 1.4	.9 1.1	.7 .6	1.3 1.3	1.4 1.4
Ex. food & energy <i>Previous Tealbook</i>	.6 .6	1.5 1.5	1.1 1.4	1.4 1.6	1.5 1.6	1.5 1.5	1.4 1.5	1.6 1.6	1.6 1.6	1.6 1.6	1.5 1.6	1.1 1.2	1.4 1.5	1.6 1.6	1.7 1.7
Ex. food & energy, market based <i>Previous Tealbook</i>	.5 .5	1.4 1.5	.7 1.2	1.4 1.5	1.5 1.6	1.5 1.5	1.3 1.5	1.6 1.6	1.6 1.6	1.6 1.6	1.4 1.6	1.1 1.2	1.4 1.5	1.6 1.6	1.7 1.7
CPI <i>Previous Tealbook</i>	.0 .0	2.6 2.6	.9 1.0	2.0 1.7	1.6 1.4	1.6 1.5	1.4 1.5	1.6 1.6	1.6 1.6	1.6 1.6	1.6 1.6	1.2 1.3	1.7 1.5	1.6 1.6	1.7 1.7
Ex. food & energy <i>Previous Tealbook</i>	1.4 1.4	1.8 1.8	1.6 1.7	1.9 1.8	1.9 1.8	1.9 1.8	1.7 1.9	1.9 2.0	1.9 1.9	1.9 1.9	1.8 1.8	1.7 1.7	1.8 1.8	1.9 1.9	1.9 1.9
ECL, hourly compensation ² <i>Previous Tealbook</i> ²	2.4 2.4	1.7 2.4	2.1 2.4	2.2 2.5	2.4 2.5	2.5 2.6	2.5 2.6	2.6 2.7	2.7 2.7	2.8 2.7	2.8 2.7	2.0 2.2	2.4 2.5	2.7 2.7	3.0 3.0
Nonfarm business sector Output per hour <i>Previous Tealbook</i>	1.8 1.8	2.7 2.2	.2 1.1	.8 .9	1.7 1.4	1.9 1.6	1.8 1.6	1.9 1.8	1.7 1.6	1.6 1.9	1.9 1.8	.7 .8	1.5 1.4	1.8 1.8	1.9 1.9
Compensation per hour <i>Previous Tealbook</i>	3.8 2.3	1.6 1.5	2.0 2.3	2.3 2.7	2.6 2.7	2.8 2.8	2.9 2.9	3.0 3.0	3.1 3.1	3.1 3.1	3.2 3.2	.5 .2	2.7 2.7	3.1 3.1	3.4 3.4
Unit labor costs <i>Previous Tealbook</i>	1.9 .5	-1.0 -.7	1.8 1.2	1.6 1.7	.9 1.2	.9 1.2	1.1 1.2	1.1 1.2	1.4 1.5	1.5 1.2	1.3 1.4	-2 -.7	1.1 1.3	1.3 1.3	1.5 1.5
Core goods imports chain-wt. price index ³ <i>Previous Tealbook</i> ³	-2.4 -2.4	-3.2 -3.0	.8 .8	1.1 1.9	1.4 1.5	1.8 1.8	1.5 1.5	1.6 1.6	1.6 1.6	1.6 1.6	1.6 1.6	-1.1 -1.1	1.5 1.7	1.6 1.6	1.7 1.6

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 1.9	.4 .4	1.8 1.8	1.8 1.8	1.8 1.8	1.3 1.3	1.4 1.4	1.6 1.6	1.7 1.7
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	.9 1.0	1.4 1.4	1.4 1.5	1.6 1.6
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	-2.5 -2.4	1.1 -.7	-8 -1.1	-5 -5
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	.9 1.1	.7 .6	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	1.1 1.2	1.4 1.5	1.6 1.6	1.7 1.7
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	1.1 1.2	1.4 1.5	1.6 1.6	1.7 1.7
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 1.3	1.7 1.5	1.6 1.6	1.7 1.7
Ex. food & energy <i>Previous Tealbook</i>	2.3 2.3	2.0 2.0	1.7 1.7	.6 .6	2.2 2.2	1.9 1.9	1.7 1.7	1.8 1.8	1.9 1.9	1.9 1.9
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 2.2	2.4 2.5	2.7 2.7	3.0 3.0
Nonfarm business sector Output per hour <i>Previous Tealbook</i>	2.4 2.3	-.4 -.2	5.5 5.4	1.9 1.9	.4 .4	.9 .9	.7 .8	1.5 1.4	1.8 1.8	1.9 1.9
Compensation per hour <i>Previous Tealbook</i>	3.9 3.9	3.0 3.0	1.2 1.2	1.6 1.6	.9 .9	5.3 5.3	.5 .2	2.7 2.7	3.1 3.1	3.4 3.4
Unit labor costs <i>Previous Tealbook</i>	1.5 1.6	3.5 3.2	-4.0 -4.0	-.3 -.3	.5 .5	4.4 4.4	-2 -.7	1.1 1.3	1.3 1.3	1.5 1.5
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	1.5 1.7	1.6 1.6	1.7 1.6

1. Private-industry workers.

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

Other Macroeconomic Indicators

Item	2013			2014			2015				2013 ¹	2014 ¹	2015 ¹	2016 ¹
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
<i>Employment and production</i>														
Nonfarm payroll employment ²	.6	.5	.6	.6	.6	.6	.6	.7	.8	.7	.7	2.3	2.4	2.9
Unemployment rate ³	7.5	7.3	7.1	6.9	6.8	6.7	6.5	6.3	6.2	6.1	5.9	7.1	6.5	5.9
<i>Previous Tealbook³</i>	7.5	7.3	7.3	7.1	7.0	6.8	6.6	6.4	6.2	6.1	5.9	7.3	6.6	5.9
Natural rate of unemployment ³	5.5	5.4	5.4	5.3	5.3	5.3	5.3	5.2	5.2	5.2	5.2	5.4	5.3	5.2
<i>Previous Tealbook³</i>	5.5	5.4	5.4	5.3	5.3	5.3	5.3	5.2	5.2	5.2	5.2	5.4	5.3	5.2
GDP gap ⁴	-3.7	-3.3	-3.4	-3.3	-3.1	-2.9	-2.5	-2.2	-1.8	-1.6	-1.3	-3.4	-2.5	-1.3
<i>Previous Tealbook⁴</i>	-3.7	-3.6	-3.6	-3.4	-3.2	-2.9	-2.6	-2.3	-1.9	-1.6	-1.3	-3.6	-2.6	-1.3
Industrial production ⁵	1.1	2.3	5.7	4.7	4.1	3.1	3.7	4.2	3.9	2.7	3.6	3.3	3.9	3.6
<i>Previous Tealbook⁵</i>	.7	2.2	4.5	4.9	4.7	3.4	3.7	4.4	4.0	3.0	3.5	2.9	4.2	3.7
Manufacturing industr. prod. ⁵	.1	1.0	4.8	3.3	3.6	3.6	4.1	4.2	4.3	3.7	3.9	2.7	3.6	4.0
<i>Previous Tealbook⁵</i>	-4	1.8	3.3	4.2	4.2	4.0	4.1	4.4	4.5	4.0	3.8	2.4	4.1	4.2
Capacity utilization rate - mfg. ³	76.1	76.0	76.5	76.8	77.1	77.4	77.7	78.1	78.5	78.7	79.0	76.5	77.7	79.0
<i>Previous Tealbook³</i>	76.0	76.0	76.3	76.8	77.2	77.6	78.0	78.5	78.9	79.3	79.6	76.3	78.0	79.6
Housing starts ⁶	.9	.9	1.0	1.0	1.1	1.2	1.3	1.3	1.4	1.4	1.5	.9	1.2	1.4
Light motor vehicle sales ⁶	15.5	15.7	15.7	15.8	15.8	15.9	16.0	16.1	16.2	16.4	16.5	15.5	15.9	16.3
<i>Income and saving</i>														
Nominal GDP ⁵	3.1	5.5	2.8	4.2	4.4	4.7	4.9	5.5	5.3	5.0	5.1	3.5	4.6	5.2
Real disposable pers. income ⁵	4.1	2.9	.9	2.2	2.8	3.0	3.2	4.1	3.3	3.3	3.3	-1	2.8	3.5
<i>Previous Tealbook⁵</i>	3.5	1.1	-1	3.6	2.8	3.1	3.2	4.1	3.4	3.3	3.2	-9	3.2	3.5
Personal saving rate ³	4.7	5.0	4.4	4.3	4.2	4.1	3.9	4.0	3.8	3.7	3.6	4.4	3.9	3.6
<i>Previous Tealbook³</i>	4.5	4.5	3.8	4.0	3.9	3.8	3.6	3.7	3.6	3.4	3.3	3.8	3.6	3.3
Corporate profits ⁷	13.9	7.1	6.3	9.1	3.7	6.3	7.2	6.6	7.0	5.6	6.0	5.3	6.5	6.3
Profit share of GNP ³	12.3	12.4	12.5	12.7	12.6	12.7	12.8	12.8	12.9	12.9	12.9	12.5	12.8	12.9
Net federal saving ⁸	-653	-854	-776	-704	-692	-691	-684	-695	-676	-667	-655	-784	-693	-673
Net state & local saving ⁸	-198	-232	-233	-226	-208	-202	-190	-185	-165	-161	-152	-223	-207	-166
Gross national saving rate ³	17.7	17.8	18.1	18.1	18.3	18.4	18.4	18.4	18.6	18.6	18.7	18.1	18.4	18.7
Net national saving rate ³	2.5	3.1	3.4	3.4	3.6	3.7	3.8	3.8	4.1	4.1	4.3	3.4	3.8	4.3

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.

