

Prefatory Note

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Class II FOMC – Restricted (FR)

Report to the FOMC on Economic Conditions and Monetary Policy



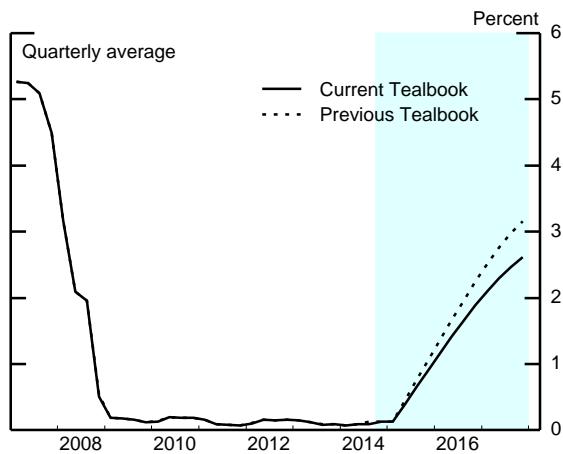
Book A Economic and Financial Conditions: Current Situation and Outlook

October 22, 2014

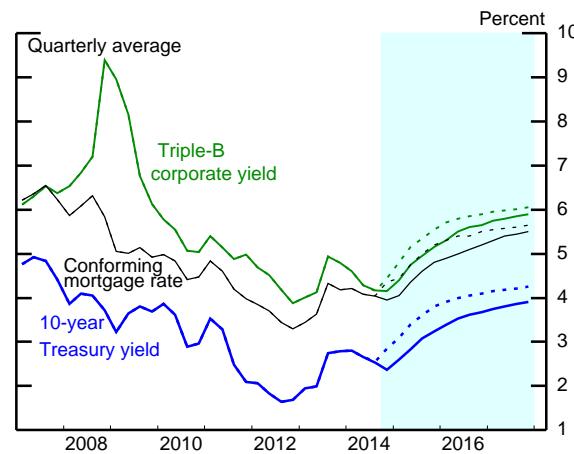
Prepared for the Federal Open Market Committee
by the staff of the Board of Governors of the Federal Reserve System

Key Background Factors underlying the Baseline Staff Projection

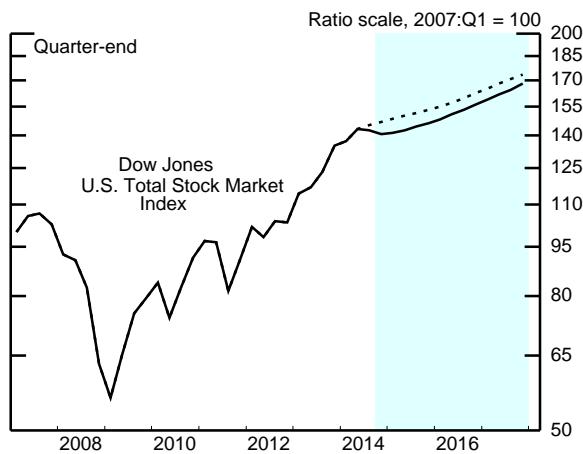
Federal Funds Rate



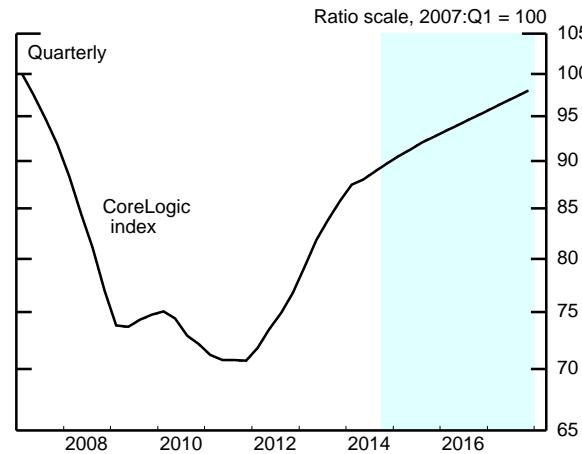
Long-Term Interest Rates



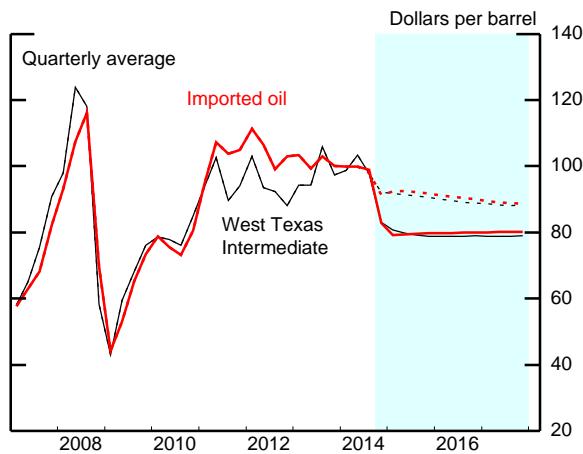
Equity Prices



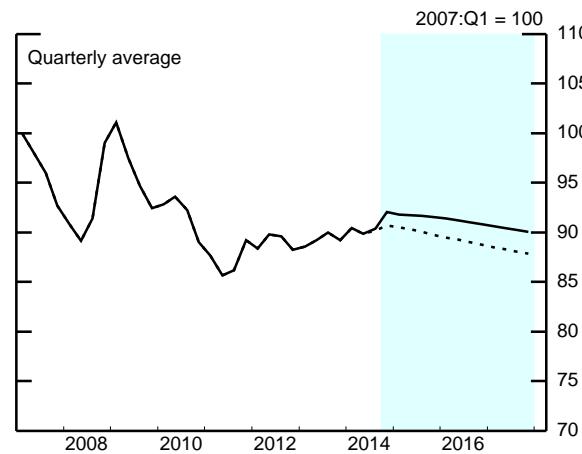
House Prices



Crude Oil Prices



Broad Real Dollar



Summary of the Near-Term Outlook

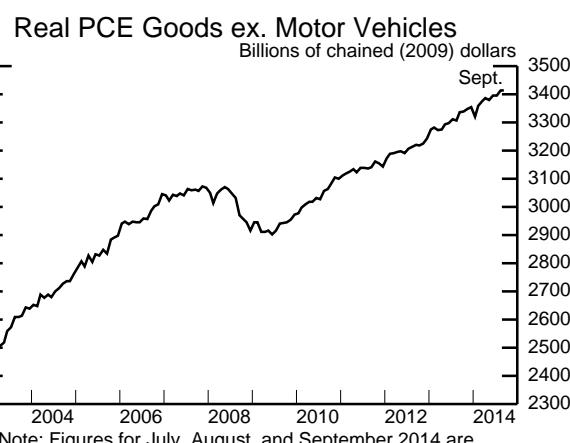
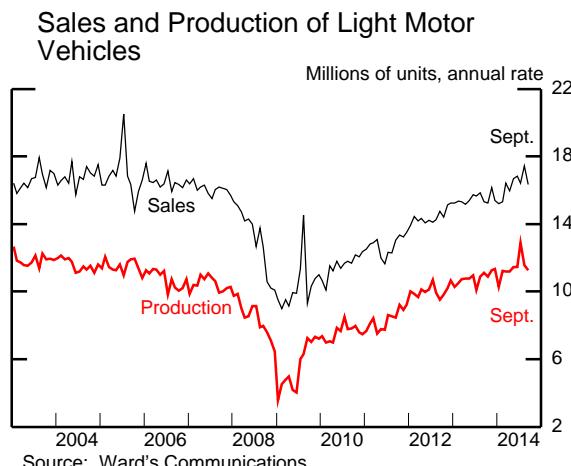
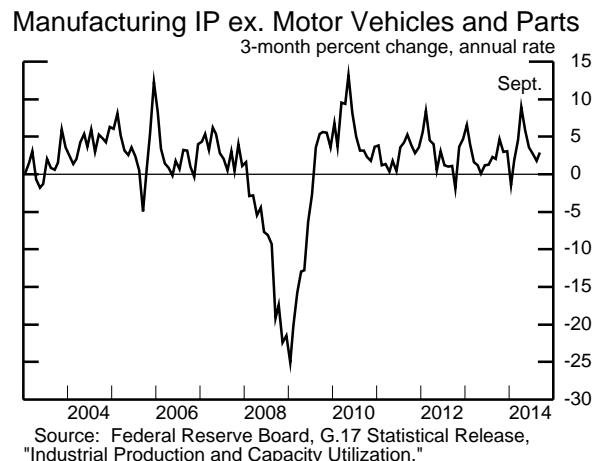
(Percent change at annual rate except as noted)

Measure	2014:Q2		2014:Q3		2014:Q4	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
Real GDP	4.4	4.6	2.8	2.7	3.0	3.0
Private domestic final purchases	3.7	3.8	2.9	2.8	3.9	3.5
Personal consumption expenditures	2.5	2.5	2.0	1.9	3.4	3.4
Residential investment	8.6	8.8	9.9	8.0	11.8	5.5
Nonres. private fixed investment	9.5	9.7	6.1	6.7	4.1	3.7
Government purchases	1.7	1.7	-1.0	1.5	-.1	-1.6
<i>Contributions to change in real GDP</i>						
Inventory investment ¹	1.2	1.4	.1	-.6	-.1	.4
Net exports ¹	-.3	-.3	.5	.6	-.2	-.1
Unemployment rate²	6.2	6.2	6.1	6.1	5.9	5.8
PCE chain price index	2.3	2.3	1.3	1.2	.9	-.2
Ex. food and energy	2.0	2.0	1.5	1.4	1.4	1.2

1. Percentage points.

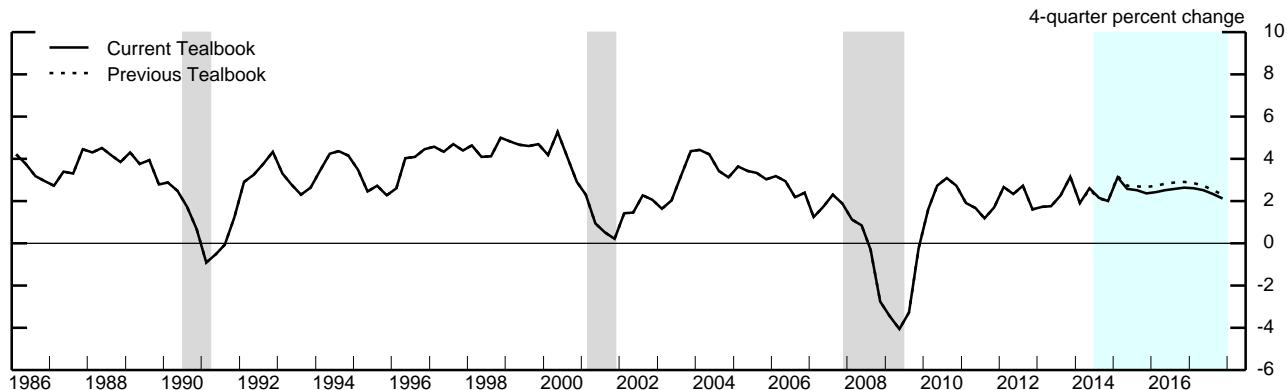
2. Percent.

Recent Nonfinancial Developments (1)



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

Measure	2014	2014		2015	2016	2017
		H1	H2			
Real GDP		2.0	1.2	2.8	2.4	2.6
Previous Tealbook		2.0	1.1	2.9	2.7	2.9
Final sales	2.0	1.1	2.9	2.3	2.6	2.4
Previous Tealbook	2.0	1.1	2.9	2.6	2.9	2.5
Personal consumption expenditures	2.3	1.9	2.6	3.0	2.7	2.4
Previous Tealbook	2.3	1.8	2.7	3.0	2.8	2.5
Residential investment	4.1	1.5	6.7	9.5	9.7	7.3
Previous Tealbook	6.0	1.4	10.8	11.0	10.7	6.0
Nonresidential structures	4.2	7.6	.9	-2.4	.6	.4
Previous Tealbook	6.8	7.8	5.9	-.7	1.1	.7
Equipment and intangibles	5.7	5.0	6.5	2.7	3.6	2.6
Previous Tealbook	4.8	4.8	4.9	3.1	4.2	3.0
Federal purchases	-1.3	-.5	-2.1	-3.6	-1.4	-1.0
Previous Tealbook	-2.0	-.5	-3.4	-3.3	-1.1	-.8
State and local purchases	1.1	1.0	1.3	1.5	1.8	2.0
Previous Tealbook	1.2	1.1	1.3	1.5	1.8	2.0
Exports	2.3	.4	4.3	3.7	4.4	5.0
Previous Tealbook	2.2	.3	4.0	4.4	5.1	5.4
Imports	4.3	6.7	1.9	4.1	4.5	3.8
Previous Tealbook	4.4	6.5	2.3	4.0	4.6	3.9
Contributions to change in real GDP (percentage points)						
Inventory change	.0	.1	-.1	.1	.1	-.3
Previous Tealbook	.0	.0	.0	.1	.1	-.2
Net exports	-.4	-1.0	.3	-.2	-.1	.1
Previous Tealbook	-.4	-1.0	.2	-.1	-.1	.1

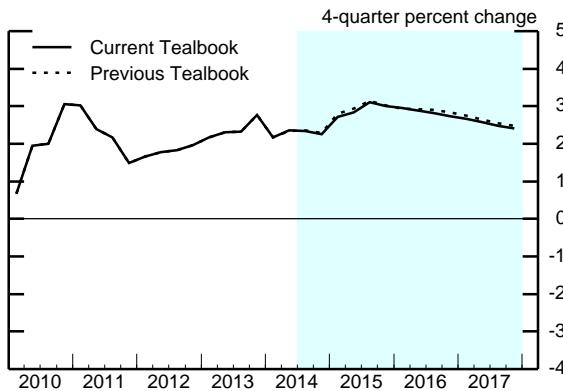
Real GDP

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

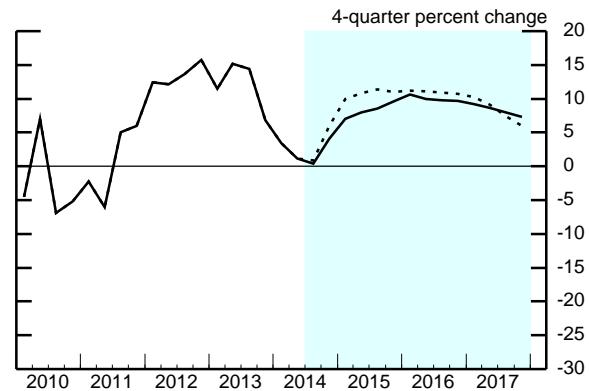
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Components of Final Demand

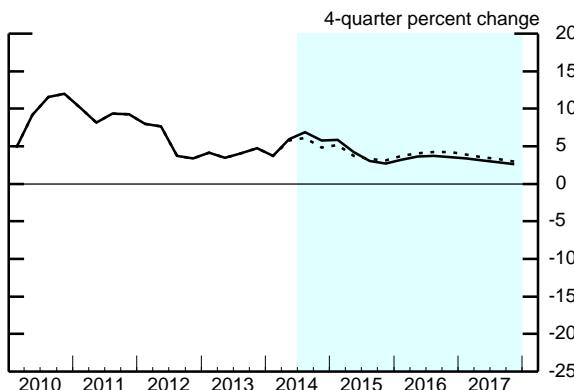
Personal Consumption Expenditures



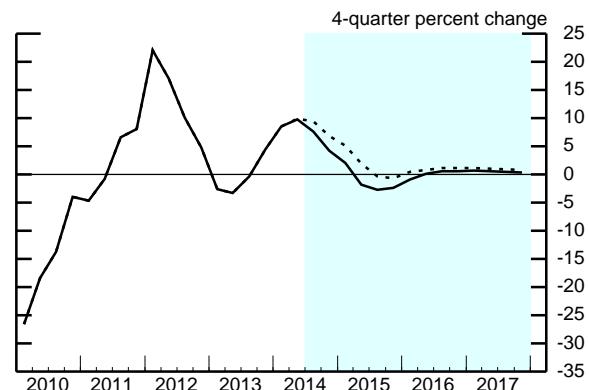
Residential Investment



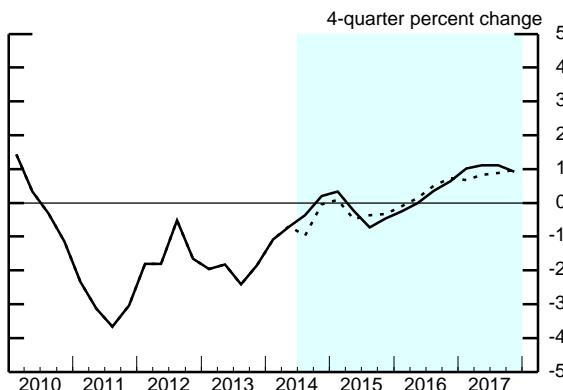
Equipment and Intangibles



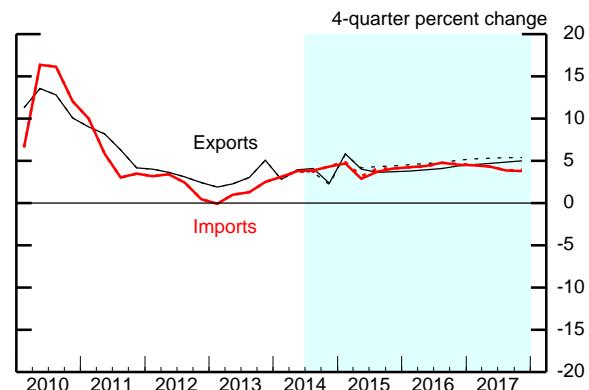
Nonresidential Structures



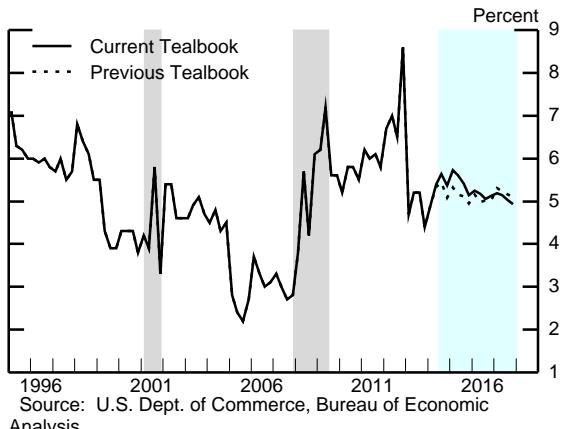
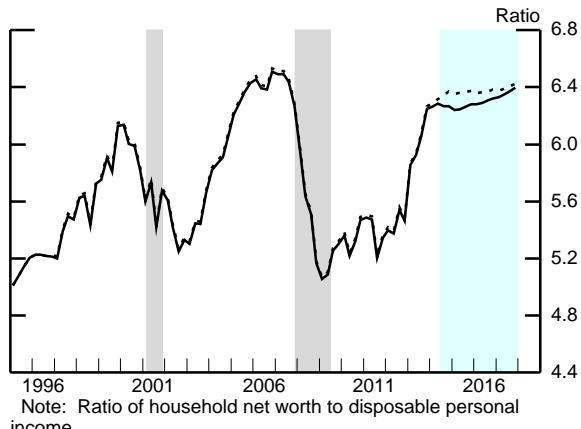
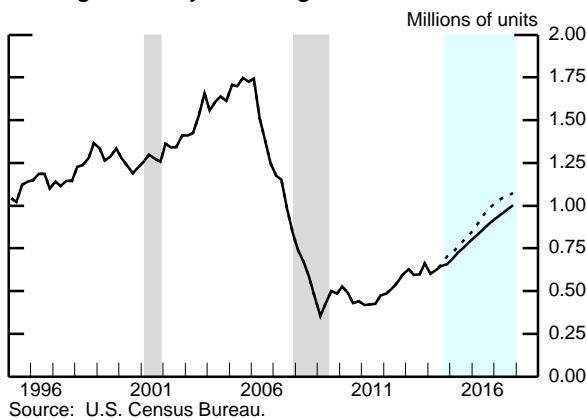
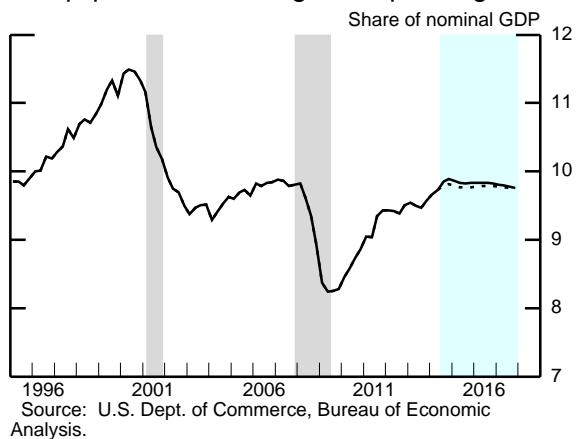
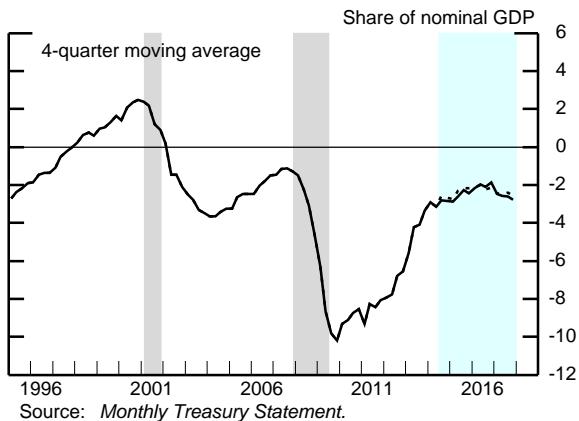
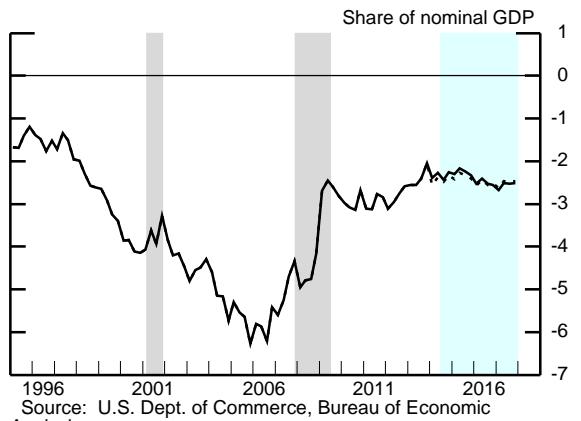
Government Consumption & Investment



Exports and Imports



Aspects of the Medium-Term Projection

Personal Saving Rate**Wealth-to-Income Ratio****Single-Family Housing Starts****Equipment and Intangibles Spending****Federal Surplus/Deficit****Current Account Surplus/Deficit**

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

Decomposition of Potential GDP

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

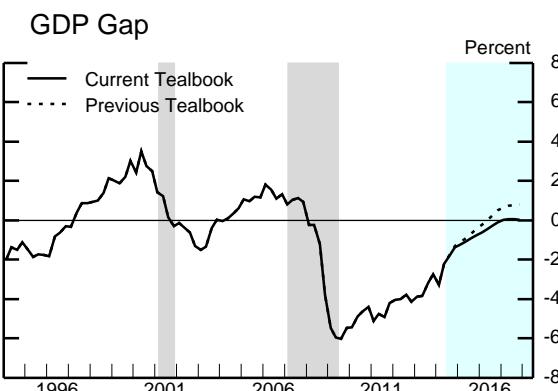
Measure	1974-95	1996-2000	2001-07	2008-10	2011-13	2014	2015	2016	2017
Potential real GDP	3.1	3.4	2.6	1.7	1.6	.6	1.7	1.9	2.0
Previous Tealbook	3.1	3.4	2.6	1.7	1.6	.5	1.7	1.9	2.0
<i>Selected contributions</i> ¹									
Structural labor productivity ²	1.6	2.9	2.8	1.5	1.2	.7	1.7	1.8	1.9
Previous Tealbook	1.6	2.9	2.8	1.5	1.2	.6	1.7	1.8	1.9
Capital deepening	.7	1.5	.9	.4	.4	.7	.7	.8	.8
Multifactor productivity	.7	1.1	1.6	.9	.7	-.1	.9	1.0	1.0
Structural hours	1.5	1.0	.7	.2	.6	.2	.3	.3	.3
Previous Tealbook	1.5	1.0	.7	.2	.6	.2	.3	.3	.3
Labor force participation	.4	.0	-.3	-.4	-.5	-.8	-.5	-.5	-.5
Previous Tealbook	.4	.0	-.3	-.4	-.5	-.8	-.5	-.5	-.5
Memo:									
GDP gap ³	-1.8	2.5	.9	-4.4	-2.8	-1.4	-.8	-.1	.0
Previous Tealbook	-1.8	2.5	.9	-4.4	-2.8	-1.3	-.4	.5	.8

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

1. Percentage points.

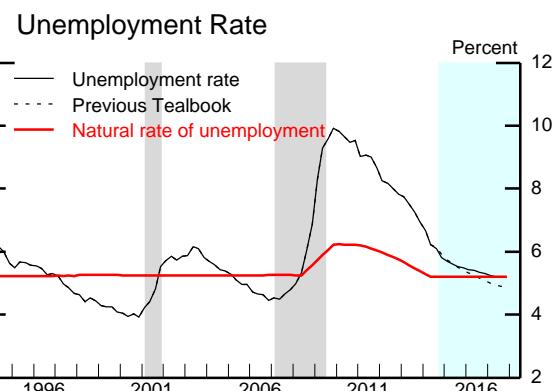
2. Total business sector.

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.

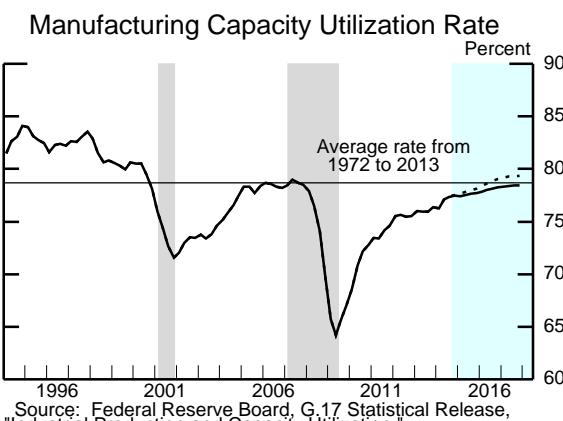


Note: The GDP gap is the percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential.

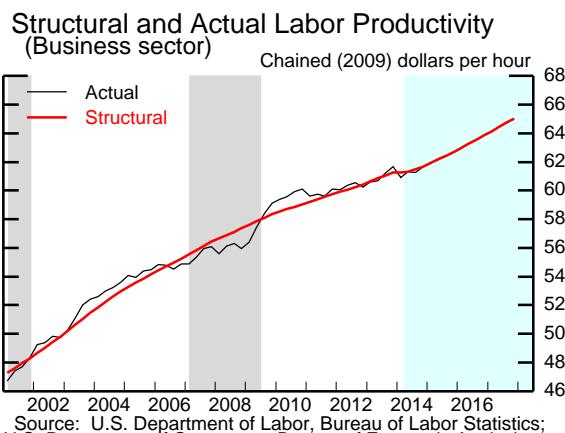
Source: U.S. Dept. of Commerce, BEA; staff assumptions.



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



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



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

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

The Outlook for the Labor Market

Measure	2014	2014		2015	2016	2017
		H1	H2			
Output per hour, business ¹ Previous Tealbook	.0 .0	-1.1 -1.3	1.1 1.3	1.7 1.7	1.8 1.8	1.9 1.9
Nonfarm private employment ² Previous Tealbook	220 211	222 222	218 200	151 180	161 180	112 130
Labor force participation rate ³ Previous Tealbook	62.7 62.8	62.8 62.8	62.7 62.8	62.6 62.6	62.4 62.4	62.2 62.2
Civilian unemployment rate ³ Previous Tealbook	5.8 5.9	6.2 6.2	5.8 5.9	5.5 5.4	5.3 5.1	5.2 4.9

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)

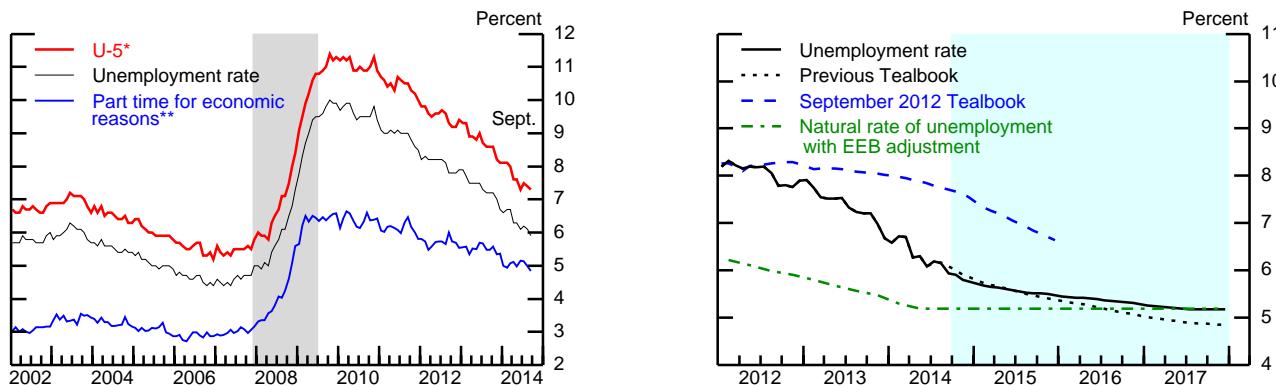
Measure	2014	2014		2015	2016	2017
		H1	H2			
PCE chain-weighted price index Previous Tealbook	1.2 1.5	1.9 1.8	.5 1.1	1.4 1.5	1.6 1.6	1.7 1.7
Food and beverages Previous Tealbook	2.7 2.2	2.9 2.9	2.5 1.5	1.0 .9	1.5 1.5	1.8 1.8
Energy Previous Tealbook	-5.5 -.9	4.6 4.6	-14.7 -6.0	-1.1 .6	1.2 -.1	.9 .2
Excluding food and energy Previous Tealbook	1.5 1.5	1.6 1.6	1.3 1.5	1.5 1.6	1.6 1.7	1.8 1.8
Prices of core goods imports ¹ Previous Tealbook	.6 1.0	1.5 1.5	-.3 .5	.4 1.1	1.2 1.3	1.2 1.3

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

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

Labor Market Developments and Outlook (1)

Measures of Labor Underutilization



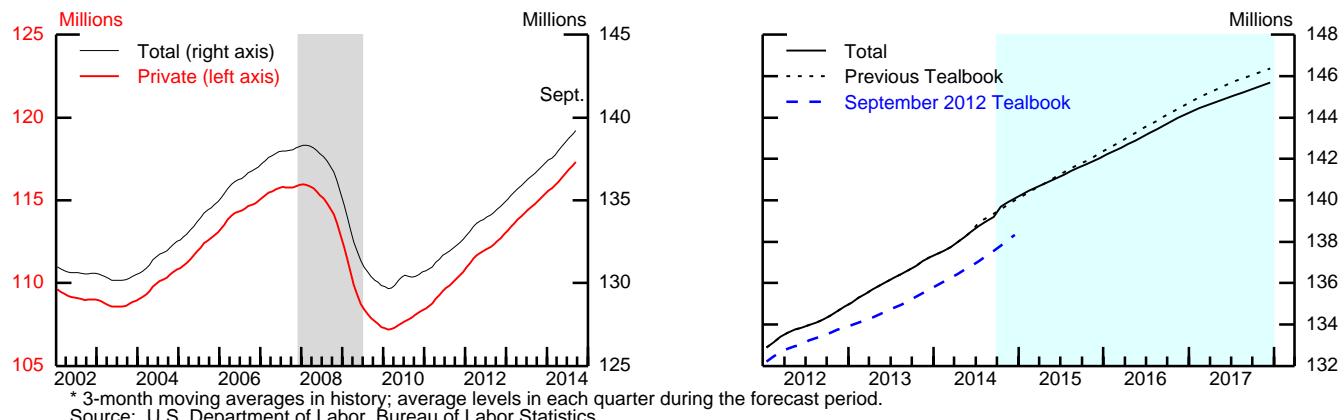
* U-5 measures total unemployed persons plus all marginally attached to the labor force, as a percent of the labor force plus persons marginally attached to the labor force.

** Percent of Current Population Survey employment.

EEB Extended and emergency unemployment benefits.

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

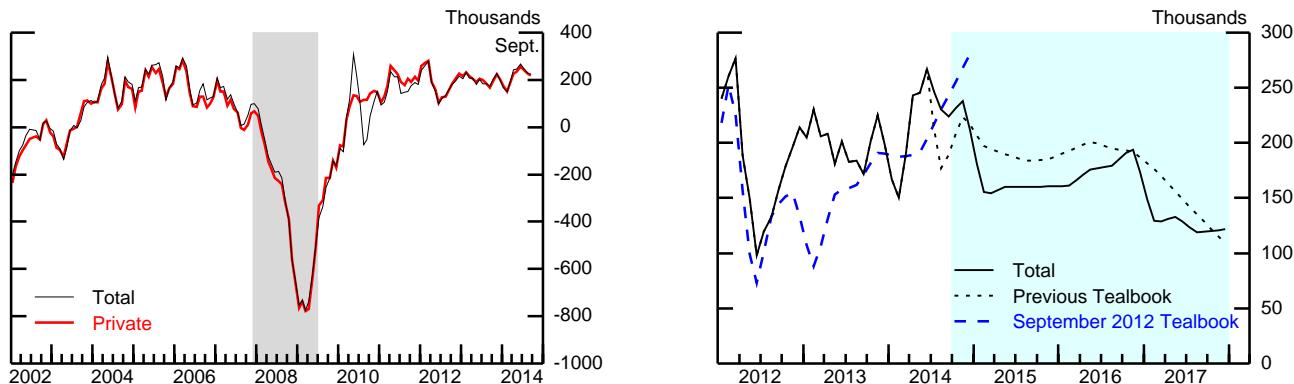
Level of Payroll Employment*



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

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

Change in Payroll Employment*



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

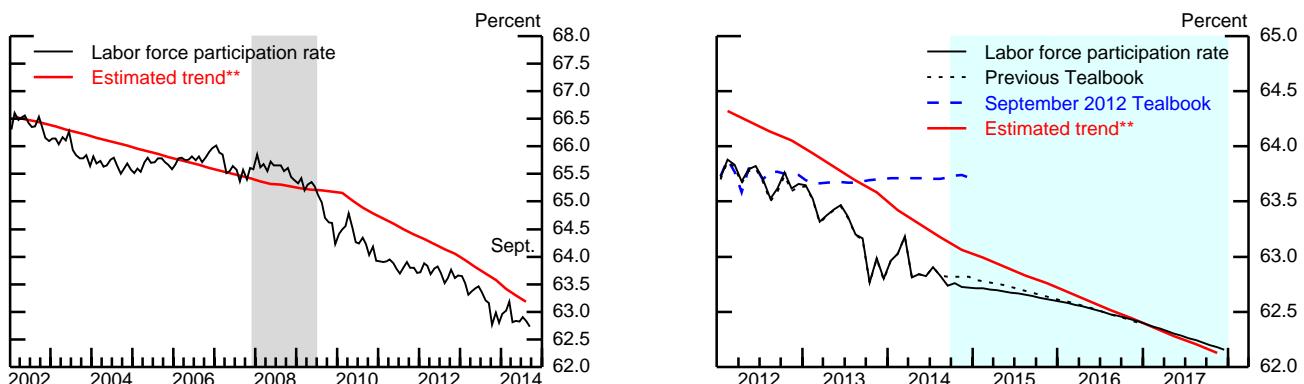
Source: U.S. Department of Labor, Bureau of Labor Statistics.

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

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

Labor Market Developments and Outlook (2)

Labor Force Participation Rate*

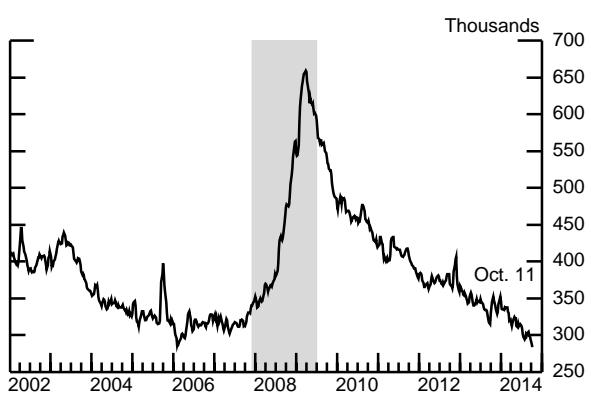


* Published data adjusted by staff to account for changes in population weights.