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	2.3	2.4	2.9	2.8
Unemployment rate ²	4.8	6.9	9.9	9.5	8.7	7.8	7.1	6.5	5.9	5.3
<i>Previous Tealbook²</i>	4.8	6.9	9.9	9.5	8.7	7.8	7.3	6.6	5.9	5.4
Natural rate of unemployment ²	5.0	5.3	6.0	6.0	5.8	5.7	5.4	5.3	5.2	5.2
<i>Previous Tealbook²</i>	5.0	5.3	6.0	6.0	5.8	5.7	5.4	5.3	5.2	5.2
GDP gap ³	.6	-4.1	-5.2	-3.9	-3.6	-3.6	-3.4	-2.5	-1.3	-1
<i>Previous Tealbook³</i>	.6	-4.1	-5.2	-3.9	-3.6	-3.6	-3.6	-2.6	-1.3	-3
Industrial production ⁴	2.7	-8.9	-5.5	6.2	3.3	2.8	3.3	3.9	3.6	3.1
<i>Previous Tealbook⁴</i>	2.7	-8.9	-5.5	6.2	3.3	2.8	2.9	4.2	3.7	2.8
Manufacturing industr. prod. ⁴	2.9	-11.6	-6.1	6.4	3.3	2.8	2.7	3.6	4.0	3.5
<i>Previous Tealbook⁴</i>	2.9	-11.6	-6.1	6.4	3.3	2.8	2.4	4.1	4.2	3.2
Capacity utilization rate - mfg. ²	78.4	69.9	67.2	72.9	74.8	75.7	76.5	77.7	79.0	79.8
<i>Previous Tealbook²</i>	78.4	69.9	67.2	72.9	74.8	75.7	76.3	78.0	79.6	80.2
Housing starts ⁵	1.4	.9	.6	.6	.6	.8	.9	1.2	1.4	1.6
Light motor vehicle sales ⁵	16.1	13.1	10.4	11.5	12.7	14.4	15.5	15.9	16.3	16.6
<i>Income and saving</i>										
Nominal GDP ⁴	4.4	-1.0	.1	4.6	3.9	3.8	3.5	4.6	5.2	5.1
Real disposable pers. income ⁴	1.2	1.1	-6	2.5	1.4	3.6	-1	2.8	3.5	3.3
<i>Previous Tealbook⁴</i>	1.2	1.1	-6	2.5	1.4	3.6	-9	3.2	3.5	3.2
Personal saving rate ²	2.9	6.1	5.7	5.5	5.0	6.6	4.4	3.9	3.6	3.6
<i>Previous Tealbook²</i>	2.9	6.1	5.7	5.5	5.0	6.6	3.8	3.6	3.3	3.4
Corporate profits ⁶	-9.0	-30.8	54.5	17.0	8.4	2.7	5.3	6.5	6.3	7.2
Profit share of GNP ²	9.9	6.9	10.7	11.9	12.4	12.3	12.5	12.8	12.9	13.2
Net federal saving ⁷	-267	-635	-1,250	-1,330	-1,248	-1,110	-784	-693	-673	-712
Net state & local saving ⁷	-73	-165	-272	-237	-213	-253	-223	-207	-166	-136
Gross national saving rate ²	16.3	15.0	14.7	15.2	15.8	16.9	18.1	18.4	18.7	19.1
Net national saving rate ²	1.0	-1.6	-1.6	-4	.5	1.7	3.4	3.8	4.3	4.8

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	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget																
Receipts ¹	2,774	3,055	3,275	3,479	581	891	687	672	641	969	772	746	672	1,023	834	785
Outlays ¹	3,454	3,554	3,698	3,913	888	800	857	872	915	894	873	933	943	926	896	964
Surplus/deficit ¹	-680	-500	-424	-434	-307	91	-170	-201	-274	75	-100	-187	-271	97	-62	-179
<i>Previous Tealbook</i>	-660	-512	-436	-446	-307	91	-151	-202	-278	69	-101	-196	-272	94	-63	-187
On-budget	-720	-539	-453	-449	-303	36	-143	-225	-261	19	-72	-213	-255	45	-31	-200
Off-budget	39	39	30	15	-4	55	-28	24	-13	56	-28	26	-16	52	-32	21
Means of financing:																
Borrowing	702	632	544	554	336	-17	69	364	-12	230	49	217	301	-67	92	209
Cash decrease	-3	18	0	0	14	-56	46	-51	95	-107	82	0	0	0	0	0
Other ²	-19	-151	-120	-120	-43	-18	55	-112	190	-198	-30	-30	-30	-30	-30	-30
Cash operating balance, end of period	88	70	70	70	79	135	88	140	45	152	70	70	70	70	70	70
NIPA federal sector																
Receipts	2,937	3,154	3,360	3,548	2,900	3,167	2,971	3,029	3,161	3,194	3,232	3,276	3,341	3,388	3,434	3,479
Expenditures	3,797	3,870	4,040	4,247	3,753	3,820	3,825	3,806	3,865	3,887	3,923	3,960	4,036	4,064	4,102	4,134
Consumption expenditures	981	952	940	939	982	976	973	957	954	950	947	943	945	939	933	930
Defense	620	598	589	587	620	616	615	603	601	597	592	591	592	589	585	584
Nondefense	361	354	351	352	363	360	358	354	353	353	354	352	353	351	348	346
Other spending	2,815	2,918	3,100	3,308	2,771	2,844	2,853	2,849	2,911	2,937	2,976	3,017	3,091	3,125	3,169	3,204
Current account surplus	-860	-716	-680	-699	-853	-653	-854	-776	-704	-692	-691	-684	-695	-676	-667	-655
Gross investment	277	262	252	245	273	277	278	266	264	261	258	256	253	250	248	246
Gross saving less gross investment ³	-871	-707	-656	-663	-860	-663	-865	-774	-697	-682	-676	-667	-672	-650	-637	-622
Fiscal indicators⁴																
High-employment (HEB) surplus/deficit	-668.5	-510.3	-517.2	-607.5	-648.8	-453.1	-662.6	-571.9	-491.4	-486.9	-490.9	-498.6	-520.7	-521.0	-528.5	-535.4
Change in HEB, percent of potential GDP	-2.0	-1.0	-1.1	.4	-1.6	-1.2	1.2	-5	-5	.0	.0	.0	.1	.0	.0	.0
Fiscal impetus (FI), percent of GDP	-1.3	-5	-4	.0	-2.0	-7	-7	-1.6	-4	-7	-5	-3	-7	-4	-3	-2
<i>Previous Tealbook</i>	-1.3	-6	-4	-1	-2.0	-7	-1.1	-1.4	-7	-8	-6	-4	-6	-4	-2	-2

1. Budget receipts, outlays, and surplus/deficit include corresponding social security (OASDI) surplus and the Postal Service surplus as 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 (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.

Foreign Real GDP and Consumer Prices: Selected Countries

(Quarterly percent changes at an annual rate)