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

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

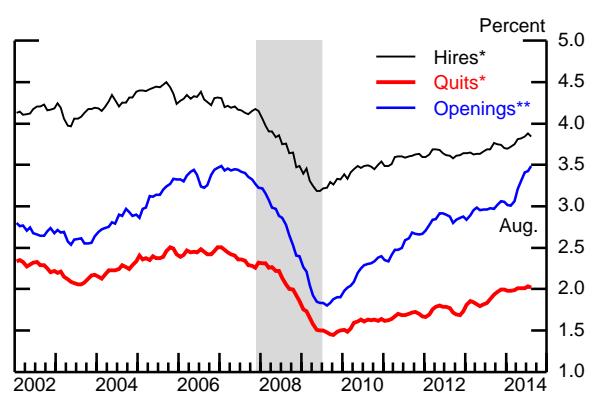
Initial Unemployment Insurance Claims*



* 4-week moving average.

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

Private Hires, Quits, and Job Openings

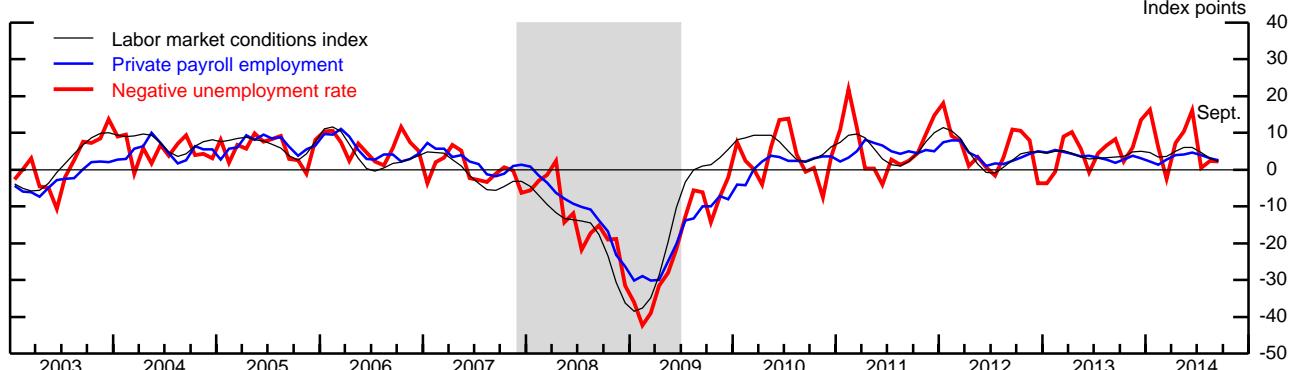


* Percent of private nonfarm payroll employment, 3-month moving average.

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

Source: Job Openings and Labor Turnover Survey.

Change in Labor Market Conditions Index and Selected Indicators*



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

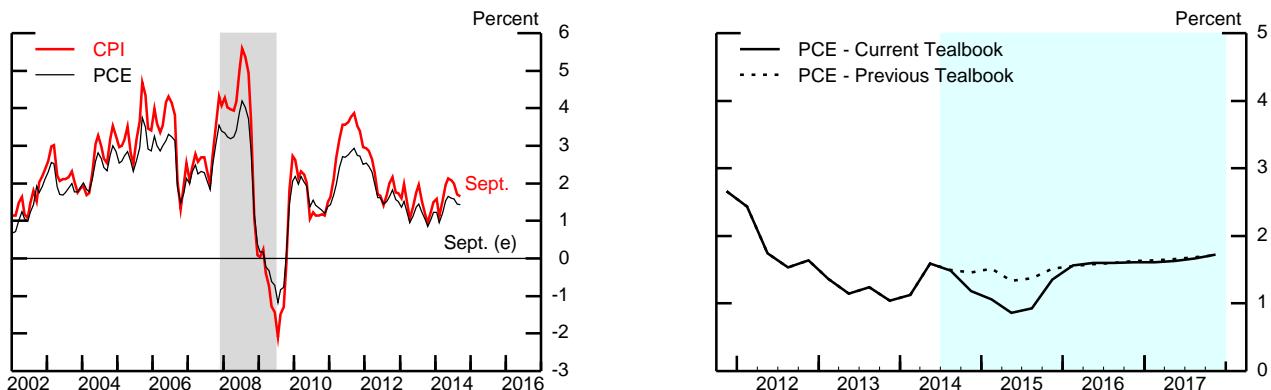
* 3-month moving average.

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

Inflation Developments and Outlook (1)

(Percent change from year-earlier period)

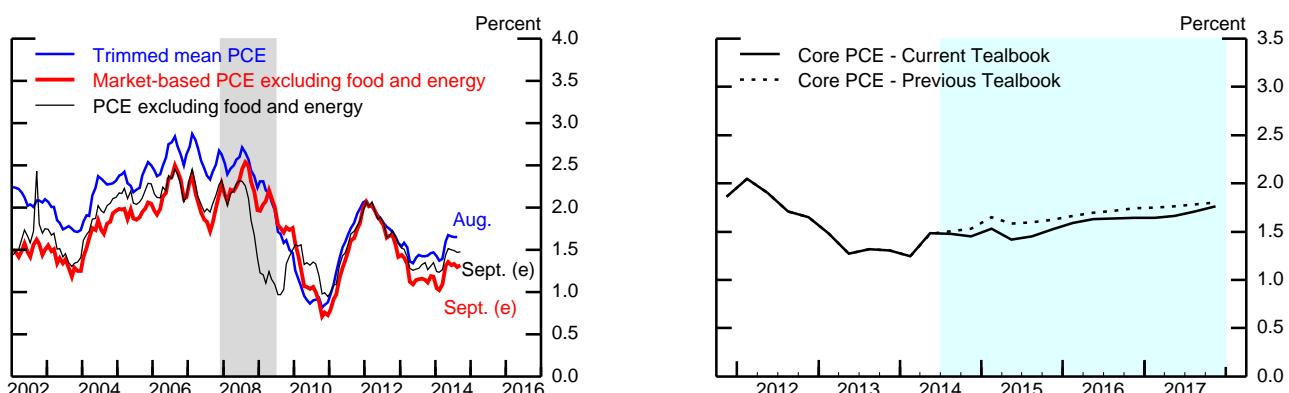
Headline Consumer Price Inflation



Note: PCE prices from July to September 2014 are staff estimates (e).

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

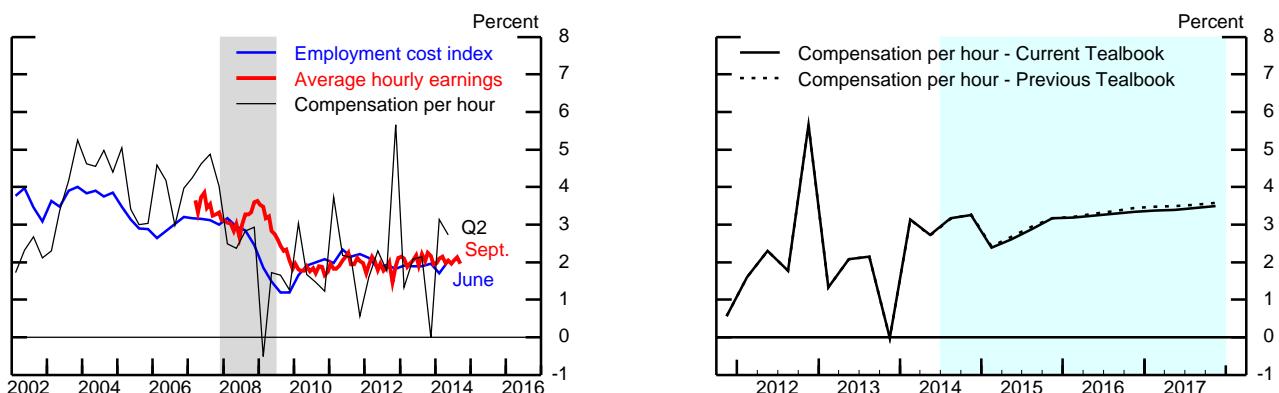
Measures of Underlying PCE Price Inflation



Note: Core PCE prices from July to September 2014 are staff estimates (e).

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

Labor Cost Growth



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

Note: Compensation per hour is for the business sector. Average hourly earnings are for the private nonfarm sector. The employment cost index is for the private sector.

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

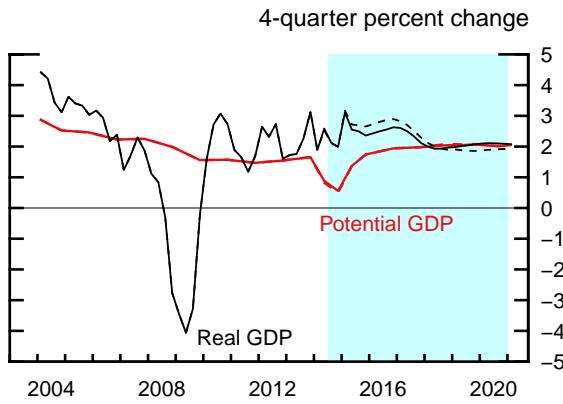
The Long-Term Outlook

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

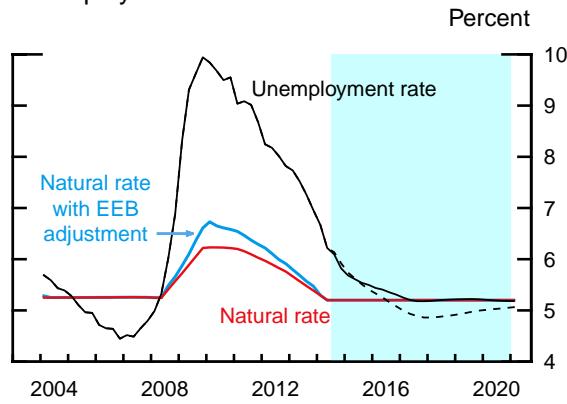
Measure	2014	2015	2016	2017	2018	2019	Longer run
Real GDP Previous Tealbook	2.0 2.0	2.4 2.7	2.6 2.9	2.1 2.3	2.0 1.9	2.1 1.9	2.0 2.0
Civilian unemployment rate ¹ Previous Tealbook	5.8 5.9	5.5 5.4	5.3 5.1	5.2 4.9	5.2 4.9	5.2 5.0	5.2 5.2
PCE prices, total Previous Tealbook	1.2 1.5	1.4 1.5	1.6 1.6	1.7 1.7	1.8 1.9	1.9 2.0	2.0 2.0
Core PCE prices Previous Tealbook	1.5 1.5	1.5 1.6	1.6 1.7	1.8 1.8	1.8 1.9	1.9 2.0	2.0 2.0
Federal funds rate ¹ Previous Tealbook	.1 .1	.9 1.1	1.9 2.3	2.6 3.2	3.0 3.7	3.2 3.9	3.8 3.8
10-year Treasury yield ¹ Previous Tealbook	2.4 2.8	3.2 3.8	3.7 4.1	3.9 4.3	4.2 4.5	4.3 4.6	4.6 4.6

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

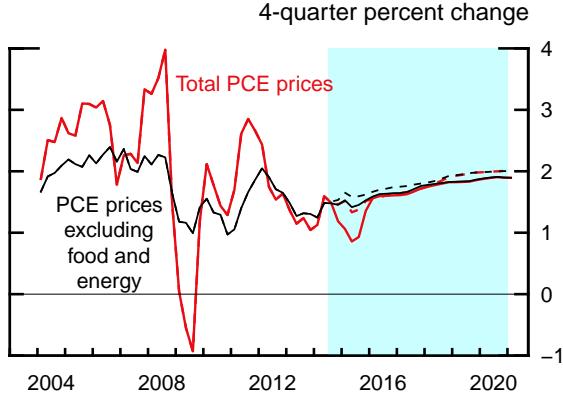
Real GDP



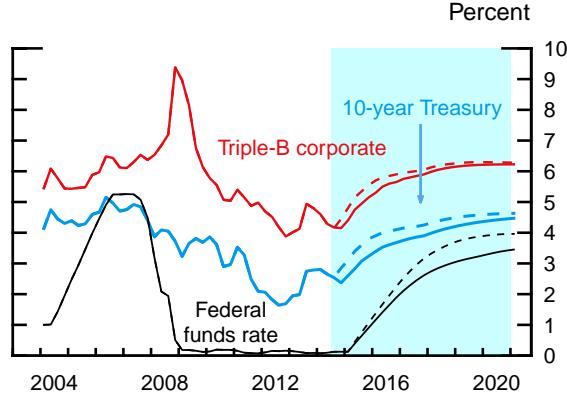
Unemployment Rate



PCE Prices



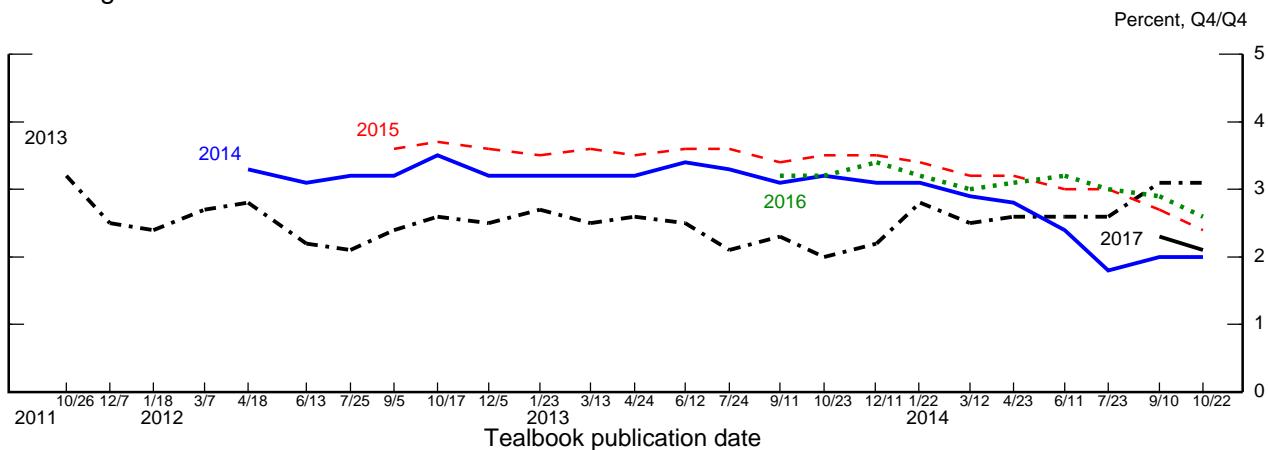
Interest Rates



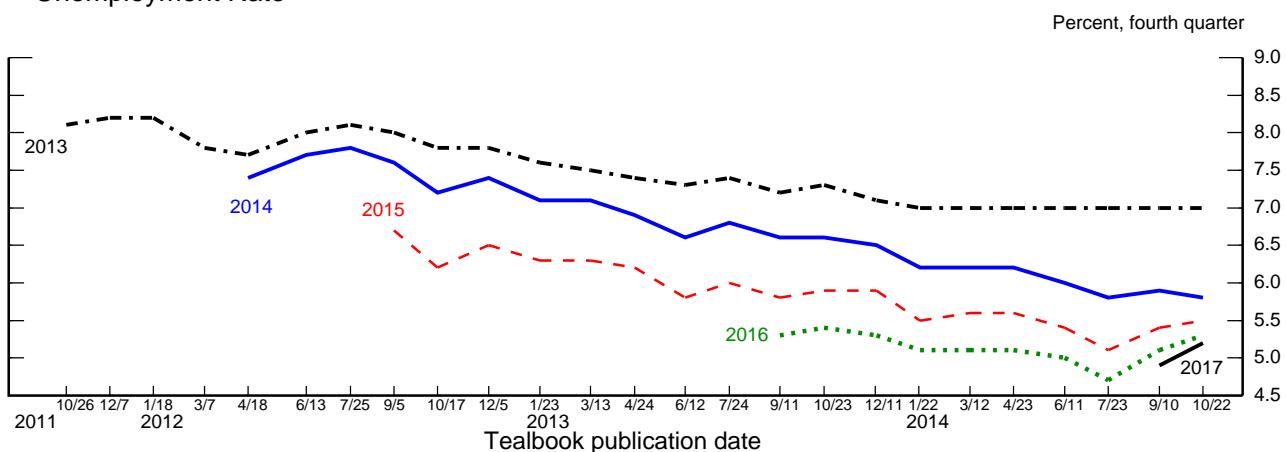
Note: In each panel, shading represents the projection period, and dashed lines are the previous Tealbook.