Measure and country	2013				2014				2015			
	-----Projected-----											
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Real GDP¹												
Total foreign	1.8	2.4	3.0	3.1	3.2	2.9	3.3	3.3	3.4	3.4	3.5	3.3
<i>Previous Tealbook</i>	1.7	2.2	2.8	3.0	3.2	2.9	3.3	3.3	3.4	3.4	3.5	3.3
Advanced foreign economies	1.5	1.8	1.8	2.0	2.2	1.5	2.1	2.2	2.3	2.3	2.4	2.0
Canada	2.3	1.6	2.7	2.2	2.4	2.5	2.6	2.6	2.7	2.7	2.7	2.6
Japan	4.5	3.6	1.1	3.6	4.4	-3.5	2.0	2.1	1.8	1.4	2.6	-1.8
United Kingdom	1.5	2.7	3.2	3.0	2.8	2.8	2.7	2.7	2.6	2.6	2.5	2.5
Euro area	-8	1.2	.3	.8	1.0	1.2	1.3	1.4	1.7	1.9	1.9	2.0
Germany	.0	2.9	1.3	1.7	1.8	1.9	2.0	2.1	2.4	2.5	2.5	2.5
Emerging market economies	2.1	3.0	4.1	4.3	4.3	4.4	4.5	4.5	4.6	4.6	4.6	4.6
Asia	3.4	5.2	5.9	5.6	5.3	5.4	5.5	5.5	5.6	5.7	5.6	5.6
Korea	3.4	4.5	4.3	4.0	3.7	3.8	4.0	4.2	4.3	4.5	4.6	4.6
China	6.5	7.5	9.4	8.5	8.0	7.8	7.8	7.7	7.7	7.7	7.6	7.6
Latin America	.8	.7	2.4	3.0	3.2	3.4	3.5	3.5	3.5	3.5	3.5	3.5
Mexico	.8	-2.2	3.4	3.5	3.4	3.6	3.6	3.7	3.6	3.6	3.6	3.6
Brazil	.0	7.2	-1.9	1.3	2.6	3.0	3.2	3.2	3.4	3.4	3.4	3.4
Consumer prices²												
Total foreign	2.2	1.9	2.8	2.3	2.5	3.0	2.4	2.5	2.5	2.5	2.6	3.0
<i>Previous Tealbook</i>	2.2	1.9	2.8	2.6	2.5	3.1	2.5	2.5	2.5	2.5	2.6	3.0
Advanced foreign economies	.9	.5	2.0	.6	1.2	2.7	1.3	1.4	1.4	1.5	1.6	2.6
Canada	1.6	.0	1.5	.3	1.4	1.5	1.6	1.7	1.7	1.7	1.8	1.8
Japan	-4	.8	3.1	1.0	1.0	8.8	.8	.9	1.1	1.2	1.3	6.8
United Kingdom	2.3	1.6	3.0	1.6	1.7	1.7	1.7	2.3	1.7	1.7	1.8	2.3
Euro area	.7	.7	1.8	.3	1.1	1.3	1.3	1.3	1.4	1.4	1.5	1.5
Germany	1.4	.7	2.6	.9	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.7
Emerging market economies	3.3	3.0	3.3	3.7	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Asia	3.3	2.0	3.6	3.5	3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.2
Korea	.6	.3	1.4	1.4	2.4	2.4	3.0	3.1	3.2	3.2	3.2	3.1
China	3.2	2.1	3.4	3.4	2.9	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Latin America	3.5	5.4	2.6	4.2	4.8	3.9	3.7	3.7	3.7	3.7	3.7	3.7
Mexico	3.2	5.3	2.0	3.9	4.7	3.7	3.4	3.4	3.4	3.4	3.4	3.4
Brazil	7.0	5.8	4.6	5.5	5.7	5.6	5.4	5.3	5.3	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	2008	2009	2010	2011	2012	-----Projected-----				
						2013	2014	2015	2016	
Real GDP¹										
Total foreign	-7	.9	4.6	3.0	2.2	2.6	3.2	3.4	3.4	
<i>Previous Tealbook</i>	-7	.9	4.6	3.0	2.2	2.4	3.2	3.4		
Advanced foreign economies	-1.5	-1.5	3.0	1.5	.2	1.8	2.0	2.2	2.3	
Canada	.1	-1.4	3.6	2.4	1.0	2.2	2.5	2.7	2.7	
Japan	-4.8	-6	3.5	.2	-3	3.2	1.2	1.0	1.3	
United Kingdom	-4.3	-2.5	1.8	1.1	-2	2.6	2.8	2.6	2.4	
Euro area	-2.1	-2.3	2.3	.7	-1.0	.4	1.2	1.9	2.0	
Germany	-1.8	-2.2	4.2	2.2	.3	1.5	1.9	2.5	2.5	
Emerging market economies	.3	3.9	6.3	4.5	4.2	3.4	4.4	4.6	4.6	
Asia	.8	8.0	7.8	4.9	5.3	5.0	5.4	5.6	5.6	
Korea	-3.2	6.3	5.0	3.4	1.4	4.1	3.9	4.5	4.5	
China	7.6	11.3	9.7	8.7	7.8	7.9	7.8	7.6	7.5	
Latin America	-4	-1	4.7	4.0	3.2	1.7	3.4	3.5	3.5	
Mexico	-1.3	-1.2	4.4	4.1	3.2	1.4	3.6	3.6	3.5	
Brazil	.9	5.3	5.3	1.4	1.9	1.6	3.0	3.4	3.4	
Consumer prices²										
Total foreign	3.3	1.2	3.2	3.4	2.3	2.3	2.6	2.6	2.6	
<i>Previous Tealbook</i>	3.3	1.2	3.2	3.4	2.3	2.4	2.6	2.7		
Advanced foreign economies	2.0	.2	1.7	2.2	1.3	1.0	1.6	1.8	1.7	
Canada	1.8	.8	2.2	2.7	.9	.9	1.5	1.7	1.9	
Japan	1.1	-2.0	-2	-3	-2	1.1	2.8	2.6	1.7	
United Kingdom	3.9	2.2	3.4	4.6	2.6	2.1	1.8	1.9	1.8	
Euro area	2.3	.4	2.0	2.9	2.3	.9	1.2	1.5	1.5	
Germany	1.7	.3	1.6	2.6	2.0	1.4	1.6	1.7	1.8	
Emerging market economies	4.6	2.1	4.3	4.3	3.1	3.3	3.3	3.3	3.3	
Asia	3.7	1.3	4.3	4.5	2.6	3.1	3.1	3.2	3.2	
Korea	4.5	2.4	3.2	3.9	1.7	.9	2.7	3.2	3.2	
China	2.5	.6	4.7	4.6	2.1	3.0	3.0	3.0	3.0	
Latin America	6.6	3.9	4.4	4.0	4.3	3.9	4.0	3.7	3.7	
Mexico	6.2	4.0	4.3	3.5	4.1	3.6	3.8	3.4	3.4	
Brazil	6.2	4.2	5.6	6.7	5.6	5.7	5.5	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-----			
	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	-419.6	-396.9	-403.7	-420.6	-427.6	-394.9	-411.9	-431.7	-460.1	-436.3	-449.2	-466.9
<i>Previous Tealbook</i>	-419.6	-395.6	-421.0	-423.9	-447.6	-413.2	-426.9	-435.3	-459.7	-432.5	-446.6	-458.7
Current account as percent of GDP	-2.5	-2.4	-2.4	-2.5	-2.5	-2.3	-2.3	-2.4	-2.6	-2.4	-2.4	-2.5
<i>Previous Tealbook</i>	-2.5	-2.4	-2.5	-2.5	-2.6	-2.4	-2.4	-2.4	-2.6	-2.4	-2.4	-2.5
Net goods & services	-490.5	-472.5	-482.9	-490.6	-475.1	-453.3	-460.0	-475.3	-478.9	-463.6	-466.8	-480.4
Investment income, net	211.6	221.1	221.8	208.9	203.2	197.1	190.3	182.5	174.4	166.0	159.9	152.3
Direct, net	276.6	279.9	291.2	293.9	292.2	293.0	293.4	294.5	296.5	299.5	305.6	311.1
Portfolio, net	-65.0	-58.9	-69.5	-85.0	-88.9	-95.9	-103.1	-112.0	-122.0	-133.5	-145.7	-158.8
Other income and transfers, net	-140.6	-145.5	-142.5	-138.8	-155.6	-138.6	-142.2	-138.8	-155.6	-138.6	-142.2	-138.8

Annual Data

	Projected-----										
	2008	2009	2010	2011	2012	2013	2014	2015	2016		
<i>Billions of dollars</i>											
U.S. current account balance	-681.3	-381.6	-449.5	-457.7	-440.4	-410.2	-416.5	-453.1	-481.9		
<i>Previous Tealbook</i>	-681.3	-381.6	-449.5	-457.7	-440.4	-415.0	-430.8	-449.4			
Current account as percent of GDP	-4.6	-2.6	-3.0	-2.9	-2.7	-2.4	-2.4	-2.5	-2.5		
<i>Previous Tealbook</i>	-4.6	-2.6	-3.0	-2.9	-2.7	-2.5	-2.5	-2.4			
Net goods & services	-702.3	-383.7	-499.4	-556.8	-534.7	-484.1	-465.9	-472.5	-464.4		
Investment income, net	157.8	132.3	185.7	240.7	232.3	215.8	193.3	163.2	126.4		
Direct, net	284.3	257.7	288.0	310.6	293.5	285.4	293.3	303.2	321.3		
Portfolio, net	-126.4	-125.4	-102.3	-69.8	-61.2	-69.6	-100.0	-140.0	-194.9		
Other income and transfers, net	-136.9	-130.2	-135.8	-141.6	-138.0	-141.9	-143.8	-143.8	-143.8		

Class I FOMC – Restricted Controlled (FR)

Report to the FOMC on Economic Conditions and Monetary Policy



Book B Monetary Policy: Strategies and Alternatives

December 12, 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

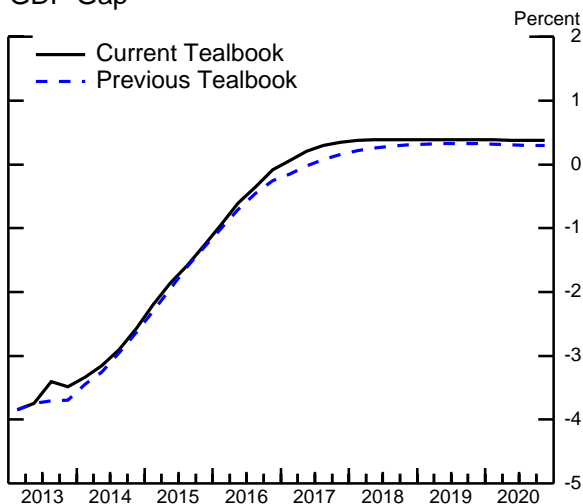
	Constrained Policy		Unconstrained Policy	
	2014Q1	2014Q2	2014Q1	2014Q2
Taylor (1993) rule	1.07	1.49	1.07	1.49
<i>Previous Tealbook</i>	1.23	1.68	1.23	1.68
Taylor (1999) rule	0.13	0.13	-0.57	-0.06
<i>Previous Tealbook</i>	0.13	0.13	-0.47	-0.08
Inertial Taylor (1999) rule	0.13	0.13	0.02	0.01
<i>Previous Tealbook outlook</i>	0.13	0.13	0.04	0.04
Outcome-based rule	0.13	0.14	0.08	0.14
<i>Previous Tealbook outlook</i>	0.16	0.27	0.16	0.27
First-difference rule	0.29	0.59	0.29	0.59
<i>Previous Tealbook outlook</i>	0.41	0.75	0.41	0.75
Nominal income targeting rule	0.13	0.13	-0.77	-1.37
<i>Previous Tealbook outlook</i>	0.13	0.13	-0.76	-1.35

Memo: Equilibrium and Actual Real Federal Funds Rates

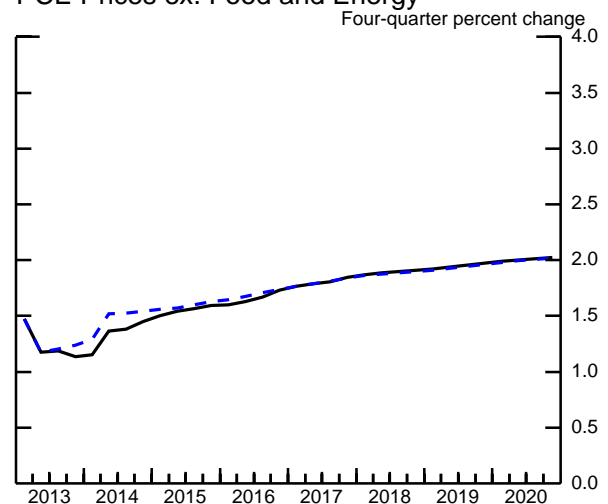
	Current Tealbook	<i>Previous Tealbook</i>
Tealbook-consistent FRB/US r^* estimate	-1.27	-1.44
Actual real federal funds rate	-1.06	-1.07

Key Elements of the Staff Projection

GDP Gap



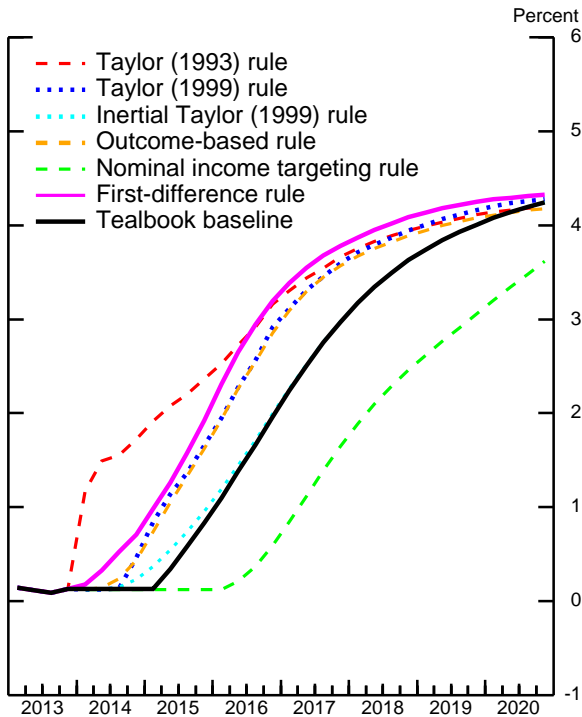
PCE Prices ex. Food and Energy



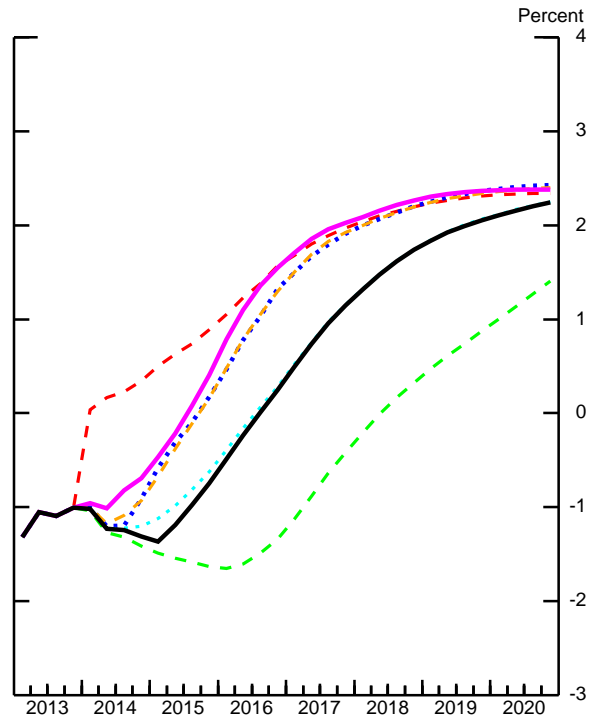
Note: For rules that have the lagged policy rate as a right-hand-side variable, the lines denoted "Previous Tealbook outlook" report rule prescriptions based on the previous Tealbook's staff outlook, but jumping off from the average value for the policy rate thus far in the current quarter.

Policy Rule Simulations without Thresholds

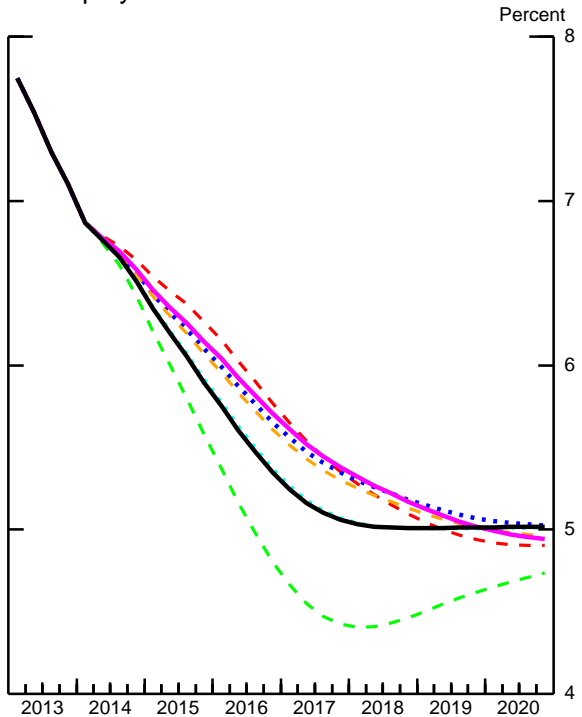
Effective Nominal Federal Funds Rate



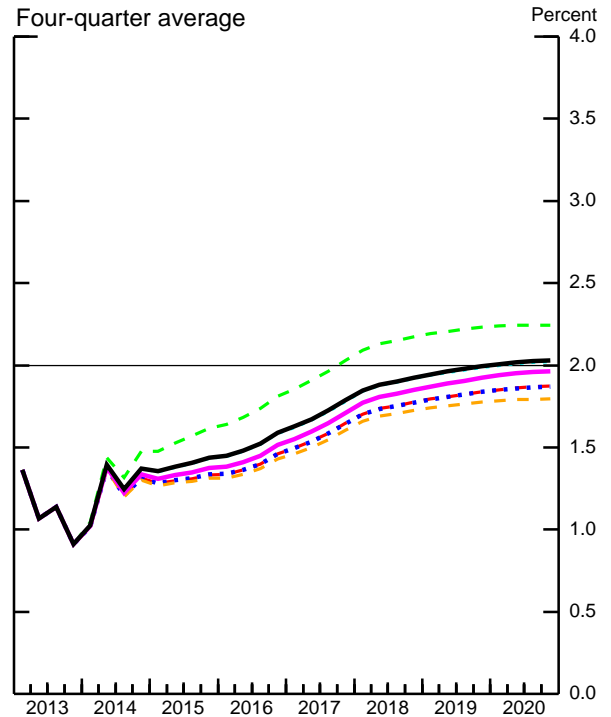
Real Federal Funds Rate



Unemployment Rate



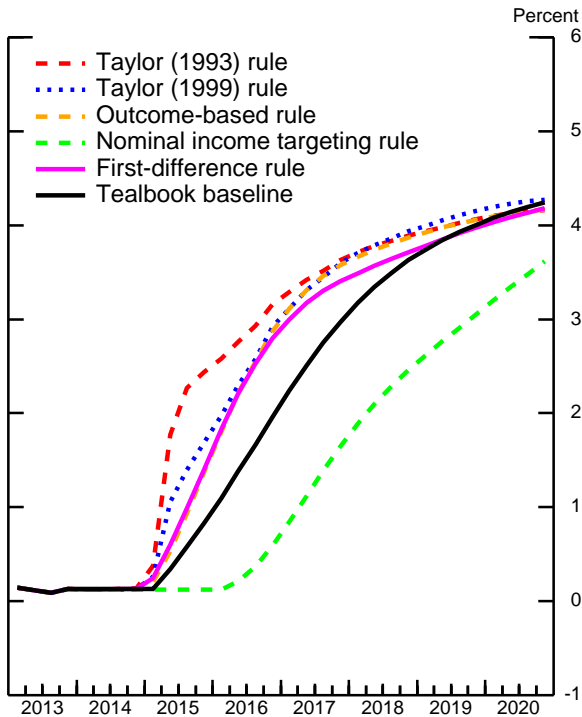
PCE Inflation
Four-quarter average



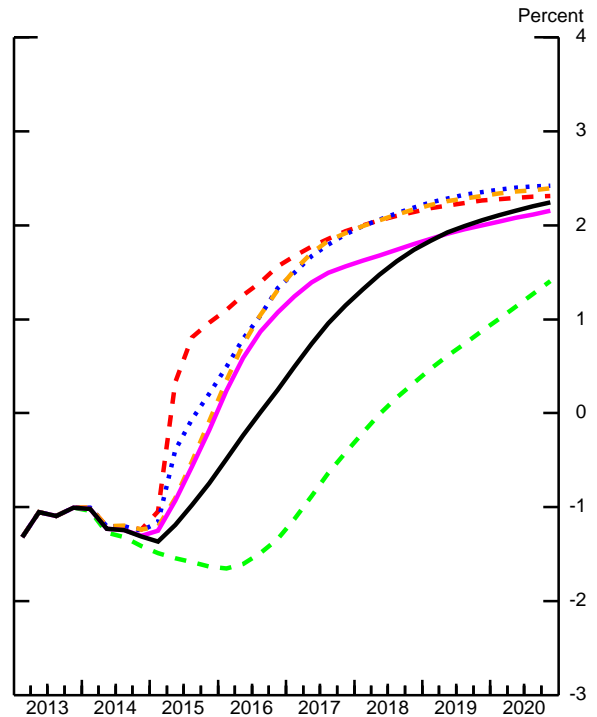
Note: The policy rule simulations in this exhibit are based on rules that respond to core inflation. This choice of rule specification was made in light of the tendency for current and near-term core inflation rates to outperform headline inflation rates as predictors of the medium-term behavior of headline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