Evolution of the Staff Forecast

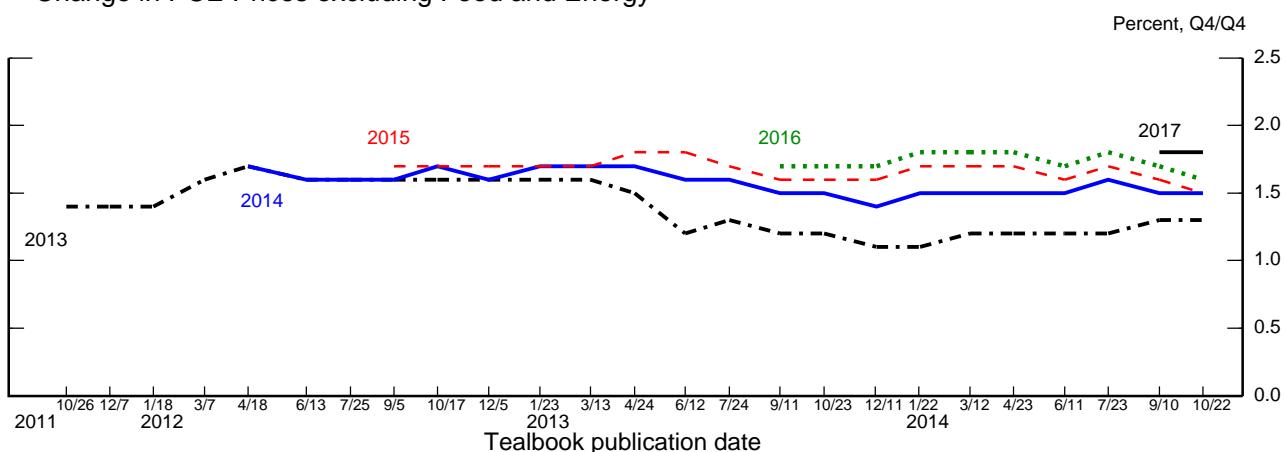
Change in Real GDP



Unemployment Rate



Change in PCE Prices excluding Food and Energy



The Foreign GDP Outlook

Int'l Econ Devel & Outlook

Real GDP*

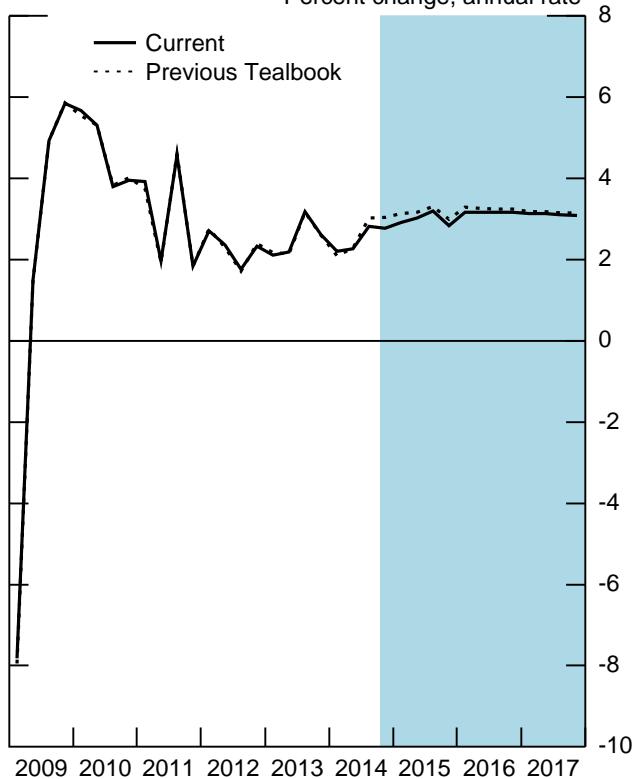
Percent change, annual rate

	2013	2014				2015	2016	2017
		Q1	Q2	Q3	Q4			
1. Total Foreign	2.5	2.2	2.3	2.8	2.8	3.0	3.2	3.1
<i>Previous Tealbook</i>	2.5	2.1	2.3	3.0	3.0	3.2	3.3	3.2
2. Advanced Foreign Economies	1.9	1.9	1.1	1.9	1.8	2.0	2.1	2.1
<i>Previous Tealbook</i>	2.0	1.8	1.0	2.1	2.1	2.1	2.2	2.1
3. Canada	2.7	0.9	3.1	2.5	2.4	2.5	2.5	2.3
4. Euro Area	0.4	1.2	0.3	0.7	0.8	1.5	1.9	2.0
5. Japan	2.4	6.0	-7.1	2.1	1.5	0.4	1.1	1.1
6. United Kingdom	2.7	3.0	3.7	2.8	2.5	2.4	2.4	2.3
7. Emerging Market Economies	3.1	2.6	3.5	3.7	3.7	4.0	4.2	4.1
<i>Previous Tealbook</i>	3.0	2.4	3.6	3.9	4.0	4.2	4.3	4.2
8. China	7.6	6.2	7.7	7.7	7.2	7.0	7.0	6.9
9. Emerging Asia ex. China	3.6	2.5	3.2	3.7	3.8	4.2	4.3	4.1
10. Mexico	0.6	1.8	4.2	3.7	3.5	3.5	3.6	3.6
11. Brazil	2.2	-0.6	-2.4	0.4	1.4	1.8	2.1	2.2

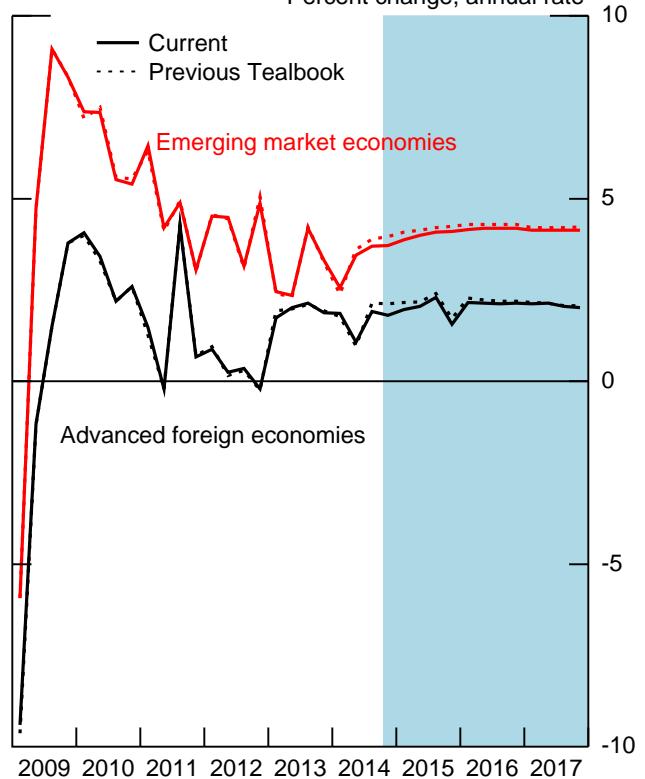
* GDP aggregates weighted by shares of U.S. merchandise exports.

Total Foreign GDP

Percent change, annual rate

**Foreign GDP**

Percent change, annual rate



The Foreign Inflation Outlook

Consumer Prices*

Percent change, annual rate

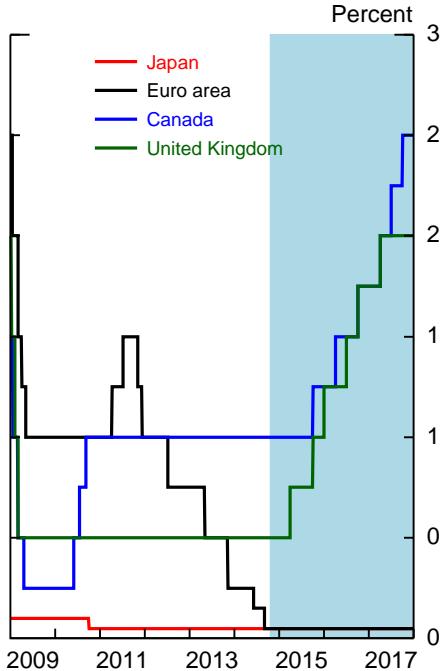
	2013	2014				2015	2016	2017
		Q1	Q2	Q3	Q4			
1. Total Foreign	2.3	2.0	3.1	2.1	1.7	2.5	2.6	2.6
<i>Previous Tealbook</i>	2.3	2.0	3.0	2.4	2.4	2.6	2.6	2.6
2. Advanced Foreign Economies	1.0	1.1	3.2	1.1	0.3	1.5	1.6	1.7
<i>Previous Tealbook</i>	1.0	1.1	3.3	1.2	1.2	1.7	1.6	1.7
3. Canada	1.0	2.8	3.7	1.3	0.2	1.5	1.9	2.0
4. Euro Area	0.8	0.2	0.4	0.6	0.4	1.2	1.5	1.6
5. Japan	1.4	0.4	9.4	1.5	0.1	2.1	1.2	1.3
6. United Kingdom	2.1	1.2	1.8	1.6	1.0	1.7	1.9	2.0
7. Emerging Market Economies	3.4	2.6	2.9	2.8	2.9	3.3	3.3	3.3
<i>Previous Tealbook</i>	3.3	2.7	2.8	3.3	3.3	3.4	3.3	3.3
8. China	2.9	0.8	2.0	2.2	1.9	3.0	3.0	3.0
9. Emerging Asia ex. China	3.4	2.9	3.1	1.8	3.2	3.5	3.5	3.5
10. Mexico	3.7	4.8	3.3	4.4	3.5	3.3	3.3	3.3
11. Brazil	5.9	6.5	7.4	6.2	6.2	5.6	5.5	5.5

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

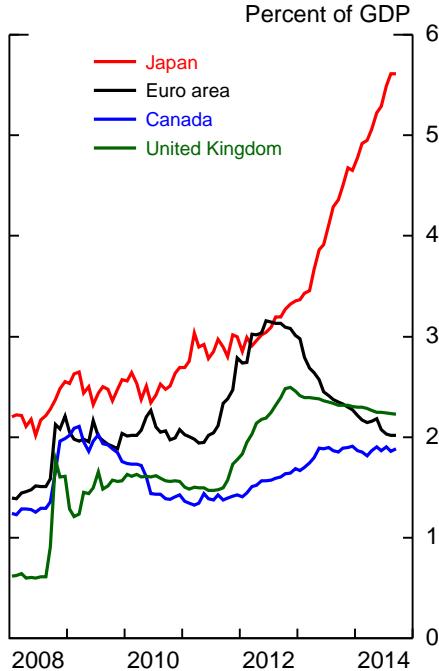
Int'l Econ Devel & Outlook

Foreign Monetary Policy

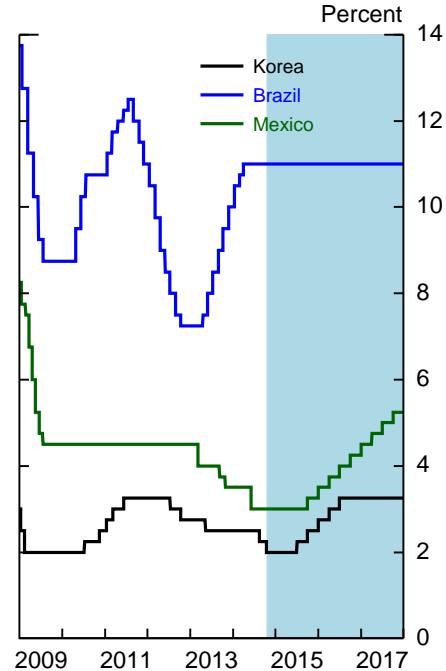
AFE Policy Rates



AFE Central Bank Balance Sheets

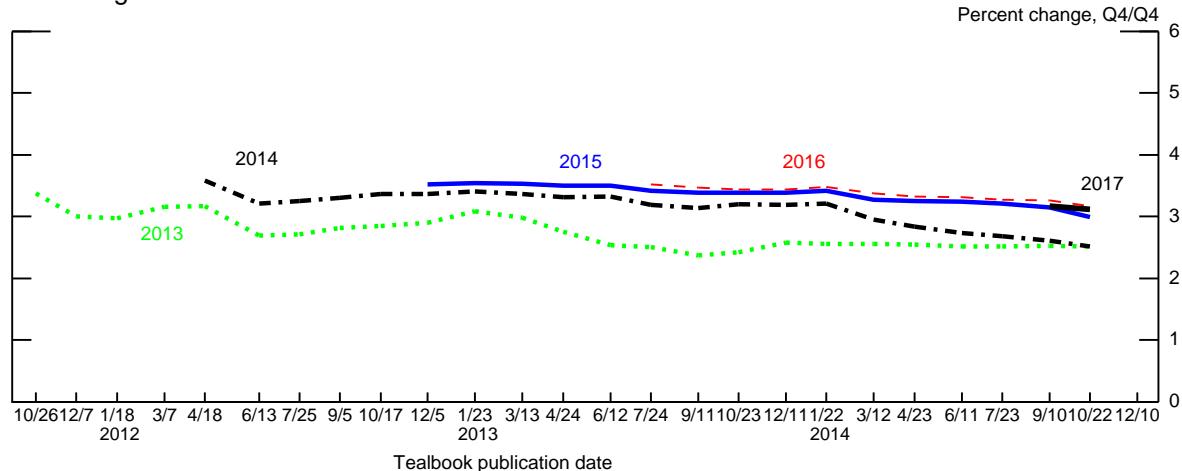


EME Policy Rates

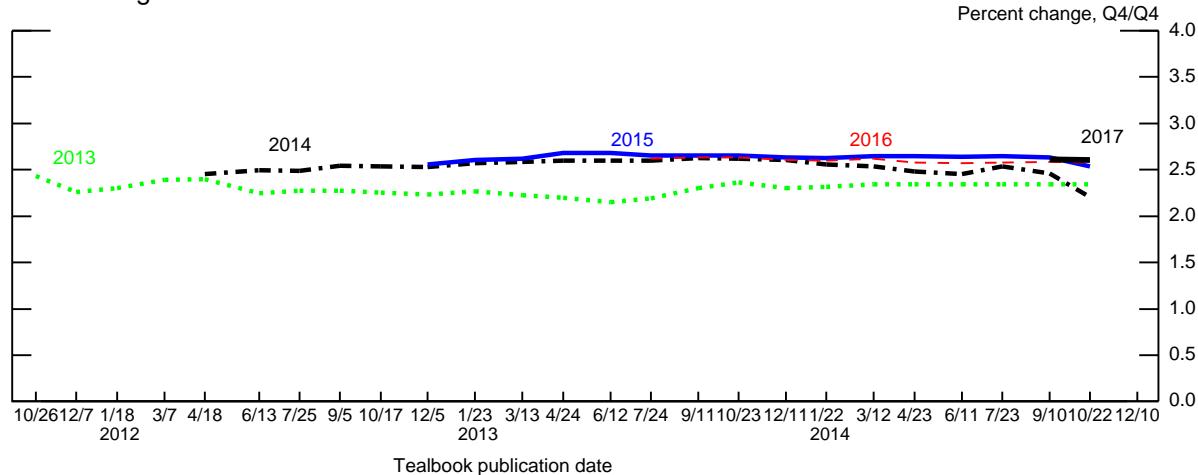


Evolution of Staff's International Forecast

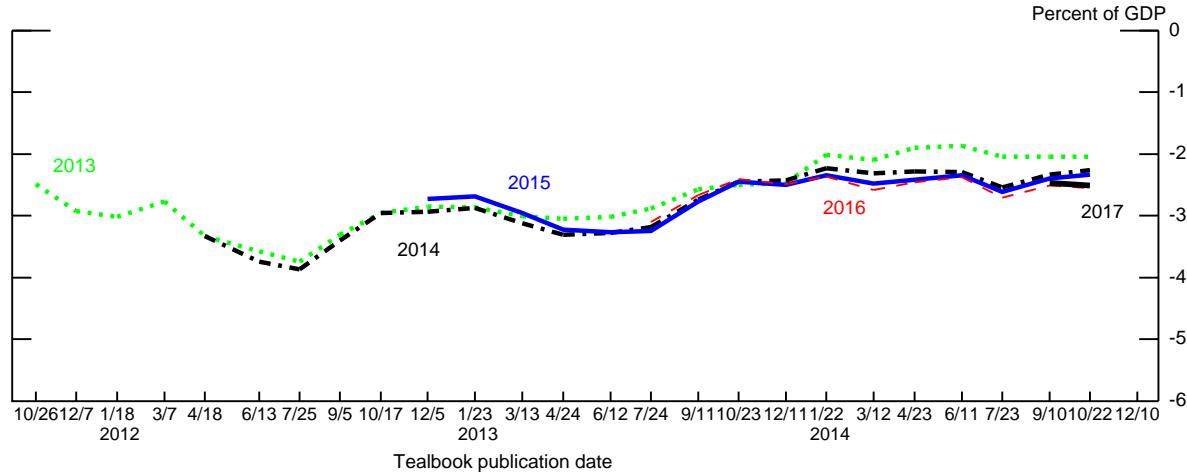
Total Foreign GDP



Total Foreign CPI

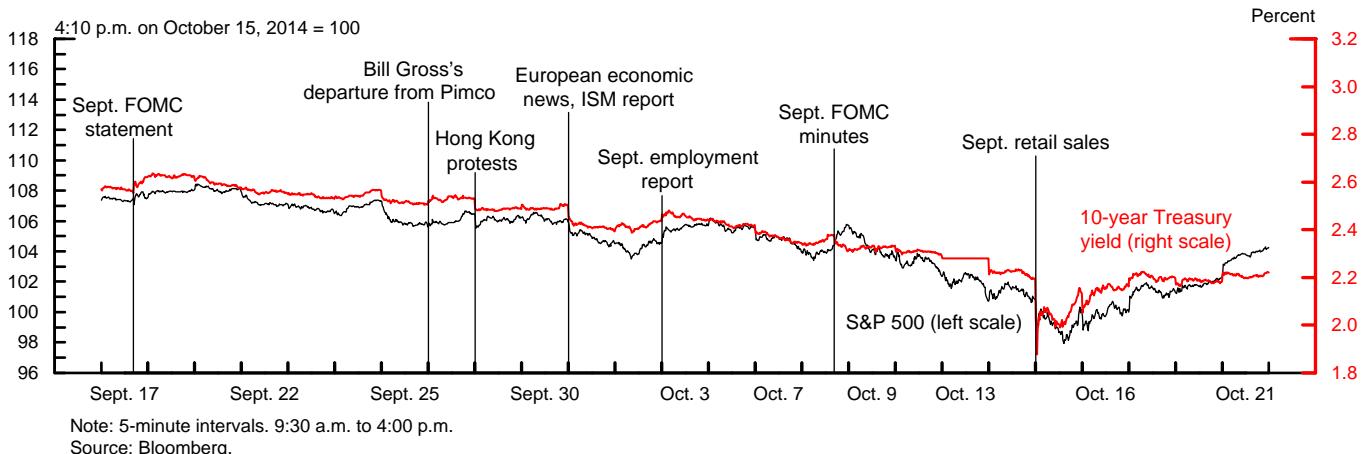


U.S. Current Account Balance

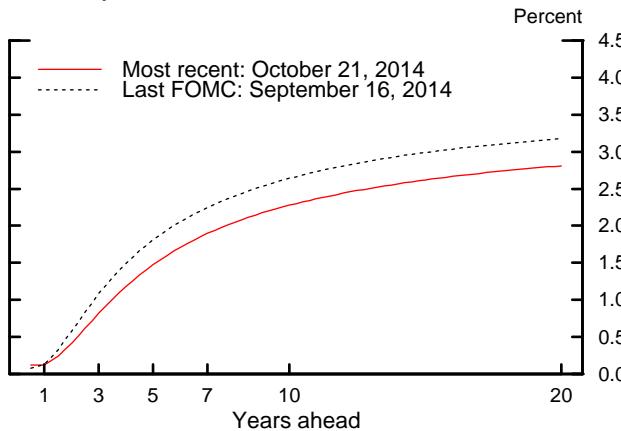


Treasury Yields and Policy Expectations

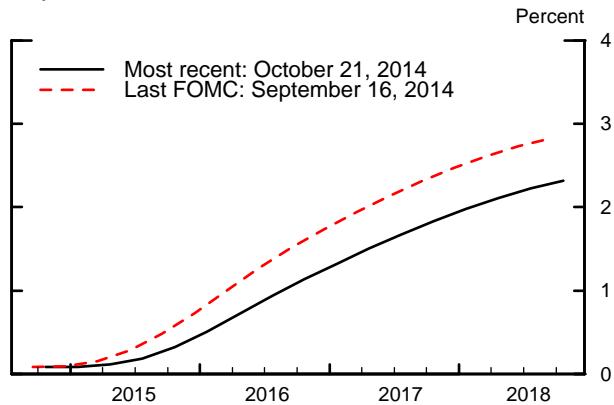
10-Year Treasury Yield and S&P 500 Index



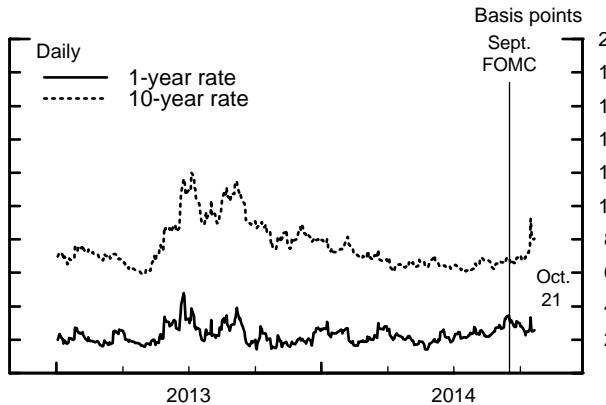
Treasury Yield Curve



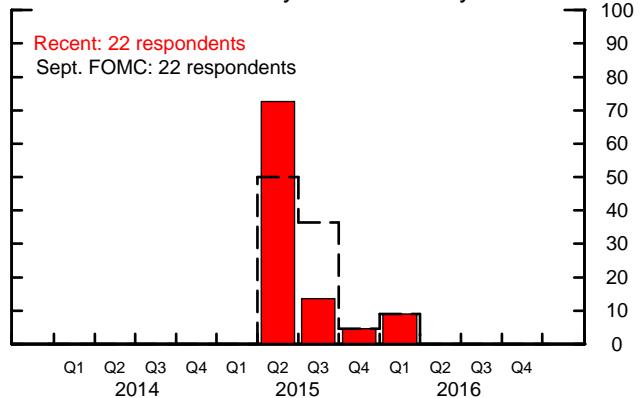
Implied Federal Funds Rate



Implied Volatility



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



Alternative Scenarios

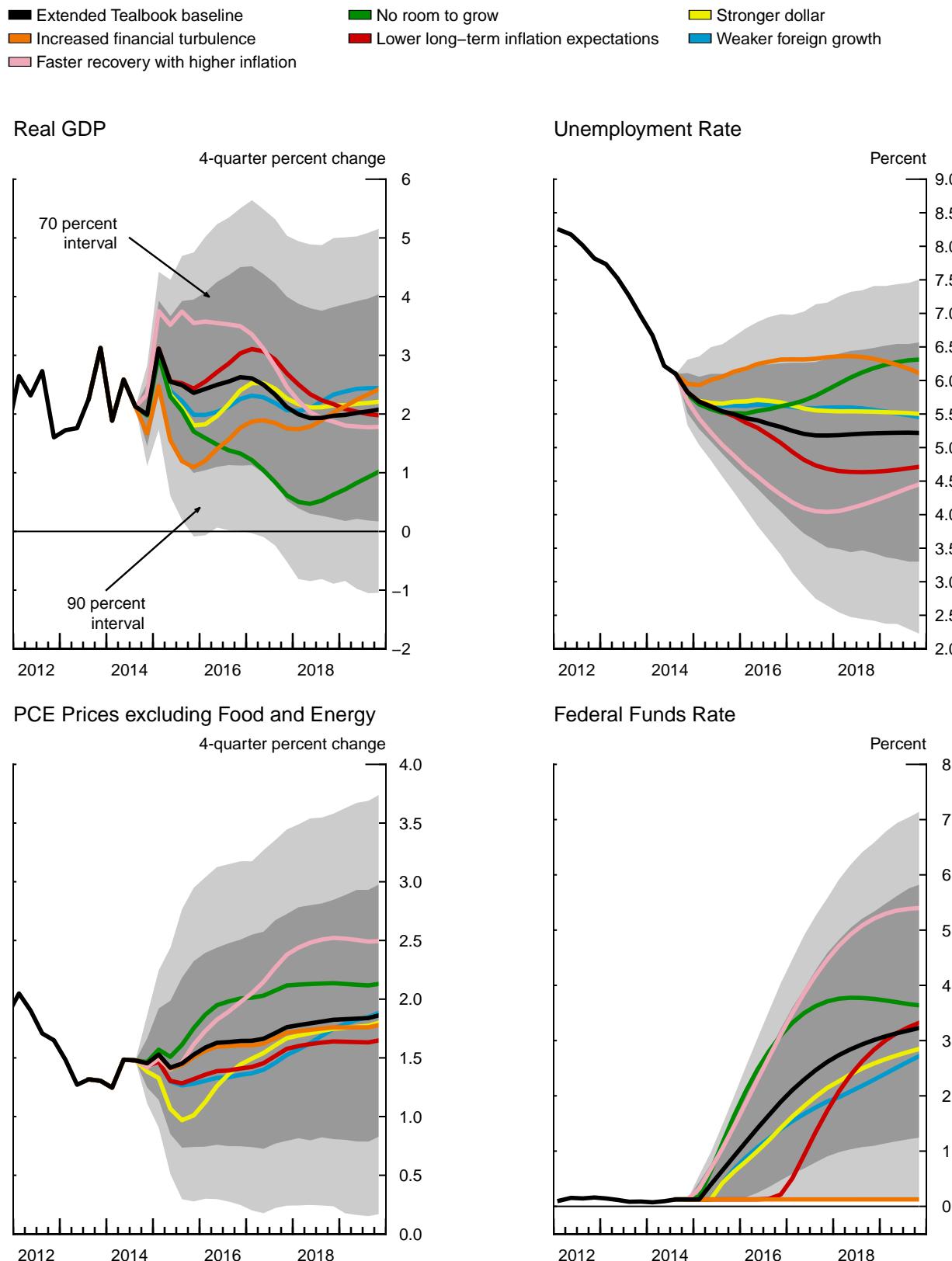
(Percent change, annual rate, from end of preceding period except as noted)

Measure and scenario	2014		2015	2016	2017	2018-19
	H1	H2				
<i>Real GDP</i>						
Extended Tealbook baseline	1.2	2.8	2.4	2.6	2.1	2.0
Increased financial turbulence	1.2	2.1	1.1	1.7	1.7	2.2
Faster recovery with higher inflation	1.2	3.5	3.6	3.5	2.4	1.8
No room to grow	1.2	2.8	1.7	1.3	.6	.8
Lower long-term inflation expectations	1.2	2.8	2.5	3.0	2.7	2.0
Stronger dollar	1.2	2.8	1.8	2.4	2.2	2.2
Weaker foreign growth	1.2	2.8	2.0	2.2	2.0	2.4
<i>Unemployment rate¹</i>						
Extended Tealbook baseline	6.2	5.8	5.5	5.3	5.2	5.2
Increased financial turbulence	6.2	5.9	6.1	6.3	6.4	6.1
Faster recovery with higher inflation	6.2	5.7	4.9	4.3	4.1	4.4
No room to grow	6.2	5.8	5.5	5.6	5.9	6.3
Lower long-term inflation expectations	6.2	5.8	5.5	5.1	4.7	4.7
Stronger dollar	6.2	5.8	5.7	5.7	5.6	5.5
Weaker foreign growth	6.2	5.8	5.6	5.6	5.6	5.4
<i>Total PCE prices</i>						
Extended Tealbook baseline	1.9	.5	1.4	1.6	1.7	1.8
Increased financial turbulence	1.9	.5	1.4	1.6	1.7	1.7
Faster recovery with higher inflation	1.9	.4	1.5	1.9	2.3	2.5
No room to grow	1.9	.5	1.6	2.0	2.1	2.1
Lower long-term inflation expectations	1.9	.5	1.2	1.4	1.5	1.6
Stronger dollar	1.9	.0	.7	1.4	1.6	1.8
Weaker foreign growth	1.9	.3	.7	1.0	1.3	2.0
<i>Core PCE prices</i>						
Extended Tealbook baseline	1.6	1.3	1.5	1.6	1.8	1.8
Increased financial turbulence	1.6	1.3	1.5	1.6	1.8	1.7
Faster recovery with higher inflation	1.6	1.2	1.6	1.9	2.4	2.5
No room to grow	1.6	1.3	1.7	2.0	2.2	2.1
Lower long-term inflation expectations	1.6	1.3	1.3	1.4	1.6	1.6
Stronger dollar	1.6	1.2	1.0	1.4	1.7	1.7
Weaker foreign growth	1.6	1.3	1.3	1.3	1.6	1.8
<i>Federal funds rate¹</i>						
Extended Tealbook baseline	.1	.1	.9	1.9	2.6	3.2
Increased financial turbulence	.1	.1	.1	.1	.1	.1
Faster recovery with higher inflation	.1	.1	1.5	3.1	4.5	5.4
No room to grow	.1	.1	1.6	3.1	3.7	3.6
Lower long-term inflation expectations	.1	.1	.1	.2	1.7	3.3
Stronger dollar	.1	.1	.6	1.4	2.1	2.9
Weaker foreign growth	.1	.1	.7	1.4	1.9	2.7

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

Forecast Confidence Intervals and Alternative Scenarios

Confidence Intervals Based on FRB/US Stochastic Simulations



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

Measure	2014	2015	2016	2017	2018	2019
<i>Real GDP</i> (percent change, Q4 to Q4)						
Projection	2.0	2.4	2.6	2.1	2.0	2.1
Confidence interval						
Tealbook forecast errors	1.5–2.5	.7–4.1	.7–4.5
FRB/US stochastic simulations	1.5–2.5	1.0–4.0	1.1–4.5	.5–4.0	.2–3.8	.2–4.1
<i>Civilian unemployment rate</i> (percent, Q4)						
Projection	5.8	5.5	5.3	5.2	5.2	5.2
Confidence interval						
Tealbook forecast errors	5.7–5.9	4.8–6.2	4.1–6.5
FRB/US stochastic simulations	5.5–6.1	4.7–6.1	4.0–6.3	3.5–6.3	3.4–6.5	3.3–6.6
<i>PCE prices, total</i> (percent change, Q4 to Q4)						
Projection	1.2	1.4	1.6	1.7	1.8	1.9
Confidence interval						
Tealbook forecast errors	1.0–1.4	.2–2.5	.6–2.6
FRB/US stochastic simulations	.9–1.5	.5–2.3	.5–2.7	.6–2.9	.7–3.0	.7–3.1
<i>PCE prices excluding</i> <i>food and energy</i> (percent change, Q4 to Q4)						
Projection	1.5	1.5	1.6	1.8	1.8	1.9
Confidence interval						
Tealbook forecast errors	1.2–1.7	.9–2.1	.9–2.4
FRB/US stochastic simulations	1.2–1.7	.7–2.3	.7–2.5	.8–2.7	.8–2.8	.8–3.0
<i>Federal funds rate</i> (percent, Q4)						
Projection	.1	.9	1.9	2.6	3.0	3.2
Confidence interval						
FRB/US stochastic simulations	.1–1	.1–1.6	.5–3.2	.9–4.6	1.1–5.3	1.2–5.8

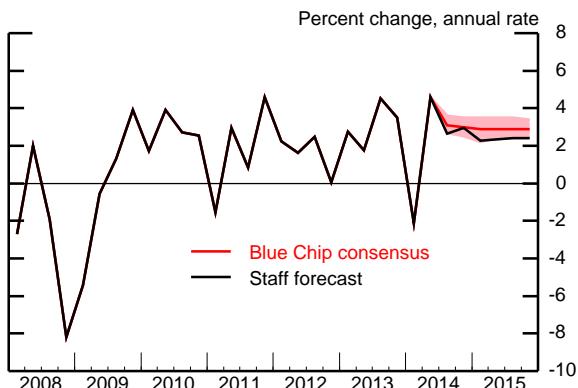
Note: Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1969–2013 set of model equation residuals.

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

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

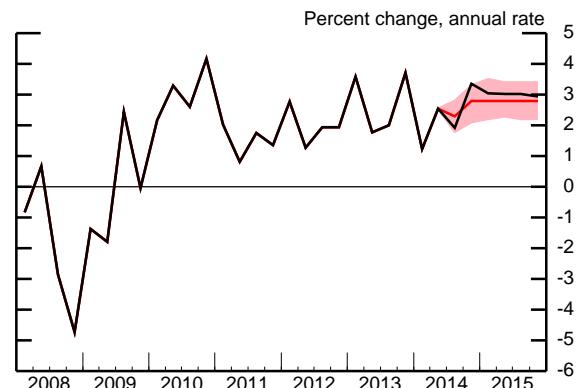
Tealbook Forecast Compared with Blue Chip (Blue Chip survey released October 10, 2014)

Real GDP

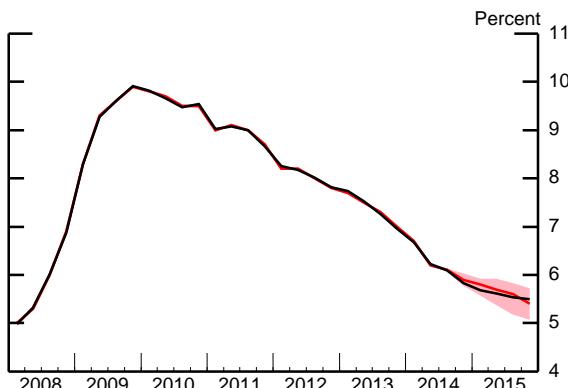


Note: The shaded area represents the area between the Blue Chip top 10 and bottom 10 averages.

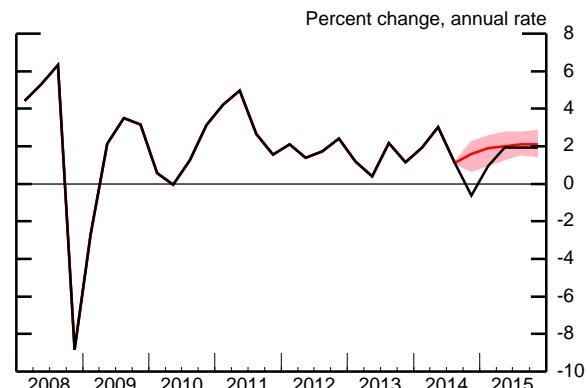
Real PCE



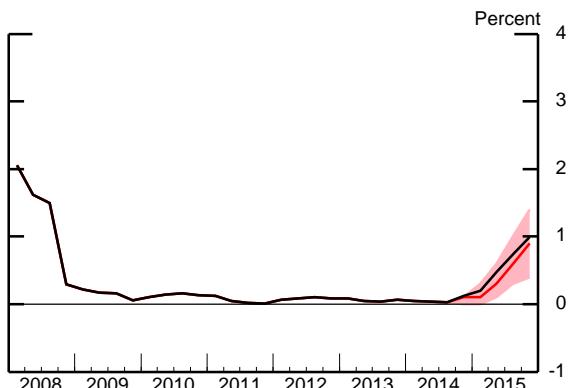
Unemployment Rate



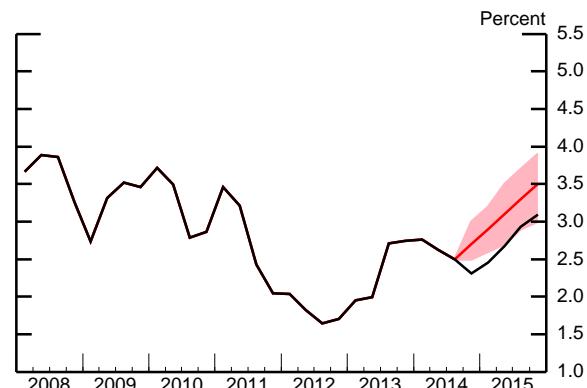
Consumer Price Index



Treasury Bill Rate



10-Year Treasury Yield



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

Assessment of Key Macroeconomic Risks (1)

Probability of Inflation Events

(4 quarters ahead—2015:Q3)

Probability that the 4-quarter change in total PCE prices will be ...	Staff	FRB/US	EDO	BVAR
<i>Greater than 3 percent</i>				
Current Tealbook	.02	.02	.10	.06
Previous Tealbook	.04	.04	.11	.06
<i>Less than 1 percent</i>				
Current Tealbook	.54	.46	.30	.17
Previous Tealbook	.33	.31	.29	.15

Probability of Unemployment Events

(4 quarters ahead—2015:Q3)

Probability that the unemployment rate will ...	Staff	FRB/US	EDO	BVAR
<i>Increase by 1 percentage point</i>				
Current Tealbook	.02	.01	.21	.01
Previous Tealbook	.01	.01	.20	.01
<i>Decrease by 1 percentage point</i>				
Current Tealbook	.27	.27	.07	.30
Previous Tealbook	.31	.26	.08	.30

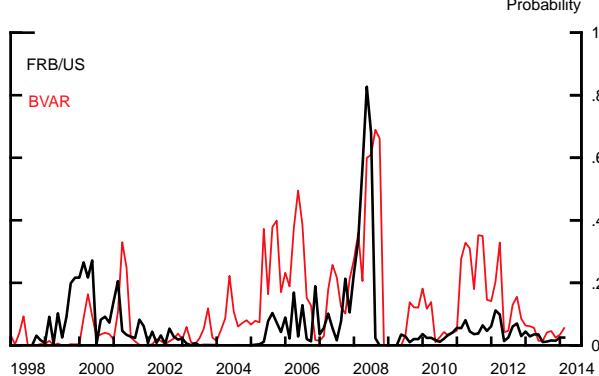
Probability of Near-Term Recession

Probability that real GDP declines in each of 2014:Q4 and 2015:Q1	Staff	FRB/US	EDO	BVAR	Factor Model
Current Tealbook	.04	.02	.02	.02	.07
Previous Tealbook	.03	.02	.02	.02	.07

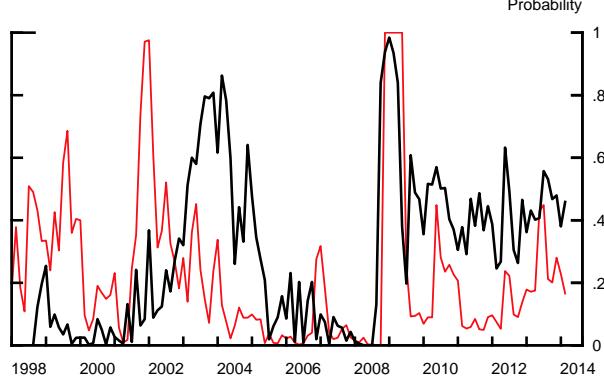
Note: “Staff” represents Tealbook forecast errors applied to the Tealbook baseline; baselines for FRB/US, BVAR, EDO, and the factor model are generated by those models themselves, up to the current-quarter estimate. Data for the current quarter are taken from the staff estimate for the second Tealbook 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.