Policy Rule Simulations with Thresholds

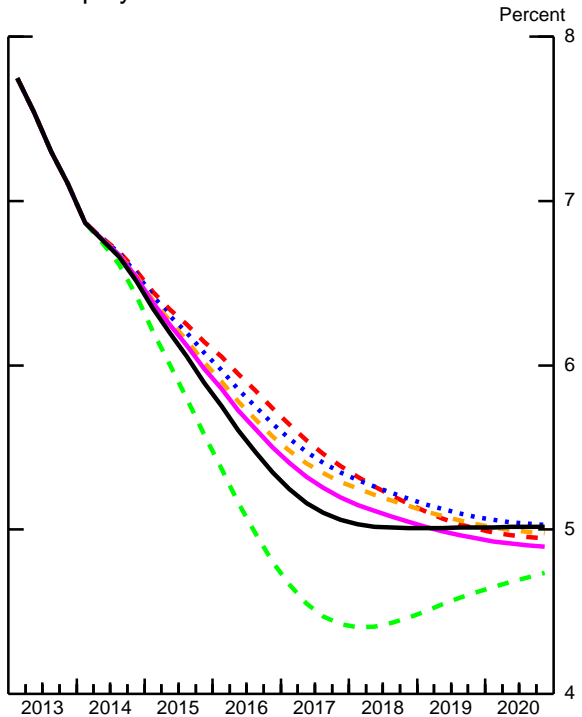
Effective Nominal Federal Funds Rate



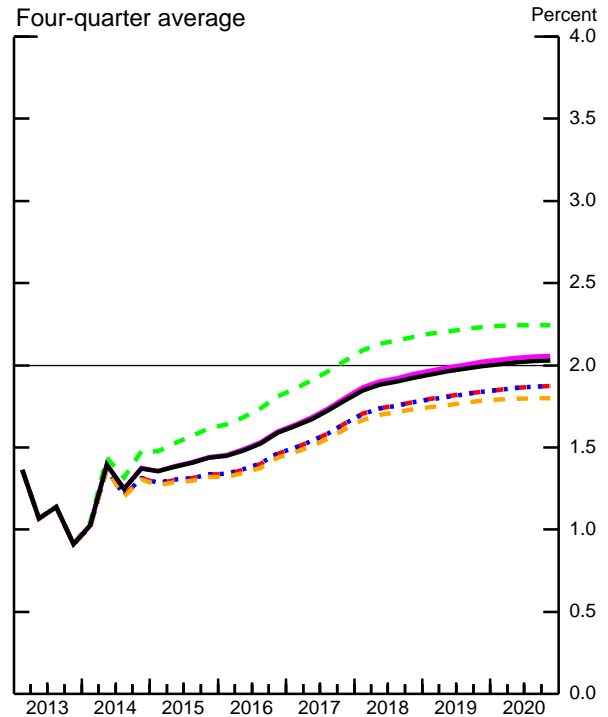
Real Federal Funds Rate



Unemployment Rate



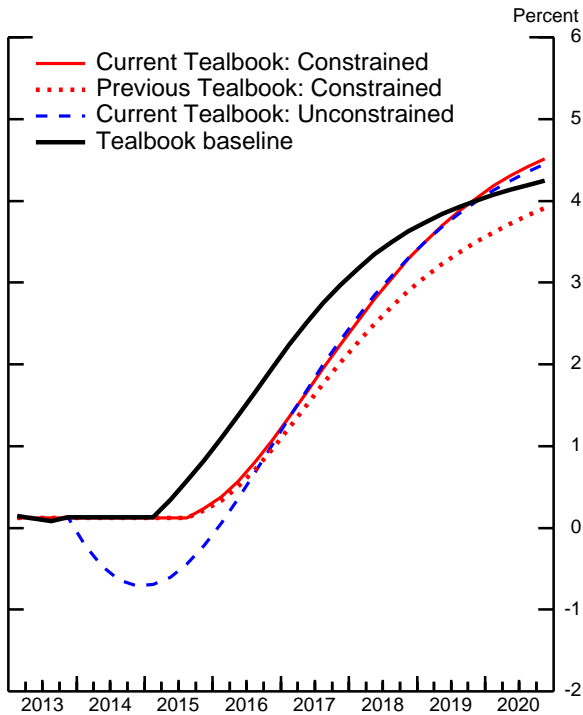
PCE Inflation
Four-quarter average



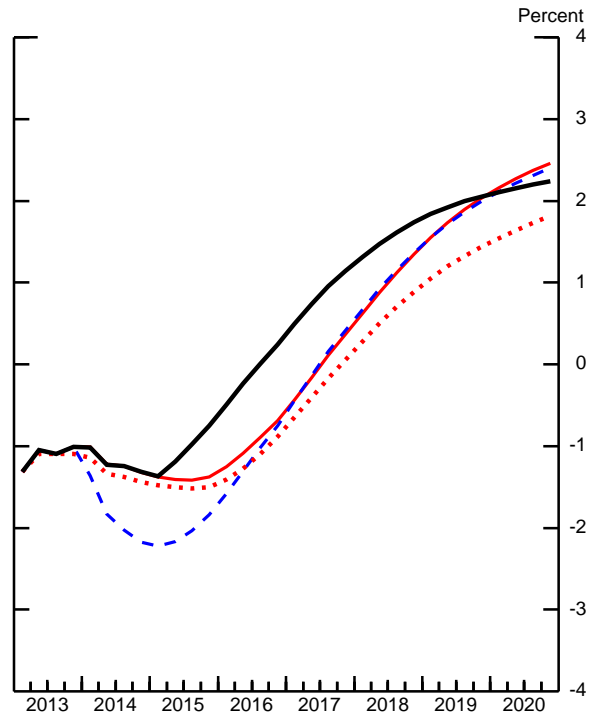
Note: The policy rule simulations in this exhibit are based on rules that respond to core inflation. This choice of rule specification was made in light of the tendency for current and near-term core inflation rates to outperform headline inflation rates as predictors of the medium-term behavior of headline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

Constrained versus Unconstrained Optimal Control Policy

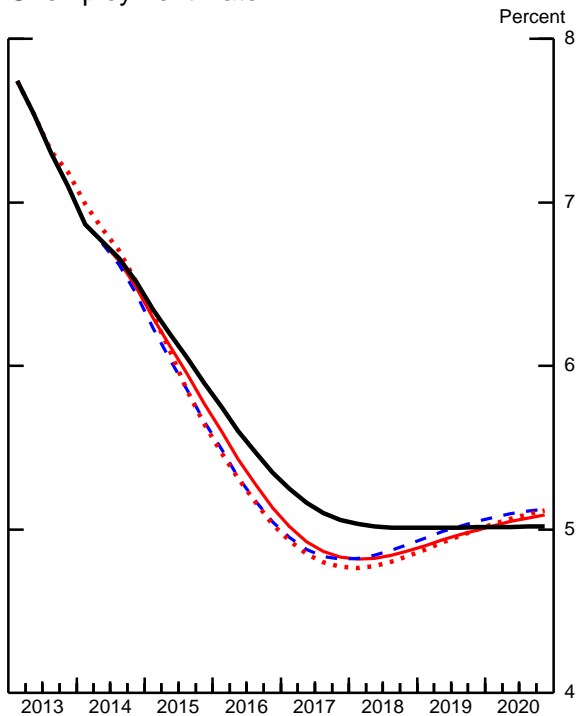
Effective Nominal Federal Funds Rate



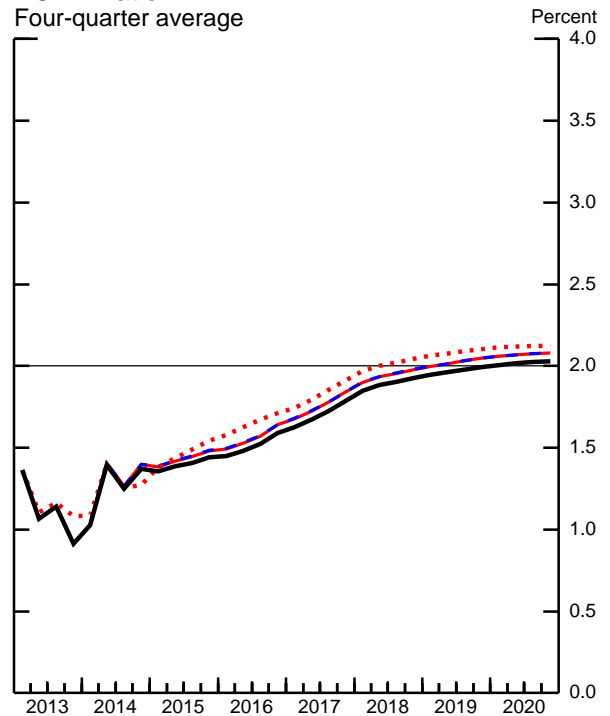
Real Federal Funds Rate



Unemployment Rate

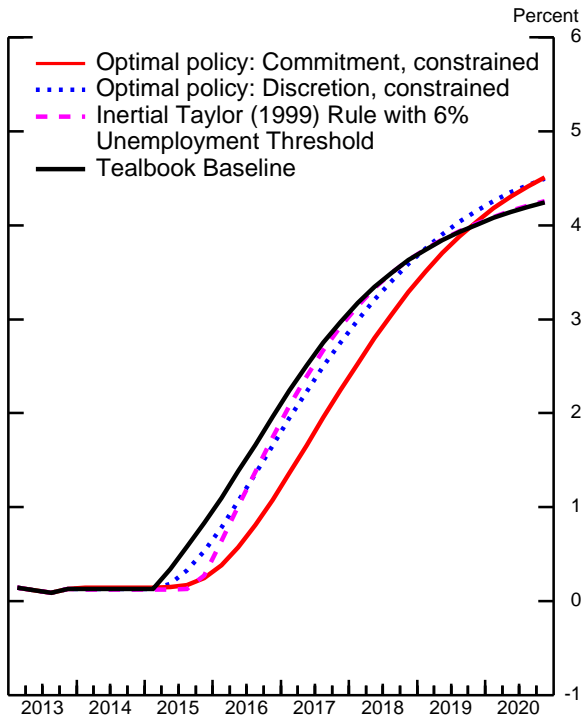


PCE Inflation
Four-quarter average

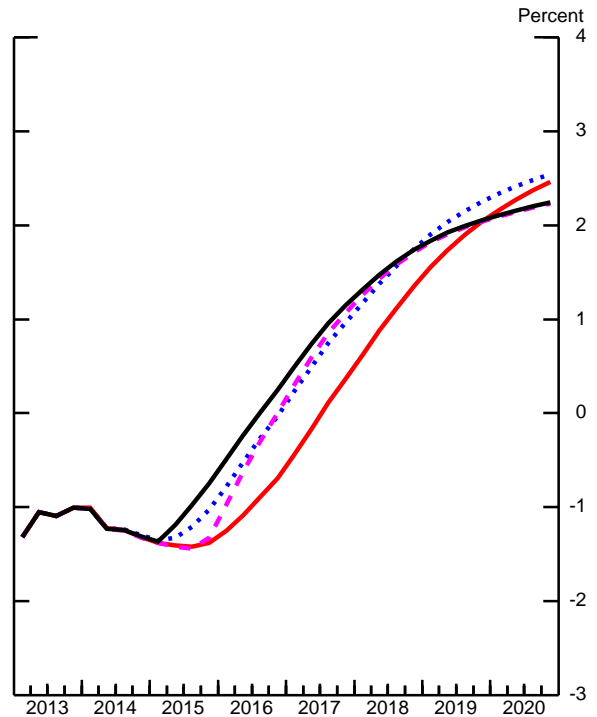


A Comparison of Optimal Control Policies and the Baseline Policy Rule under Alternative Unemployment Rate Thresholds