Assessment of Key Macroeconomic Risks (2)

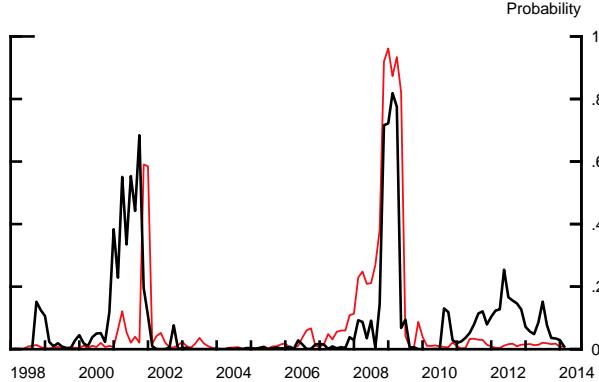
Probability that Total PCE Inflation Is above 3 Percent
(4 quarters ahead)



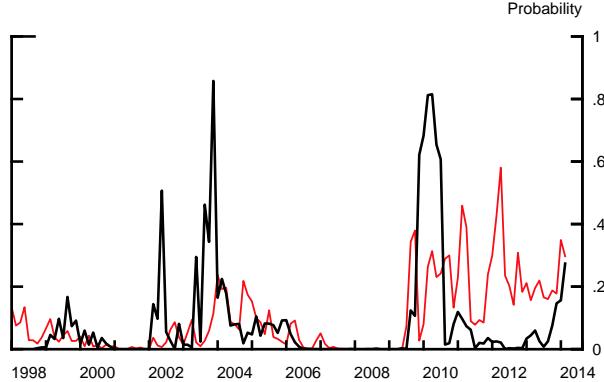
Probability that Total PCE Inflation Is below 1 Percent
(4 quarters ahead)



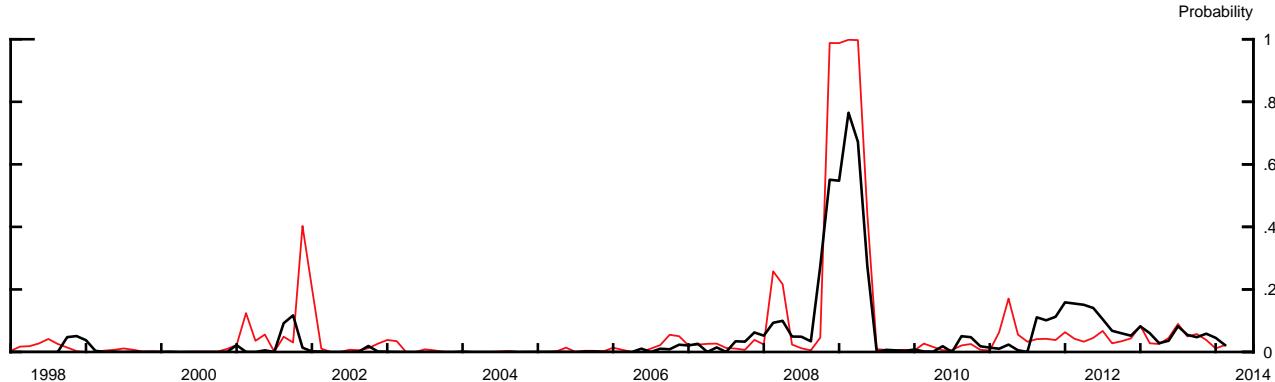
Probability that the Unemployment Rate Increases 1 ppt
(4 quarters ahead)



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



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



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

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

	Nominal GDP		Real GDP		PCE price index		Core PCE price index		Unemployment rate ¹	
Interval	09/10/14	10/22/14	09/10/14	10/22/14	09/10/14	10/22/14	09/10/14	10/22/14	09/10/14	10/22/14
<i>Quarterly</i>										
2014:Q1	.8	-.8	-2.1	-2.1	1.4	1.4	1.2	1.2	6.7	6.7
Q2	6.6	6.8	4.4	4.6	2.3	2.3	2.0	2.0	6.2	6.2
Q3	4.5	4.1	2.8	2.7	1.3	1.2	1.4	1.4	6.1	6.1
Q4	4.6	4.2	3.0	3.0	.9	-.2	1.4	1.2	5.9	5.8
2015:Q1	4.4	3.9	2.5	2.3	1.6	.9	1.7	1.5	5.7	5.7
Q2	4.3	4.1	2.6	2.3	1.6	1.5	1.7	1.5	5.6	5.6
Q3	4.4	4.2	2.7	2.4	1.5	1.5	1.6	1.6	5.5	5.5
Q4	4.5	4.1	2.8	2.4	1.4	1.5	1.5	1.5	5.4	5.5
2016:Q1	4.7	4.5	2.8	2.5	1.7	1.7	1.9	1.7	5.3	5.4
Q2	4.7	4.4	2.9	2.6	1.7	1.7	1.8	1.7	5.3	5.4
Q3	4.7	4.4	3.0	2.7	1.6	1.6	1.6	1.6	5.2	5.4
Q4	4.6	4.4	2.9	2.7	1.5	1.5	1.6	1.6	5.1	5.3
<i>Two-quarter²</i>										
2014:Q2	2.8	2.9	1.1	1.2	1.8	1.9	1.6	1.6	-.8	-.8
Q4	4.6	4.2	2.9	2.8	1.1	.5	1.5	1.3	-.3	-.4
2015:Q2	4.4	4.0	2.5	2.3	1.6	1.2	1.7	1.5	-.3	-.2
Q4	4.4	4.1	2.8	2.4	1.5	1.5	1.6	1.5	-.2	-.1
2016:Q2	4.7	4.5	2.8	2.6	1.7	1.7	1.8	1.7	-.1	-.1
Q4	4.7	4.4	3.0	2.7	1.6	1.5	1.6	1.6	-.2	-.1
<i>Four-quarter³</i>										
2013:Q4	4.6	4.6	3.1	3.1	1.0	1.0	1.3	1.3	-.8	-.8
2014:Q4	3.7	3.5	2.0	2.0	1.5	1.2	1.5	1.5	-1.1	-1.2
2015:Q4	4.4	4.0	2.7	2.4	1.5	1.4	1.6	1.5	-.5	-.3
2016:Q4	4.7	4.4	2.9	2.6	1.6	1.6	1.7	1.6	-.3	-.2
2017:Q4	4.1	4.0	2.3	2.1	1.7	1.7	1.8	1.8	-.2	-.1
<i>Annual</i>										
2013	3.7	3.7	2.2	2.2	1.2	1.2	1.3	1.3	7.4	7.4
2014	3.7	3.7	2.1	2.1	1.4	1.3	1.4	1.4	6.2	6.2
2015	4.6	4.2	2.8	2.6	1.4	1.1	1.6	1.5	5.6	5.6
2016	4.6	4.3	2.8	2.5	1.6	1.6	1.7	1.6	5.2	5.4
2017	4.4	4.2	2.6	2.4	1.7	1.7	1.8	1.7	4.9	5.2

- 1. Level, except for two-quarter and four-quarter intervals.
- 2. Percent change from two quarters earlier; for unemployment rate, change is in percentage points.
- 3. Percent change from four quarters earlier; for unemployment rate, change is in percentage points.

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

Item	2014			2015			2016			2014 ¹			2015 ¹			2016 ¹			2017 ¹		
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2014 ¹	2015 ¹	2016 ¹	2017 ¹	2014 ¹	2015 ¹	2016 ¹	2017 ¹		
Real GDP <i>Previous Tealbook</i>	4.6 4.4	2.7 2.8	3.0 3.0	2.3 2.5	2.4 2.6	2.4 2.7	2.4 2.5	2.5 2.8	2.6 2.9	2.6 2.9	2.7 3.0	2.7 2.9	2.0 2.0	2.4 2.7	2.6 2.9	2.4 2.7	2.6 2.9	2.1 2.3			
Final sales <i>Previous Tealbook</i>	3.2 3.1	3.3 2.8	2.6 3.1	2.1 2.6	2.4 2.5	2.5 2.6	2.3 2.7	2.6 2.9	2.6 2.9	2.5 2.8	2.7 2.9	2.6 2.8	2.0 2.0	2.3 2.6	2.6 2.9	2.4 2.5	2.4 2.5	2.4 2.5			
Priv. dom. final purch. <i>Previous Tealbook</i>	3.8 3.7	2.8 2.9	3.5 3.9	2.7 3.2	3.1 3.2	3.2 3.2	3.1 3.3	3.2 3.4	3.1 3.4	3.0 3.3	2.9 3.1	2.9 3.1	2.0 2.9	2.8 2.9	3.0 3.1	3.1 3.2	3.1 3.3	2.6 2.6			
Personal cons. expend. <i>Previous Tealbook</i>	2.5 2.5	1.9 2.0	3.4 3.4	3.0 3.3	3.0 3.0	3.0 2.9	2.9 3.0	2.8 2.9	2.8 2.9	2.8 2.9	2.7 2.8	2.7 2.7	2.6 2.7	2.3 2.3	2.3 3.0	2.7 2.8	2.7 2.8	2.4 2.5			
Durables	14.1	7.8	9.8	8.3	7.2	7.2	7.4	6.1	6.3	6.0	5.4	8.6	7.5	6.0	7.5	6.0	3.8	3.8			
Nondurables	2.2	.8	1.7	2.1	2.4	2.4	2.2	1.8	2.1	2.1	2.3	1.2	2.3	2.1	2.3	2.1	2.1	2.2			
Services	.9	1.3	2.9	2.5	2.6	2.5	2.4	2.6	2.4	2.4	2.3	1.6	2.5	2.4	2.5	2.4	2.4	2.2			
Residential investment <i>Previous Tealbook</i>	8.8 8.6	8.0 9.9	5.5 11.8	6.1 9.7	12.4 11.9	10.5 12.1	9.3 10.4	10.4 10.7	9.8 11.1	9.6 11.4	9.1 9.6	4.1 6.0	9.5 11.0	9.7 10.7	7.3 6.0	7.3 6.0	7.3 6.0				
Nonres. priv. fixed invest. <i>Previous Tealbook</i>	9.7 9.5	6.7 6.1	3.7 4.1	.1 1.0	.9 2.1	2.2 2.7	2.9 3.2	2.9 3.8	3.1 3.6	2.9 3.6	3.1 3.3	5.4 5.3	1.5 2.2	2.9 3.5	2.2 2.4	2.2 2.4	2.2 2.4	2.1 2.4			
Equipment & intangibles <i>Previous Tealbook</i>	8.9 8.5	7.9 5.2	5.0 4.6	1.8 2.4	2.1 2.8	3.2 3.5	3.6 3.8	3.7 4.6	3.8 4.4	3.6 4.0	3.2 3.8	5.7 4.8	2.7 3.1	2.7 3.1	3.6 4.2	3.6 4.2	3.6 4.2	3.6 3.0			
Nonres. structures <i>Previous Tealbook</i>	12.6 12.9	2.6 9.3	-7 2.6	-5.5 -3.6	-3.3 -.4	-1.3 .0	.5 1.1	.4 1.1	.6 1.0	.5 1.0	.6 1.2	4.2 6.8	4.2 6.8	-2.4 -.7	.6 1.1	.6 .7	.4 1.1	.4 1.1			
Net exports ² <i>Previous Tealbook</i> ²	-460 -459	-436 -440	-446 -447	-450 -452	-455 -452	-467 -458	-467 -464	-475 -472	-480 -467	-491 -467	-492 -467	-446 -448	-454 -453	-484 -466	-484 -466	-489 -459	-489 -459				
Exports Imports	11.1 11.3	5.6 .7	3.0 3.1	3.6 4.0	3.8 3.7	4.0 4.6	3.3 4.6	4.1 4.6	4.3 4.4	4.5 5.3	4.6 5.3	2.3 3.8	3.7 4.3	4.4 4.1	5.0 4.5	5.0 3.8	5.0 3.8				
Gov't. cons. & invest. <i>Previous Tealbook</i>	1.7 1.7	1.5 -1.0	-1.6 -.1	-.2 -.3	-.6 -.5	-.5 .0	-.5 .7	-.5 .7	-.4 .4	.9 1.0	.9 1.0	.2 .9	-.5 .0	.6 .7	.6 1.0	.9 1.0	.9 1.0				
Federal Defense	-.9 -.9	2.1 5.2	-6.2 -8.3	-2.9 -3.3	-4.0 -4.8	-3.8 -4.7	-1.2 -1.7	-1.9 -2.9	-1.6 -1.5	-1.6 -1.5	-1.8 -2.7	-1.8 -2.7	-1.3 -1.7	-3.6 -4.3	-1.4 -2.4	-1.0 -2.2	-1.0 -1.6	-1.0 -1.6			
Nonddefense State & local	-3.8 3.4	-2.8 1.2	-2.6 1.4	-2.3 1.4	-2.6 1.5	-2.6 1.5	-2.3 1.5	-2.3 1.6	-2.3 1.7	-2.3 1.9	-2.3 2.0	-2.3 2.0	-2.4 1.1	-2.4 1.5	-2.4 1.8	0.0 1.8	0.0 2.0	0.0 2.0			
Change in priv. inventories ² <i>Previous Tealbook</i> ²	85 78	61 80	76 77	83 75	82 76	80 81	84 87	82 83	83 93	89 94	95 96	64 67	82 80	87 89	68 79	68 79	68 79				

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	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Real GDP <i>Previous Tealbook</i>	-2.8	.2	2.7	1.7	1.6	3.1	2.0	2.4	2.6	2.1
Final sales <i>Previous Tealbook</i>	-2.1	-.4	2.0	1.5	2.1	2.6	2.0	2.3	2.6	2.4
Priv. dom. final purch. <i>Previous Tealbook</i>	-4.1	-2.4	3.5	2.6	2.6	3.2	2.8	3.0	2.6	2.5
Personal cons. expend. <i>Previous Tealbook</i>	-2.0	-.2	3.1	1.5	2.0	2.8	2.3	3.0	2.7	2.4
Durables	-12.9	2.5	9.3	4.8	7.5	5.9	8.6	7.5	6.0	2.5
Nondurables	-2.7	.2	3.3	.4	1.0	2.5	1.2	2.3	2.1	3.8
Services	.3	-.8	2.0	1.4	1.5	2.4	1.6	2.5	2.4	2.2
Residential investment <i>Previous Tealbook</i>	-24.3	-10.8	-5.2	6.0	15.8	6.9	4.1	9.5	9.7	7.3
Nonres. priv. fixed invest. <i>Previous Tealbook</i>	-8.9	-12.2	8.1	9.0	3.7	4.7	5.4	1.5	2.9	2.1
Equipment & intangibles <i>Previous Tealbook</i>	-8.9	-12.2	8.1	9.0	3.7	4.7	5.3	2.2	3.5	2.4
Nonres. structures <i>Previous Tealbook</i>	-11.8	-6.0	12.0	9.2	3.3	4.8	5.7	2.7	3.6	2.6
Net exports ¹ <i>Previous Tealbook</i>	-558	-395	-459	-459	-452	-420	-446	-454	-484	-489
Exports	-558	-395	-459	-459	-452	-420	-448	-453	-466	-459
Imports	-2.8	.8	10.1	4.2	2.4	5.1	2.3	3.7	4.4	5.0
Gov't. cons. & invest. <i>Previous Tealbook</i>	3.3	2.3	-1.1	-3.0	-1.7	-1.9	2	-5	.6	.9
Federal	3.3	2.3	-1.1	-3.0	-1.7	-1.9	.0	-.3	.7	1.0
Defense	8.4	3.9	3.2	-4.0	-2.6	-6.3	-1.3	-3.6	-1.4	-1.0
Nondefense	9.4	3.6	2.0	-4.1	-4.9	-6.1	-1.7	-4.3	-2.2	-1.6
State & local	6.5	4.6	5.5	-3.9	1.4	-6.6	-7	-2.4	0	0
Change in priv. inventories ¹ <i>Previous Tealbook</i>	-34	-148	58	38	57	64	64	82	87	68
	-34	-148	58	38	57	64	67	80	89	79

1. Billions of chained (2009) dollars.

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

Item	2014			2015			2016			2014 ¹			2015 ¹			2016 ¹		
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2014 ¹	2015 ¹	2016 ¹	2016 ¹	2017 ¹		
Real GDP <i>Previous Tealbook</i>	4.6	2.7	3.0	2.3	2.3	2.4	2.4	2.5	2.6	2.6	2.7	2.7	2.0	2.4	2.6	2.1	2.3	
Final sales <i>Previous Tealbook</i>	3.2	3.3	2.6	2.1	2.4	2.5	2.3	2.6	2.6	2.5	2.6	2.0	2.3	2.6	2.4	2.4	2.5	
Priv. dom. final purch. <i>Previous Tealbook</i>	3.2	2.4	2.9	2.3	2.6	2.7	2.7	2.7	2.6	2.6	2.5	2.3	2.6	2.6	2.6	2.2	2.2	
Personal cons. expend. <i>Previous Tealbook</i>	1.8	1.3	2.3	2.1	2.1	2.0	2.0	1.9	1.9	1.8	1.8	1.6	2.0	1.9	1.9	1.6	1.7	
Durables	1.7	1.4	2.3	2.2	2.0	2.0	2.0	2.0	1.9	1.8	1.8	1.6	2.1	1.9	1.9	1.7	1.7	
Nondurables	1.0	.6	.7	.6	.5	.5	.6	.5	.5	.4	.4	.6	.6	.5	.5	.3	.3	
Services	.3	.1	.3	.3	.4	.4	.3	.3	.3	.3	.3	.2	.3	.3	.3	.3	.3	
Residential investment <i>Previous Tealbook</i>	.3	.2	.2	.2	.4	.3	.3	.4	.3	.3	.3	.1	.3	.3	.3	.3	.3	
Nonres. priv. fixed invest. <i>Previous Tealbook</i>	1.2	.8	.5	.0	.1	.3	.4	.4	.4	.4	.4	.3	.7	.2	.4	.4	.3	
Equipment & intangibles <i>Previous Tealbook</i>	1.2	.8	.5	.1	.3	.3	.4	.5	.5	.4	.4	.3	.7	.3	.4	.4	.3	
Nonres. structures <i>Previous Tealbook</i>	.8	.8	.5	.2	.2	.3	.4	.4	.4	.4	.4	.3	.5	.3	.3	.3	.3	
Net exports <i>Previous Tealbook</i>	-.3	-.5	.4	.2	.3	.3	.4	.4	.4	.4	.4	.5	.5	.3	.4	.3	.3	
Exports	1.4	.7	.4	.5	.5	.5	.4	.5	.5	.6	.6	.6	.5	.5	.6	.7	.7	
Imports	-1.8	-.1	-.5	-.6	-.6	-.6	-.7	-.7	-.7	-.8	-.8	-.7	-.6	-.7	-.6	-.6	-.6	
Gov't. cons. & invest. <i>Previous Tealbook</i>	.3	.3	-.3	.0	-.1	-.1	-.1	-.1	-.1	-.1	-.1	.2	.1	.0	-.1	.1	.2	
Federal	-.1	.1	-.4	-.2	-.3	-.3	-.3	-.3	-.3	-.3	-.3	-.1	-.1	-.1	-.2	-.1	.2	
Defense	-.0	.2	-.4	-.1	-.2	-.2	-.2	-.2	-.2	-.2	-.2	-.1	-.1	-.1	-.2	-.1	-.1	
Nondefense	-.1	-.1	-.1	.2	.2	.2	.2	.2	.2	.2	.2	.0	.0	.0	.0	.0	.0	
State & local	.4	.1	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.1	.2	.2	.2	
Change in priv. inventories <i>Previous Tealbook</i>	1.4	-.6	.4	.2	.0	-.1	.1	-.1	0	.2	.2	.0	.1	.1	.1	.1	.1	
	1.2	.1	-.1	-.1	-.1	-.1	-.1	-.1	-.1	-.1	-.1	-.1	-.1	-.1	-.1	-.2	-.2	

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	2014			2015				2016				2017 ¹			
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2014 ¹	2015 ¹	2016 ¹	2017 ¹
GDP chain-wt. price index <i>Previous Tealbook</i>	2.1	1.4	1.2	1.6	1.7	1.6	1.6	1.9	1.8	1.7	1.6	1.5	1.6	1.7	1.8
PCE chain-wt. price index <i>Previous Tealbook</i>	2.1	1.6	1.6	1.9	1.7	1.6	1.6	1.9	1.8	1.7	1.6	1.7	1.8	1.7	1.8
Energy <i>Previous Tealbook</i>	2.3	1.2	-.2	.9	1.5	1.5	1.4	1.7	1.7	1.6	1.5	1.2	1.4	1.6	1.7
Food <i>Previous Tealbook</i>	5.2	1.3	-.9	1.6	1.6	1.5	1.4	1.7	1.7	1.6	1.5	1.5	1.5	1.6	1.7
Ex. food & energy <i>Previous Tealbook</i>	4.0	-4.1	-24.0	-9.8	2.1	2.1	1.6	1.2	1.2	1.2	1.0	-5.5	-1.1	1.2	.9
Ex. food & energy, market based <i>Previous Tealbook</i>	4.5	3.1	2.0	1.0	.9	1.0	1.2	1.4	1.5	1.5	1.5	-2.9	-.6	-.1	.2
CPI <i>Previous Tealbook</i>	4.5	2.2	.9	.8	.8	.9	1.1	1.4	1.5	1.5	1.5	2.7	1.0	1.5	1.8
Ex. food & energy <i>Previous Tealbook</i>	2.0	1.4	1.2	1.5	1.5	1.6	1.5	1.7	1.7	1.6	1.6	1.5	1.5	1.6	1.8
ECI, hourly compensation ² <i>Previous Tealbook²</i>	2.0	1.5	1.4	1.7	1.7	1.6	1.5	1.9	1.8	1.6	1.6	1.5	1.6	1.7	1.8
Business sector															
Output per hour <i>Previous Tealbook</i>	3.4	2.3	2.5	2.8	2.7	2.7	2.7	3.3	3.1	3.1	3.1	2.3	2.7	3.1	3.3
Compensation per hour <i>Previous Tealbook</i>	3.4	2.3	2.5	2.8	2.7	2.8	2.8	3.3	3.1	3.1	3.1	2.3	2.7	3.2	3.4
Unit labor costs <i>Previous Tealbook</i>	3.4	2.9	-.3	2.6	1.6	1.6	1.7	1.8	1.8	1.8	1.9	0	1.7	1.8	1.9
Core goods imports chain-wt. price index ³ <i>Previous Tealbook³</i>	2.2	2.5	1.1	.5	.5	.5	.5	1.3	1.3	1.3	1.3	.6	.4	1.2	1.2

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	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
GDP chain-wt. price index <i>Previous Tealbook</i>	1.9 1.9	.4 .8	1.8 1.9	1.9 1.9	1.8 1.8	1.4 1.4	1.4 1.4	1.5 1.5	1.6 1.7	1.7 1.8
PCE chain-wt. price index <i>Previous Tealbook</i>	1.5 1.5	1.2 1.2	1.3 1.3	2.7 2.7	1.6 1.6	1.0 1.0	1.2 1.2	1.4 1.5	1.6 1.6	1.7 1.7
Energy <i>Previous Tealbook</i>	-8.2 -8.2	2.3 2.3	6.4 6.4	12.0 12.0	2.1 2.1	-2.6 -2.6	-5.5 -.9	-1.1 .6	1.2 -.1	.9 .2
Food <i>Previous Tealbook</i>	6.9 6.9	-1.8 -1.8	1.3 1.3	5.1 5.1	1.2 1.2	.7 .7	.7 2.7	1.0 1.0	1.5 1.5	1.8 1.8
Ex. food & energy <i>Previous Tealbook</i>	1.6 1.6	1.4 1.4	1.0 1.0	1.9 1.9	1.6 1.6	1.3 1.3	1.3 1.3	1.5 1.5	1.6 1.6	1.8 1.8
Ex. food & energy, market based <i>Previous Tealbook</i>	2.2 2.2	1.8 1.8	.7 .7	1.9 1.9	1.5 1.5	1.2 1.2	1.3 1.3	1.5 1.5	1.6 1.6	1.8 1.8
CPI <i>Previous Tealbook</i>	1.6 1.6	1.5 1.5	1.2 1.2	3.3 3.3	1.9 1.9	1.2 1.2	1.3 1.3	1.7 1.7	1.9 1.9	2.0 2.0
Ex. food & energy <i>Previous Tealbook</i>	2.0 2.0	1.8 1.8	.6 .6	2.2 2.2	1.9 1.9	1.7 1.7	1.8 1.8	2.0 2.0	2.0 2.0	2.1 2.1
ECL, hourly compensation ¹ <i>Previous Tealbook</i>	2.4 2.4	1.2 1.2	2.1 2.1	2.2 2.2	1.8 1.8	2.0 2.0	2.3 2.3	2.7 2.7	3.1 3.2	3.3 3.4
Business sector										
Output per hour <i>Previous Tealbook</i>	-.2 -.2	5.6 5.6	1.7 1.7	.0 .0	.3 .3	2.4 2.4	.0 0	1.7 1.7	1.8 1.8	1.9 1.9
Compensation per hour <i>Previous Tealbook</i>	2.9 2.9	1.3 1.3	1.2 1.2	.6 .6	5.7 5.7	.0 .0	3.2 3.3	3.2 3.3	3.3 3.4	3.5 3.6
Unit labor costs <i>Previous Tealbook</i>	3.2 3.2	-4.2 -4.2	-4 -.4	.6 .6	5.4 5.4	-2.3 -2.3	3.2 3.3	1.5 1.5	1.5 1.5	1.6 1.6
Core goods imports chain-wt. price index ² <i>Previous Tealbook</i>	3.9 3.9	-1.9 -1.9	2.3 2.3	4.3 4.3	.2 .2	-1.0 -1.0	.6 1.0	.4 1.1	1.2 1.3	1.2 1.3

1. Private-industry workers.

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

Other Macroeconomic Indicators

Item	2014			2015			2016			2014 ^l	2015 ^l	2016 ^l	2017 ^l
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
<i>Employment and production</i>													
Nonfarm payroll employment ²	.8	.7	.7	.6	.5	.5	.5	.5	.5	.5	.6	2.6	2.0
Unemployment rate ³	6.2	6.1	5.8	5.7	5.6	5.5	5.5	5.4	5.4	5.3	5.8	5.5	5.3
<i>Previous Tealbook</i> ³	6.2	6.1	5.9	5.7	5.6	5.4	5.3	5.2	5.2	5.1	5.9	5.4	5.1
Natural rate of unemployment ³	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
<i>Previous Tealbook</i> ³	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
GDP gap ⁴	-2.2	-1.8	-1.4	-1.2	-1.1	-.9	-.8	-.6	-.5	-.3	-.1	-.8	-.1
<i>Previous Tealbook</i> ⁴	-2.2	-1.8	-1.3	-1.1	-.9	-.7	-.4	-.2	-.0	.3	.5	-.4	.5
Industrial production ⁵	5.5	3.2	4.0	2.1	3.0	2.1	1.7	3.0	2.8	2.7	2.6	4.1	2.2
<i>Previous Tealbook</i> ⁵	5.5	3.0	3.2	3.5	3.6	2.5	2.2	3.4	3.2	3.0	2.9	3.9	2.9
Manufacturing industr. prod. ⁵	6.8	3.5	3.1	1.8	2.6	2.6	2.6	2.8	2.8	2.7	2.7	3.7	2.4
<i>Previous Tealbook</i> ⁵	6.8	3.8	3.0	2.6	3.1	3.0	3.1	3.3	3.6	3.3	3.1	3.7	3.0
Capacity utilization rate - mfg. ³	77.1	77.3	77.5	77.4	77.5	77.6	77.6	77.7	77.8	78.0	78.2	78.3	77.5
<i>Previous Tealbook</i> ³	77.1	77.4	77.6	77.6	77.8	78.0	78.2	78.4	78.6	78.9	79.0	77.6	77.7
Housing starts ⁶	1.0	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.4	1.4	1.0	1.3
Light motor vehicle sales ⁶	16.5	16.7	16.6	16.6	16.6	16.7	16.7	16.7	16.7	16.7	16.7	16.4	16.6
<i>Income and saving</i>													
Nominal GDP ⁵	6.8	4.1	4.2	3.9	4.1	4.2	4.1	4.5	4.4	4.4	4.4	3.5	4.0
Real disposable pers. income ⁵	4.4	3.2	2.3	4.7	2.5	2.2	1.8	3.3	2.5	2.2	2.9	3.3	2.8
<i>Previous Tealbook</i> ⁵	4.2	2.5	2.0	4.4	2.3	2.7	2.3	3.8	2.2	3.0	2.6	3.0	2.9
Personal saving rate ³	5.4	5.6	5.4	5.7	5.6	5.4	5.1	5.2	5.2	5.1	5.4	5.1	4.9
<i>Previous Tealbook</i> ³	5.3	5.4	5.1	5.3	5.2	5.1	5.0	5.2	5.0	5.0	5.1	5.0	5.1
Corporate profits ⁷	38.3	3.9	.1	1.6	2.9	3.7	.4	5.1	3.2	3.0	3.4	-.8	2.1
Profit share of GNP ³	12.0	12.0	11.9	11.8	11.8	11.8	11.7	11.7	11.7	11.7	11.6	11.9	11.7
Net federal saving ⁸	-584	-493	-467	-489	-472	-475	-458	-511	-492	-499	-516	-526	-473
Net state & local saving ⁸	-227	-253	-235	-230	-229	-222	-216	-205	-211	-205	-205	-239	-224
Gross national saving rate ³	18.3	18.5	18.5	18.7	18.7	18.7	18.6	18.5	18.7	18.6	18.7	18.5	18.7
Net national saving rate ³	3.2	4.2	4.2	4.3	4.3	4.3	4.1	4.0	4.1	4.1	4.2	4.1	4.1

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

2. Change, millions.

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

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

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

5. Percent change, annual rate.

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

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

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

Greensheets

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

Item	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<i>Employment and production</i>										
Nonfarm payroll employment ¹	-2.8	-5.6	.8	2.0	2.2	2.4	2.6	2.0	2.1	1.6
Unemployment rate ²	6.9	9.9	9.5	8.7	7.8	7.0	5.8	5.5	5.3	5.2
<i>Previous Tealbook</i> ²	6.9	9.9	9.5	8.7	7.8	7.0	5.9	5.4	5.1	4.9
Natural rate of unemployment ²	5.6	6.2	6.2	6.0	5.8	5.4	5.2	5.2	5.2	5.2
<i>Previous Tealbook</i> ²	5.6	6.2	6.2	6.0	5.8	5.4	5.2	5.2	5.2	5.2
GDP gap ³	-3.8	-5.5	-4.4	-4.2	-4.1	-2.8	-1.4	-8	-1	0
<i>Previous Tealbook</i> ³	-3.8	-5.5	-4.4	-4.2	-4.1	-2.8	-1.3	-4	.5	.8
Industrial production ⁴	-8.9	-5.5	6.2	3.2	3.2	3.3	4.1	2.2	2.7	2.0
<i>Previous Tealbook</i> ⁴	-8.9	-5.5	6.2	3.2	3.2	3.3	3.9	2.9	3.1	2.3
Manufacturing industr. prod. ⁴	-11.6	-6.1	6.4	3.1	3.5	2.9	3.7	2.4	2.8	2.2
<i>Previous Tealbook</i> ⁴	-11.6	-6.1	6.4	3.1	3.5	2.9	3.7	3.0	3.3	2.6
Capacity utilization rate - mfg. ²	70.0	67.1	72.7	74.6	75.5	76.4	77.5	77.7	78.3	78.4
<i>Previous Tealbook</i> ²	70.0	67.1	72.7	74.6	75.5	76.4	77.6	78.2	79.0	79.3
Housing starts ⁵	.9	.6	.6	.8	.9	1.0	1.1	1.3	1.5	1.5
Light motor vehicle sales ⁵	13.1	10.4	11.5	12.7	14.4	15.5	16.4	16.6	16.7	16.6
<i>Income and saving</i>										
Nominal GDP ⁴	-.9	.1	4.6	3.6	3.5	4.6	3.5	4.0	4.4	4.0
Real disposable pers. income ⁴	1.1	-.7	2.6	1.7	5.0	-1.9	3.3	2.8	2.7	2.2
<i>Previous Tealbook</i> ⁴	1.1	-.7	2.6	1.7	5.0	-1.9	3.0	2.9	2.9	2.6
Personal saving rate ²	6.1	5.6	5.5	5.8	8.6	4.4	5.4	5.1	5.1	4.9
<i>Previous Tealbook</i> ²	6.1	5.6	5.5	5.8	8.6	4.4	5.1	5.0	5.0	5.1
Corporate profits ⁶	-30.8	53.7	18.0	6.8	3.8	4.7	-.8	2.1	3.7	3.0
Profit share of GNP ²	6.9	10.6	12.0	12.3	12.4	12.4	11.9	11.7	11.6	11.5
Net federal saving ⁷	-634	-1,249	-1,329	-1,244	-1,079	-649	-526	-473	-504	-573
Net state & local saving ⁷	-165	-272	-237	-216	-233	-225	-239	-224	-206	-194
Gross national saving rate ²	14.9	14.6	15.2	16.1	17.8	17.9	18.5	18.6	18.7	18.7
Net national saving rate ²	-1.6	-1.7	-.4	.8	2.8	3.0	4.2	4.1	4.1	3.9

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				2014				2015				2016			
	2014	2015	2016	2017	Q1 ^a	Q2 ^a	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget																
Receipts	3,021	3,261	3,433	3,552	656	938	760	737	678	1,024	822	765	723	1,086	859	796
Outlays	3,504	3,667	3,824	4,061	897	890	878	922	927	933	884	987	926	961	950	981
Surplus/deficit	-483	-406	-392	-509	-241	47	-117	-185	-249	92	-63	-222	-203	125	-92	-185
<i>Previous Tealbook</i>	-444	-392	-421	-471	-241	47	-78	-193	-258	119	-59	-195	-256	139	-108	-181
Means of financing:																
Borrowing	798	432	512	629	262	-46	211	202	273	-136	93	252	233	-95	122	215
Cash decrease	-70	88	0	0	20	3	-19	-4	18	74	0	0	0	0	0	0
Other ¹	-244	-115	-120	-120	-42	-4	-74	-13	-42	-30	-30	-30	-30	-30	-30	-30
Cash operating balance, end of period	158	70	70	70	142	139	158	162	144	70	70	70	70	70	70	70
NIPA federal sector																
Receipts	3,285	3,504	3,677	3,837	3,243	3,292	3,400	3,419	3,490	3,534	3,575	3,609	3,657	3,699	3,745	3,789
Expenditures	3,829	3,980	4,167	4,395	3,803	3,875	3,893	3,886	3,979	4,005	4,050	4,067	4,168	4,190	4,244	4,305
Consumption expenditures	956	950	948	966	957	956	961	951	955	950	945	941	950	950	952	952
Defense	611	609	605	614	610	610	618	609	612	608	605	602	607	606	606	605
Nondefense	345	342	343	352	347	345	343	341	343	342	340	339	343	344	346	347
Other spending	2,873	3,030	3,219	3,430	2,846	2,920	2,932	2,936	3,023	3,055	3,105	3,127	3,218	3,241	3,292	3,352
Current account surplus	-544	-476	-490	-558	-560	-584	-493	-467	-489	-472	-475	-458	-511	-492	-499	-516
Gross investment	258	250	243	243	251	255	260	254	252	249	246	244	243	242	242	241
Gross saving less gross investment ²	-529	-446	-445	-506	-539	-565	-478	-444	-462	-440	-439	-417	-468	-445	-451	-465
Fiscal indicators																
High-employment (HEB) surplus/deficit ³	-368.4	-375.5	-415.0	-509.6	-343.4	-414.1	-357.9	-349.2	-387.8	-376.8	-388.3	-376.0	-430.3	-418.5	-435.3	-461.0
Change in HEB, percent of potential GDP	-1.2	.0	.1	.4	-.1	.4	-.3	-.1	.2	-.1	.0	-.1	.3	-.1	.1	.1
Fiscal impetus (FI), percent of GDP ⁴	-.1	.0	.2	.2	-.5	.1	.3	-.3	-.2	.0	.0	.1	.1	.1	.2	.2
<i>Previous Tealbook</i>	-.2	.0	.2	.2	-.6	.0	-.2	-.1	-.1	-.1	-.1	-.1	.1	.1	.3	.3
Federal purchases	-.1	-2	-1	-1	-.1	-.1	-.1	-.1	-.1	-.4	-.2	-.3	-.3	-.1	-.1	-.1
State and local purchases	.1	.2	.2	.2	.1	.4	.1	.2	.1	.2	.2	.2	.1	.2	.2	.2
Taxes and transfers	-.2	.1	.1	.0	-.4	-.3	.0	.0	-.2	.1	.1	.2	.0	.1	.1	.1

1. Other means of financing include checks issued less checks paid, accrued items, and changes in other financial assets and liabilities.
2. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises.
3. 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. Quarterly figures for change in HEB are not at annual rates.
4. Fiscal impetus measures the contribution to growth of real GDP from fiscal policy actions at the general government level (excluding multiplier effects). It equals the sum of the direct contributions to real GDP growth from changes in federal purchases and state and local purchases, plus the estimated contribution from real consumption and investment that is induced by discretionary policy changes in transfers and taxes.

a Actual.