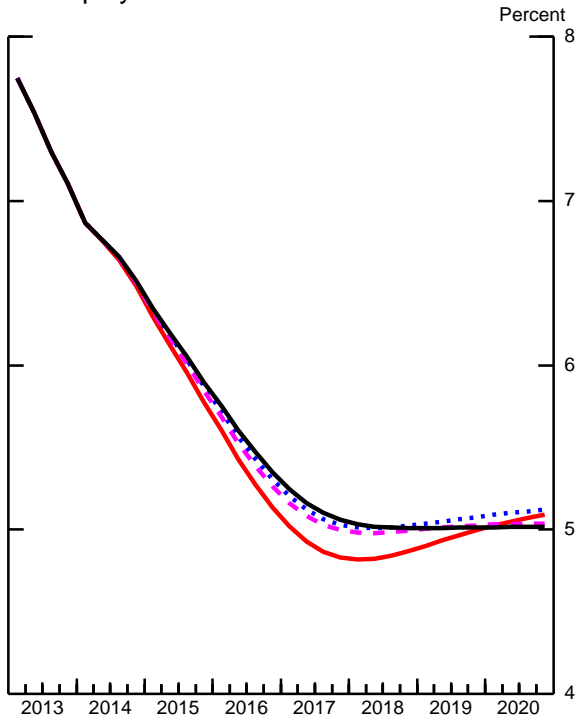
Effective Nominal Federal Funds Rate



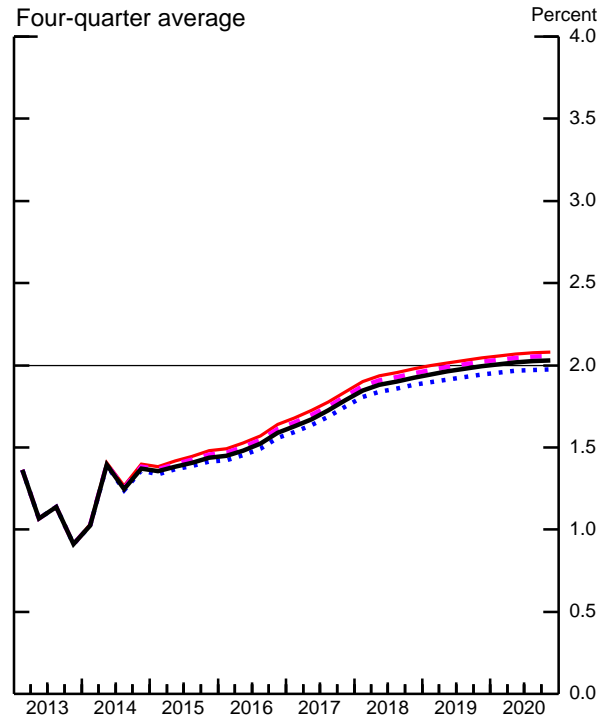
Real Federal Funds Rate



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	1.8	2.6	3.1	3.5	3.4	2.7
Taylor (1993)	1.8	2.2	2.7	3.2	3.2	2.9
Taylor (1999)	1.8	2.2	3.0	3.3	3.1	2.8
Inertial Taylor (1999)	1.8	2.2	3.2	3.5	3.2	2.7
Outcome based	1.8	2.2	3.0	3.3	3.1	2.8
First difference	1.8	2.2	2.9	3.2	3.1	2.8
Nominal income targeting	1.8	2.2	3.6	4.0	3.6	2.8
Constrained optimal control	1.8	2.6	3.2	3.7	3.5	2.7
<i>Unemployment rate²</i>						
Extended Tealbook baseline ¹	7.5	7.1	6.5	5.9	5.3	5.1
Taylor (1993)	7.5	7.3	6.8	6.3	5.8	5.4
Taylor (1999)	7.5	7.3	6.7	6.1	5.7	5.4
Inertial Taylor (1999)	7.5	7.3	6.6	5.9	5.4	5.2
Outcome based	7.5	7.3	6.7	6.1	5.7	5.4
First difference	7.5	7.3	6.7	6.2	5.8	5.5
Nominal income targeting	7.5	7.3	6.5	5.6	4.8	4.5
Constrained optimal control	7.5	7.1	6.5	5.8	5.1	4.8
<i>Total PCE prices</i>						
Extended Tealbook baseline ¹	0.5	1.3	1.4	1.4	1.6	1.8
Taylor (1993)	0.5	1.5	1.3	1.3	1.4	1.6
Taylor (1999)	0.5	1.5	1.3	1.3	1.5	1.6
Inertial Taylor (1999)	0.5	1.6	1.4	1.5	1.6	1.8
Outcome based	0.5	1.5	1.3	1.3	1.4	1.6
First difference	0.5	1.5	1.3	1.4	1.5	1.7
Nominal income targeting	0.5	1.6	1.5	1.7	1.8	2.0
Constrained optimal control	0.5	1.3	1.4	1.5	1.6	1.8
<i>Core PCE prices</i>						
Extended Tealbook baseline ¹	1.0	1.3	1.4	1.6	1.7	1.8
Taylor (1993)	1.0	1.5	1.5	1.5	1.6	1.7
Taylor (1999)	1.0	1.5	1.5	1.5	1.6	1.7
Inertial Taylor (1999)	1.0	1.5	1.5	1.6	1.7	1.8
Outcome based	1.0	1.5	1.5	1.5	1.6	1.7
First difference	1.0	1.5	1.5	1.5	1.6	1.7
Nominal income targeting	1.0	1.5	1.7	1.8	2.0	2.1
Constrained optimal control	1.0	1.3	1.5	1.6	1.8	1.9
<i>Effective nominal federal funds rate²</i>						
Extended Tealbook baseline ¹	0.1	0.1	0.1	0.8	2.0	3.0
Taylor (1993)	0.1	1.1	1.7	2.3	3.0	3.5
Taylor (1999)	0.1	0.1	0.5	1.7	2.8	3.4
Inertial Taylor (1999)	0.1	0.1	0.3	1.0	2.0	2.9
Outcome based	0.1	0.1	0.5	1.7	2.8	3.4
First difference	0.1	0.1	0.8	2.1	3.1	3.8
Nominal income targeting	0.1	0.1	0.1	0.1	0.6	1.6
Constrained optimal control	0.1	0.1	0.1	0.2	1.1	2.2

1. Policy in the Tealbook baseline keeps the federal funds rate at an 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	1.8	2.6	3.1	3.5	3.4	2.7
Taylor (1993)	1.8	2.6	2.9	3.1	3.2	2.9
Taylor (1999)	1.8	2.6	2.9	3.2	3.2	2.8
Outcome based	1.8	2.6	3.0	3.3	3.2	2.7
First difference	1.8	2.6	3.0	3.4	3.2	2.8
Nominal income targeting	1.8	2.6	3.4	4.0	3.8	2.9
Constrained optimal control	1.8	2.6	3.2	3.7	3.5	2.7
<i>Unemployment rate²</i>						
Extended Tealbook baseline ¹	7.5	7.1	6.5	5.9	5.3	5.1
Taylor (1993)	7.5	7.1	6.6	6.1	5.7	5.4
Taylor (1999)	7.5	7.1	6.6	6.1	5.6	5.3
Outcome based	7.5	7.1	6.5	6.0	5.6	5.3
First difference	7.5	7.1	6.5	6.0	5.5	5.2
Nominal income targeting	7.5	7.1	6.4	5.6	4.8	4.4
Constrained optimal control	7.5	7.1	6.5	5.8	5.1	4.8
<i>Total PCE prices</i>						
Extended Tealbook baseline ¹	0.5	1.3	1.4	1.4	1.6	1.8
Taylor (1993)	0.5	1.3	1.3	1.3	1.5	1.6
Taylor (1999)	0.5	1.3	1.3	1.3	1.5	1.6
Outcome based	0.5	1.3	1.3	1.3	1.4	1.6
First difference	0.5	1.3	1.4	1.4	1.6	1.8
Nominal income targeting	0.5	1.3	1.5	1.6	1.8	2.0
Constrained optimal control	0.5	1.3	1.4	1.5	1.6	1.8
<i>Core PCE prices</i>						
Extended Tealbook baseline ¹	1.0	1.3	1.4	1.6	1.7	1.8
Taylor (1993)	1.0	1.3	1.4	1.5	1.6	1.7
Taylor (1999)	1.0	1.3	1.4	1.5	1.6	1.7
Outcome based	1.0	1.3	1.4	1.5	1.6	1.7
First difference	1.0	1.3	1.4	1.6	1.7	1.9
Nominal income targeting	1.0	1.3	1.6	1.8	2.0	2.1
Constrained optimal control	1.0	1.3	1.5	1.6	1.8	1.9
<i>Effective nominal federal funds rate²</i>						
Extended Tealbook baseline ¹	0.1	0.1	0.1	0.8	2.0	3.0
Taylor (1993)	0.1	0.1	0.1	2.4	3.2	3.6
Taylor (1999)	0.1	0.1	0.1	1.7	2.9	3.6
Outcome based	0.1	0.1	0.1	1.4	2.9	3.6
First difference	0.1	0.1	0.1	1.4	2.8	3.4
Nominal income targeting	0.1	0.1	0.1	0.1	0.6	1.6
Constrained optimal control	0.1	0.1	0.1	0.2	1.1	2.2

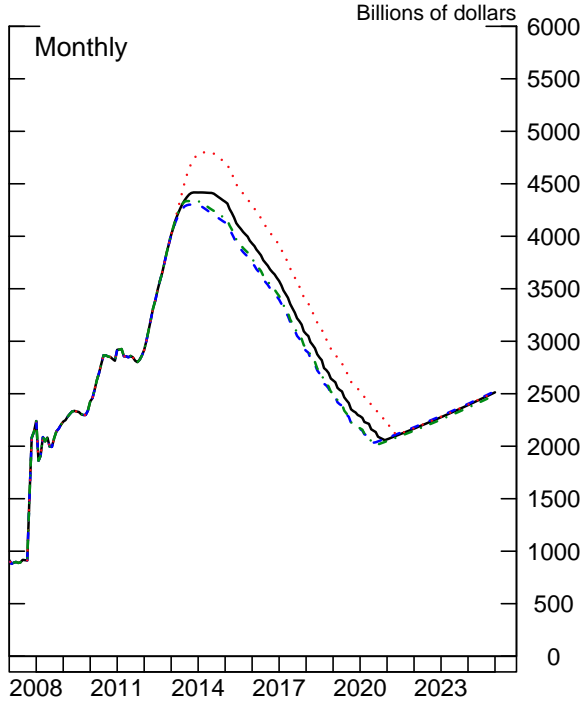
1. With the exception of constrained optimal control, monetary policy is specified to keep the federal funds rate at an effective lower bound of 12.5 basis points as long as the unemployment rate is above 6.5 percent and projected one-year-ahead inflation is less than 2.5 percent. Once either of these 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.

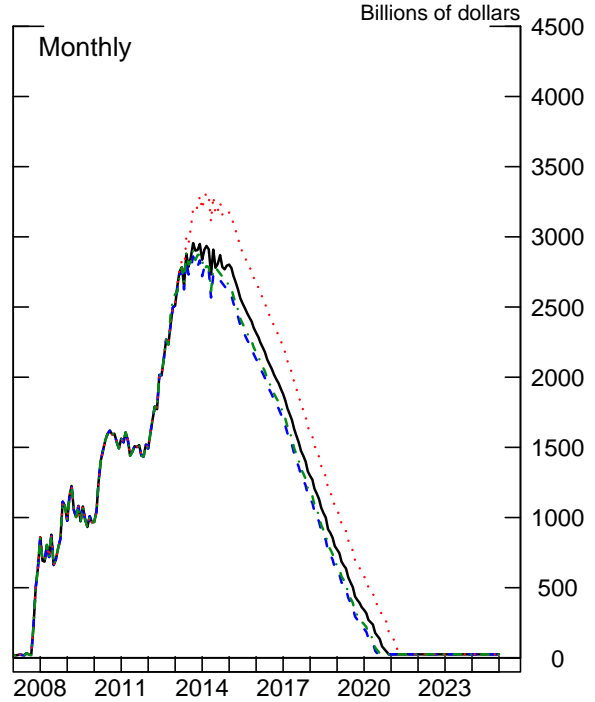
Total Assets and Selected Balance Sheet Items

— Alternative B
 - - Alternative C
 . . . Alternative A
 . . . October Tealbook Alternative B

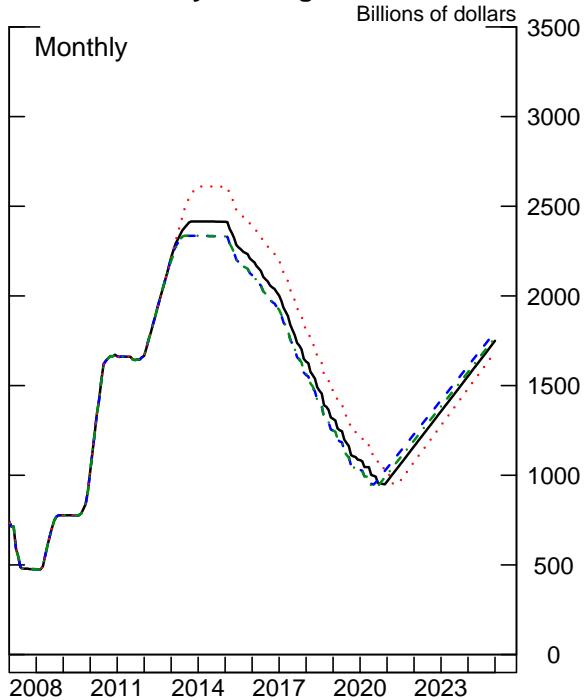
Total Assets



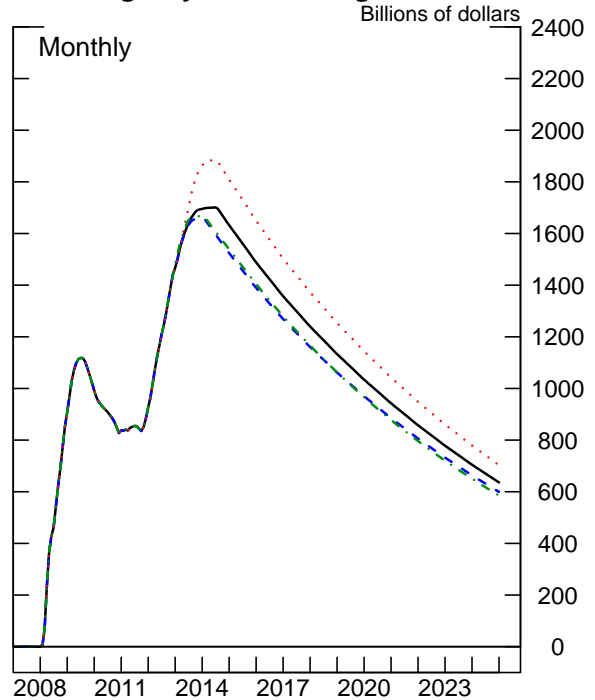
Reserve Balances



SOMA Treasury Holdings



SOMA Agency MBS Holdings

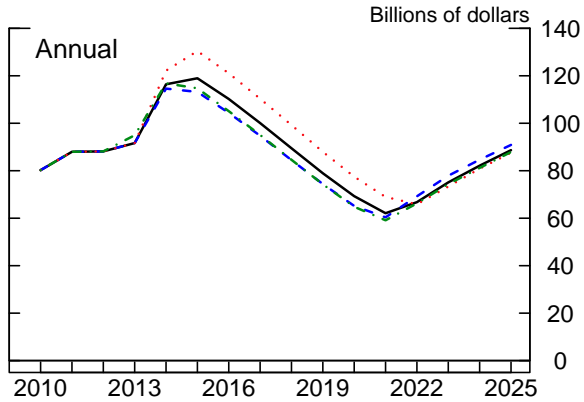


Projections

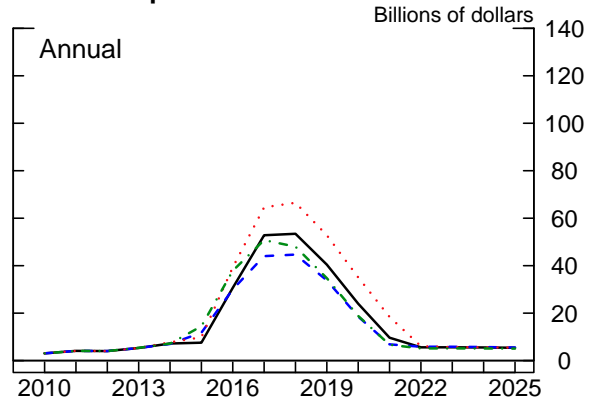
Income Projections

— Alternative B
 - - Alternative C
 . . . Alternative A
 - . - . October Tealbook Alternative B

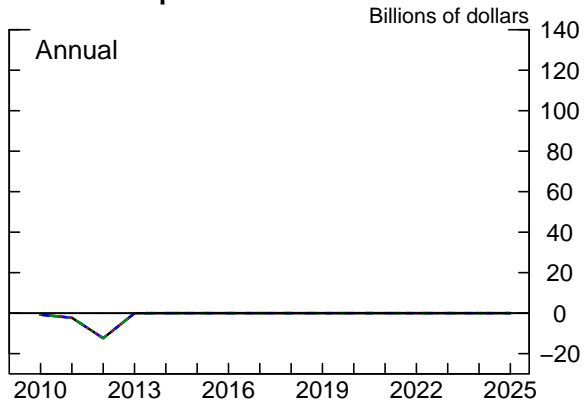
Interest Income



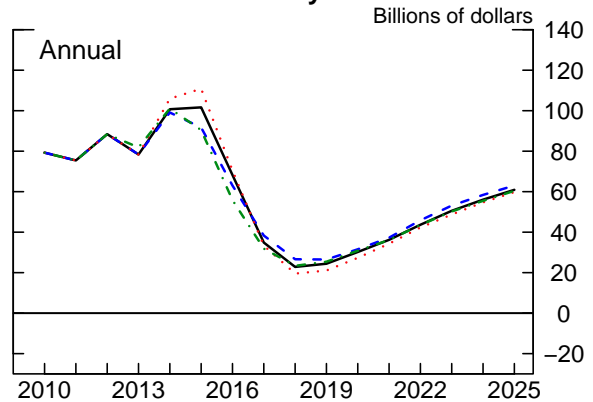
Interest Expense



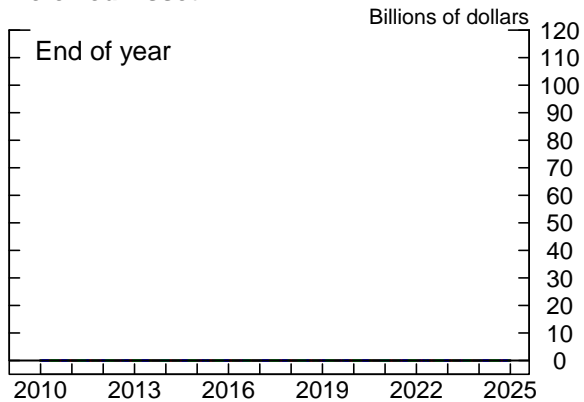
Realized Capital Losses



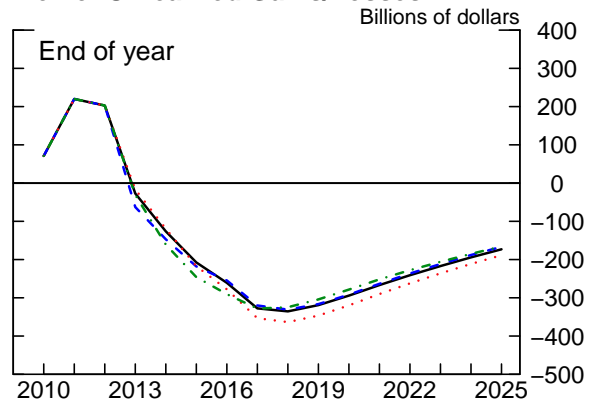
Remittances to Treasury



Deferred Asset



Memo: Unrealized Gains/Losses



Alternative Projections for the Monetary Base

Percent change, annual rate; not seasonally adjusted

Date	Alternative B	Alternative C	Alternative A	October Alternative B
------	---------------	---------------	---------------	--------------------------

Quarterly

2013: Q4	33.2	33.2	33.2	47.0
2014: Q1	28.9	27.4	30.5	23.2
Q2	11.1	8.5	19.8	13.4
Q3	13.0	8.5	24.9	8.1
Q4	4.1	1.1	13.0	2.7
2015: Q1	1.6	0.1	5.9	-4.9
Q2	-5.6	-7.3	-4.7	-4.5
Q3	1.1	4.0	0.8	4.4
Q4	-1.4	-4.5	-1.6	-4.2
2016: Q1	-2.0	-6.8	-2.1	-6.6
Q2	-12.6	-13.0	-11.9	-12.7
Q3	-10.0	-10.2	-9.5	-9.9
Q4	-8.4	-8.5	-8.1	-8.2

Annual

2013	37.7	37.7	37.7	42.0
2014	14.9	11.8	23.9	12.3
2015	-1.1	-1.9	0.1	-2.3
2016	-8.0	-9.3	-7.7	-9.1
2017	-9.6	-9.8	-9.2	-9.6
2018	-14.6	-14.9	-13.8	-14.5
2019	-15.9	-16.1	-15.4	-15.9
2020	-15.2	-15.3	-14.9	-15.1
2021	-12.3	-6.6	-13.7	-8.1
2022	4.1	4.8	-5.4	4.4
2023	4.8	4.7	4.8	4.5
2024	4.8	4.7	4.8	4.5
2025	4.8	4.7	4.8	4.6

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

MONEY

After advancing briskly in 2013, M2 is projected to increase at a rate roughly in line with that of nominal GDP in the first quarter of next year. Thereafter, M2 is forecast to expand more slowly than nominal GDP, in part because investors are assumed to reallocate a portion of their elevated M2 balances to riskier investments as economic conditions improve.⁹ In 2015 and 2016, M2 growth is depressed as the projected rise in short-term market rates increases the opportunity cost of holding M2 assets.

M2 Monetary Aggregate Projections (Percent change, annual rate; seasonally adjusted)*		
<i>Quarterly</i>		
2013:	Q4	7.1
2014:	Q1	4.0
	Q2	3.4
	Q3	2.6
	Q4	2.8
2015:	Q1	0.9
	Q2	-1.0
	Q3	-1.7
	Q4	-1.6
2016:	Q1	-1.2
	Q2	-0.9
	Q3	-0.7
<i>Annual</i>		
	2013	6.1
	2014	3.3
	2015	-0.9
	2016	-0.7

Note: This forecast is consistent with nominal GDP and interest rates in the Tealbook forecast. Actual data through December 2, 2013; projections thereafter.

* Quarterly growth rates are computed from quarter averages. Annual growth rates are calculated using the change from fourth quarter of previous year to fourth quarter of year indicated.

⁹ The staff's M2 forecast is constructed using the staff's forecast of nominal income growth and model-based estimates of interest rate effects with judgmental adjustments.

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

Billions of dollars

	<u>Nov 29, 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	3,926	4,014	4,329	3,574	2,627	2,065	2,276	2,513
Selected assets								
Liquidity programs for financial firms	0	0	0	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0	0	0
Central bank liquidity swaps	0	0	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	1	0	0	0	0	0	0
Securities held outright	3,662	3,739	4,079	3,364	2,450	1,910	2,137	2,388
U.S. Treasury securities	2,164	2,215	2,414	2,002	1,314	965	1,357	1,750
Agency debt securities	58	57	33	4	2	2	2	2
Agency mortgage-backed securities	1,440	1,467	1,632	1,357	1,133	943	778	636
Net portfolio holdings of TALF LLC	0	0	0	0	0	0	0	0
Unamortized premiums	208	217	197	154	120	96	78	64
Unamortized discounts	-10	-11	-14	-11	-9	-7	-6	-5
Total other assets	65	67	67	67	67	67	67	67
Total liabilities	3,871	3,959	4,268	3,498	2,531	1,944	2,122	2,319
Selected liabilities								
Federal Reserve notes in circulation	1,184	1,190	1,342	1,496	1,640	1,801	1,981	2,178
Reverse repurchase agreements	128	100	100	100	100	100	100	100
Deposits with Federal Reserve Banks	2,549	2,658	2,816	1,894	786	39	39	39
Reserve balances held by depository institutions	2,498	2,509	2,802	1,880	772	25	25	25
U.S. Treasury, General Account	33	140	5	5	5	5	5	5
Other Deposits	17	9	9	9	9	9	9	9
Interest on Federal Reserve Notes due to U.S. Treasury	2	0	0	0	0	0	0	0
Total capital	55	55	61	76	96	122	154	195

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>Nov 29, 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	3,926	4,013	4,131	3,397	2,485	2,078	2,289	2,525
Selected assets								
Liquidity programs for financial firms	0	0	0	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0	0	0
Central bank liquidity swaps	0	0	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	1	0	0	0	0	0	0
Securities held outright	3,662	3,740	3,889	3,194	2,313	1,927	2,153	2,402
U.S. Treasury securities	2,164	2,215	2,332	1,921	1,248	1,040	1,418	1,800
Agency debt securities	58	57	33	4	2	2	2	2
Agency mortgage-backed securities	1,440	1,467	1,524	1,269	1,062	885	732	599
Net portfolio holdings of TALF LLC	0	0	0	0	0	0	0	0
Unamortized premiums	208	217	188	146	114	90	74	60
Unamortized discounts	-10	-11	-12	-10	-8	-6	-5	-5
Total other assets	65	67	67	67	67	67	67	67
Total liabilities	3,871	3,958	4,070	3,321	2,389	1,957	2,135	2,330
Selected liabilities								
Federal Reserve notes in circulation	1,184	1,190	1,342	1,499	1,651	1,815	1,994	2,190
Reverse repurchase agreements	128	100	100	100	100	100	100	100
Deposits with Federal Reserve Banks	2,549	2,657	2,619	1,716	633	39	39	39
Reserve balances held by depository institutions	2,498	2,509	2,605	1,702	619	25	25	25
U.S. Treasury, General Account	33	140	5	5	5	5	5	5
Other Deposits	17	9	9	9	9	9	9	9
Interest on Federal Reserve Notes due to U.S. Treasury	2	0	0	0	0	0	0	0
Total capital	55	55	61	76	96	122	154	195

Projections

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

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

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

Billions of dollars

	<u>Nov 29, 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	3,926	4,014	4,704	3,917	2,908	2,208	2,281	2,518
Selected assets								
Liquidity programs for financial firms	0	0	0	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0	0	0
Central bank liquidity swaps	0	0	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	1	0	0	0	0	0	0
Securities held outright	3,662	3,739	4,450	3,705	2,729	2,052	2,141	2,393
U.S. Treasury securities	2,164	2,215	2,609	2,197	1,473	1,007	1,278	1,687
Agency debt securities	58	57	33	4	2	2	2	2
Agency mortgage-backed securities	1,440	1,466	1,809	1,503	1,254	1,042	860	703
Net portfolio holdings of TALF LLC	0	0	0	0	0	0	0	0
Unamortized premiums	208	218	205	161	125	99	81	66
Unamortized discounts	-10	-11	-18	-15	-12	-10	-8	-7
Total other assets	65	67	67	67	67	67	67	67
Total liabilities	3,871	3,959	4,643	3,842	2,812	2,087	2,127	2,324
Selected liabilities								
Federal Reserve notes in circulation	1,184	1,190	1,342	1,496	1,641	1,803	1,983	2,180
Reverse repurchase agreements	128	100	100	100	100	100	100	100
Deposits with Federal Reserve Banks	2,549	2,658	3,187	2,233	1,062	177	39	39
Reserve balances held by depository institutions	2,498	2,509	3,173	2,220	1,049	163	25	25
U.S. Treasury, General Account	33	140	5	5	5	5	5	5
Other Deposits	17	9	9	9	9	9	9	9
Interest on Federal Reserve Notes due to U.S. Treasury	2	0	0	0	0	0	0	0
Total capital	55	55	61	76	96	122	154	195

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 C	Alternative A	October Alternative B
------	---------------	---------------	---------------	--------------------------

Basis Points

Quarterly Averages

2013: Q4	-126	-120	-140	-119
2014: Q1	-122	-115	-136	-115
Q2	-117	-110	-132	-110
Q3	-112	-105	-127	-105
Q4	-107	-100	-121	-99
2015: Q1	-101	-95	-115	-94
Q2	-96	-90	-110	-89
Q3	-91	-85	-104	-84
Q4	-86	-80	-99	-80
2016: Q1	-82	-76	-93	-75
Q2	-77	-71	-88	-71
Q3	-73	-67	-84	-67
Q4	-69	-63	-79	-63
2017: Q4	-54	-50	-63	-49
2018: Q4	-42	-39	-49	-38
2019: Q4	-33	-30	-38	-30
2020: Q4	-25	-24	-30	-23
2021: Q4	-20	-19	-23	-18
2022: Q4	-16	-15	-18	-14
2023: Q4	-12	-12	-14	-11
2024: Q4	-9	-8	-10	-8
2025: Q4	-6	-6	-7	-6