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

Measure and country	2014				2015				Projected 2016			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Real GDP¹												
Total foreign	2.2	2.3	2.8	2.8	2.9	3.0	3.2	2.8	3.2	3.2	3.2	3.2
<i>Previous Tealbook</i>	2.1	2.3	3.0	3.0	3.1	3.2	3.3	3.0	3.3	3.3	3.3	3.3
Advanced foreign economies	1.9	1.1	1.9	1.8	2.0	2.1	2.3	1.6	2.2	2.1	2.1	2.1
Canada	.9	3.1	2.5	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.4	2.4
Japan	6.0	-7.1	2.1	1.5	1.4	1.1	2.9	-3.7	1.5	.9	1.0	1.1
United Kingdom	3.0	3.7	2.8	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Euro area	1.2	.3	.7	.8	1.3	1.5	1.6	1.7	1.7	1.9	1.9	1.9
Germany	2.7	-.6	.7	1.2	1.7	1.7	1.9	2.0	2.0	2.0	2.0	2.0
Emerging market economies	2.6	3.5	3.7	3.7	3.9	4.0	4.1	4.1	4.2	4.2	4.2	4.2
Asia	3.9	4.9	5.2	5.0	5.2	5.2	5.2	5.2	5.3	5.3	5.3	5.3
Korea	3.8	2.0	3.9	3.9	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
China	6.2	7.7	7.7	7.2	7.1	7.1	7.0	7.0	7.0	7.0	7.0	7.0
Latin America	1.4	2.5	2.6	2.7	2.8	3.0	3.2	3.2	3.2	3.3	3.3	3.3
Mexico	1.8	4.2	3.7	3.5	3.4	3.5	3.6	3.6	3.6	3.6	3.6	3.6
Brazil	-.6	-2.4	.4	1.4	1.6	1.8	2.0	2.0	2.1	2.1	2.1	2.1
<i>Consumer prices²</i>												
Total foreign	2.0	3.1	2.1	1.7	2.2	2.4	2.5	2.5	2.5	3.0	2.6	2.6
<i>Previous Tealbook</i>	2.0	3.0	2.4	2.4	2.5	2.5	2.5	2.5	2.6	2.6	2.6	2.6
Advanced foreign economies	1.1	3.2	1.1	.3	.8	1.2	1.4	1.4	1.5	1.5	1.6	1.7
Canada	2.8	3.7	1.3	.2	.8	1.6	1.7	1.8	1.9	1.9	1.9	1.9
Japan	.4	9.4	1.5	.1	.3	.9	1.0	6.3	1.1	1.2	1.2	1.3
United Kingdom	1.2	1.8	1.6	1.0	1.6	1.6	1.8	1.9	1.8	1.9	1.9	2.0
Euro area	.2	.4	.6	.4	1.0	1.1	1.3	1.3	1.4	1.4	1.5	1.6
Germany	.2	.4	1.8	.5	1.3	1.4	1.5	1.6	1.7	1.7	1.7	1.7
Emerging market economies	2.6	2.9	2.8	2.9	3.3	3.4	3.3	3.3	3.3	3.3	3.3	3.3
Asia	1.6	2.4	2.0	2.4	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Korea	1.4	2.2	.6	2.8	3.3	3.2	3.2	3.2	3.3	3.3	3.3	3.3
China	.8	2.0	2.2	1.9	2.9	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Latin America	5.3	4.3	4.9	4.0	3.7	3.8	3.8	3.8	3.7	3.7	3.7	3.7
Mexico	4.8	3.3	4.4	3.5	3.2	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Brazil	6.5	7.4	6.2	6.2	5.6	5.6	5.6	5.6	5.5	5.5	5.5	5.5

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

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

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

Measure and country	2009	2010	2011	2012	2013	2014	2015	2016	2017
Real GDP¹									
Total foreign	1.0	4.7	3.1	2.3	2.5	2.5	3.0	3.2	3.1
<i>Previous Tealbook</i>	.9	4.7	3.0	2.3	2.5	2.6	3.2	3.3	3.2
Advanced foreign economies	-1.4	3.1	1.5	.3	1.9	1.7	2.0	2.1	2.1
Canada	-1.4	3.6	2.4	1.0	2.7	2.2	2.5	2.5	2.3
Japan	-.6	3.5	.2	-.3	2.4	.5	.4	1.1	1.1
United Kingdom	-1.5	2.2	1.5	.4	2.7	3.0	2.4	2.4	2.3
Euro area	-2.4	2.3	.7	-.9	.4	.8	1.5	1.9	2.0
Germany	-3.0	4.4	2.4	.1	1.1	1.0	1.8	2.0	1.9
Emerging market economies	3.9	6.4	4.6	4.3	3.1	3.4	4.0	4.2	4.1
Asia	7.8	8.0	5.0	5.5	5.1	4.7	5.2	5.3	5.2
Korea	4.9	6.1	3.0	2.1	3.6	3.4	4.0	4.0	3.9
China	11.3	9.7	8.7	7.7	7.6	7.2	7.0	7.0	6.9
Latin America	.0	4.7	4.1	3.2	1.2	2.3	3.1	3.3	3.3
Mexico	-1.2	4.5	4.2	3.3	.6	3.3	3.5	3.6	3.6
Brazil	5.3	5.3	1.3	1.8	2.2	-.3	1.8	2.1	2.2
Consumer prices ²									
Total foreign	1.2	3.2	3.4	2.3	2.3	2.2	2.5	2.6	2.6
<i>Previous Tealbook</i>	1.2	3.2	3.4	2.3	2.3	2.5	2.6	2.6	2.6
Advanced foreign economies	.2	1.7	2.2	1.3	1.0	1.4	1.5	1.6	1.7
Canada	.8	2.2	2.7	.9	1.0	2.0	1.5	1.9	2.0
Japan	-2.0	-.3	-.3	-2	1.4	2.8	2.1	1.2	1.3
United Kingdom	2.2	3.4	4.6	2.6	2.1	1.4	1.7	1.9	2.0
Euro area	.4	2.0	2.9	2.3	.8	.4	1.2	1.5	1.6
Germany	.3	1.6	2.6	2.0	1.3	.7	1.4	1.7	1.7
Emerging market economies	2.0	4.3	4.3	3.1	3.4	2.8	3.3	3.3	3.3
Asia	1.2	4.3	4.5	2.6	3.1	2.1	3.2	3.2	3.2
Korea	2.4	3.2	3.9	1.7	1.1	1.7	3.3	3.3	3.3
China	.6	4.6	4.6	2.1	2.9	1.7	3.0	3.0	3.0
Latin America	3.9	4.4	4.0	4.3	4.0	4.6	3.8	3.7	3.6
Mexico	4.0	4.3	3.5	4.1	3.7	4.0	3.3	3.3	3.3
Brazil	4.3	5.6	6.7	5.6	5.9	6.6	5.6	5.5	5.5

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**

	2014				2015				Projected 2016			
	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	-408.5	-394.0	-426.1	-400.1	-409.9	-391.0	-407.3	-430.2	-468.8	-453.8	-481.3	-489.9
<i>Previous Tealbook</i>	-435.5	-410.9	-434.4	-413.7	-433.7	-411.3	-425.9	-444.1	-481.0	-461.7	-487.8	-486.5
Current account as percent of GDP	-2.4	-2.3	-2.4	-2.3	-2.3	-2.2	-2.2	-2.3	-2.5	-2.4	-2.5	-2.6
<i>Previous Tealbook</i>	-2.6	-2.4	-2.5	-2.3	-2.4	-2.3	-2.3	-2.4	-2.6	-2.4	-2.5	-2.5
Net goods & services	-498.1	-521.0	-494.3	-452.5	-447.9	-439.1	-446.6	-463.8	-475.4	-471.5	-487.8	-493.0
Investment income, net	218.2	221.7	210.1	192.3	190.1	181.4	175.3	167.2	158.7	151.1	142.5	136.7
Direct, net	292.8	286.0	273.7	255.0	255.2	256.0	259.8	263.4	267.0	272.2	277.3	284.9
Portfolio, net	-74.6	-64.3	-63.6	-62.7	-65.1	-74.5	-84.5	-96.2	-108.3	-121.2	-134.8	-148.3
Other income and transfers, net	-128.5	-94.7	-141.9	-140.0	-152.1	-133.4	-136.0	-133.6	-152.1	-133.4	-136.0	-133.6
<i>Annual Data</i>												
	2009	2010	2011	2012	2013	2014	2015	2016	2017			
U.S. current account balance	-380.8	-443.9	-459.3	-460.8	-400.3	-407.2	-409.6	-473.5	-504.1			
<i>Previous Tealbook</i>	-380.8	-443.9	-459.3	-460.8	-400.3	-423.6	-428.8	-479.3	-498.3			
Current account as percent of GDP	-2.6	-3.0	-3.0	-2.9	-2.4	-2.4	-2.3	-2.3	-2.5	-2.5	-2.6	-2.6
<i>Previous Tealbook</i>	-2.6	-3.0	-3.0	-2.9	-2.4	-2.4	-2.4	-2.4	-2.5	-2.5	-2.5	-2.5
Net goods & services	-383.8	-494.7	-548.6	-537.6	-476.4	-491.5	-494.4	-481.9	-490.1			
Investment income, net	132.3	185.7	229.0	211.4	208.5	210.6	178.5	147.2	124.8			
Direct, net	257.7	288.0	298.6	281.6	290.9	276.9	258.6	275.4	307.3			
Portfolio, net	-125.4	-102.3	-69.5	-70.2	-82.3	-66.3	-80.1	-128.1	-182.5			
Other income and transfers, net	-129.3	-135.0	-139.8	-134.6	-132.4	-126.3	-138.8	-138.8	-138.8			

Class I FOMC – Restricted Controlled (FR)

Report to the FOMC on Economic Conditions and Monetary Policy



Book B Monetary Policy: Strategies and Alternatives

October 23, 2014

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

Policy Rules and the Staff Projection

Near-Term Prescriptions of Selected Policy Rules¹

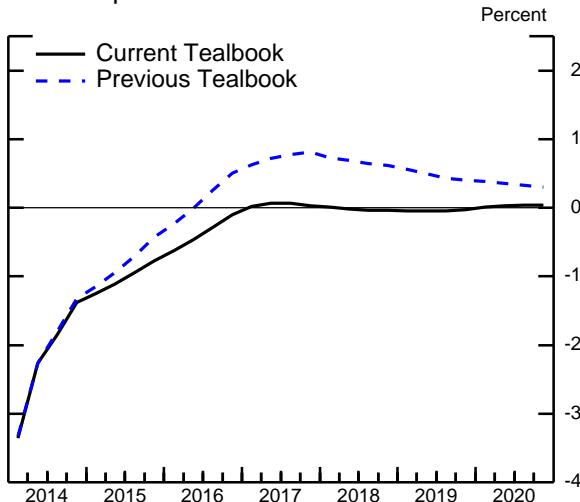
	<u>2014Q4</u>	<u>2015Q1</u>
Taylor (1993) rule <i>Previous Tealbook</i>	2.25 2.39	2.43 2.66
Taylor (1999) rule <i>Previous Tealbook</i>	1.57 1.73	1.81 2.09
Inertial Taylor (1999) rule <i>Previous Tealbook outlook</i>	0.34 0.37	0.56 0.63
First-difference rule <i>Previous Tealbook outlook</i>	0.30 0.47	0.37 0.72
Nominal income targeting rule <i>Previous Tealbook outlook</i>	-0.29 -0.22	-0.58 -0.41

Memo: Equilibrium and Actual Real Federal Funds Rates²

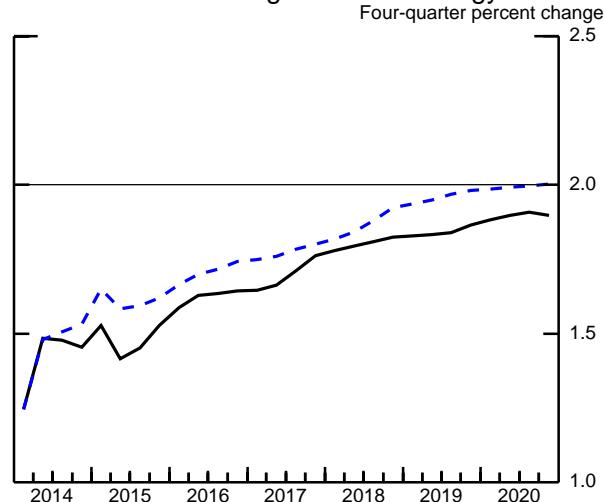
	Current Tealbook	<i>Current Quarter Estimate as of Previous Tealbook</i>	Previous Tealbook
Tealbook-consistent FRB/US r^* estimate	-1.28	-0.84	-0.85
Actual real federal funds rate	-1.34		-1.34

Key Elements of the Staff Projection

GDP Gap



PCE Prices Excluding Food and Energy

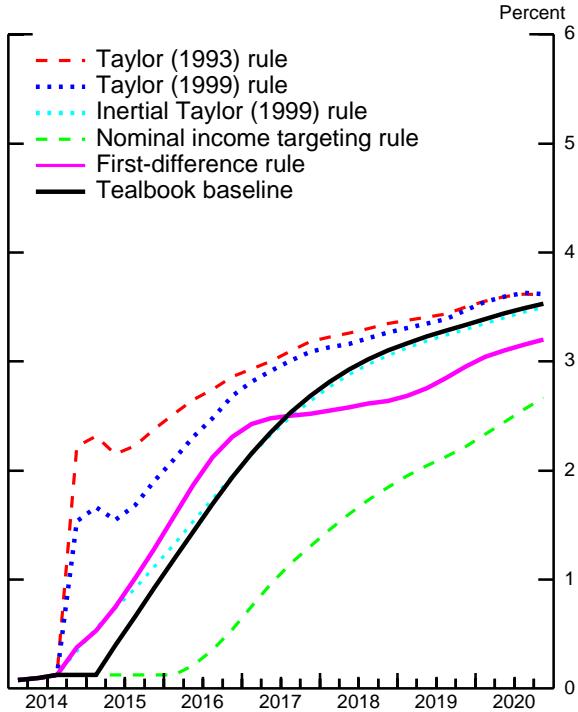


1. These near-term prescriptions are not constrained by the effective lower bound on the federal funds rate. For rules that have a lagged policy rate as a right-hand-side variable, the lines denoted "Previous Tealbook outlook" report rule prescriptions based on the previous Tealbook's staff outlook, but jumping off from the realized value for the policy rate last quarter.

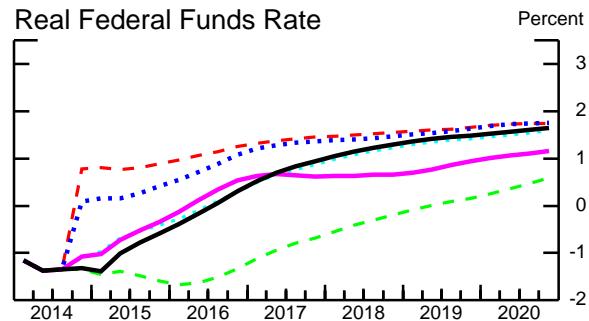
2. Estimates of r^* may change at the beginning of a quarter even when the staff outlook is unchanged because the twelve-quarter horizon covered by the calculation has rolled forward one quarter. Therefore, whenever the Tealbook is published early in the quarter, the memo includes an extra column labeled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

Policy Rule Simulations

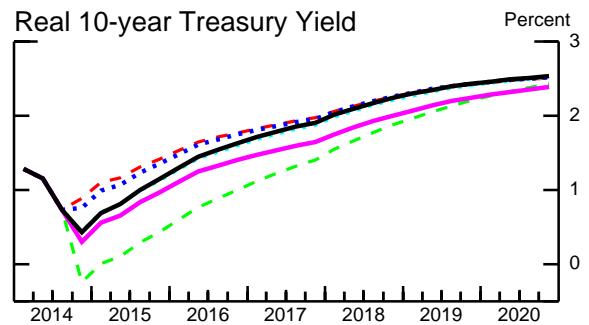
Effective Nominal Federal Funds Rate



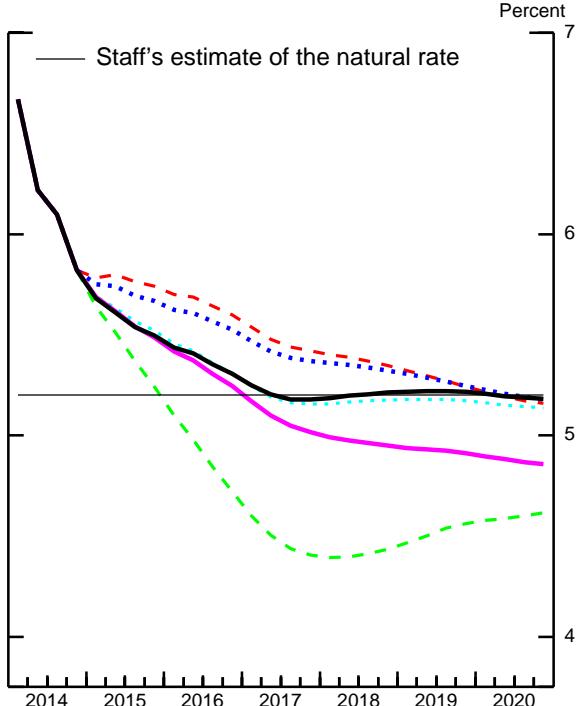
Real Federal Funds Rate



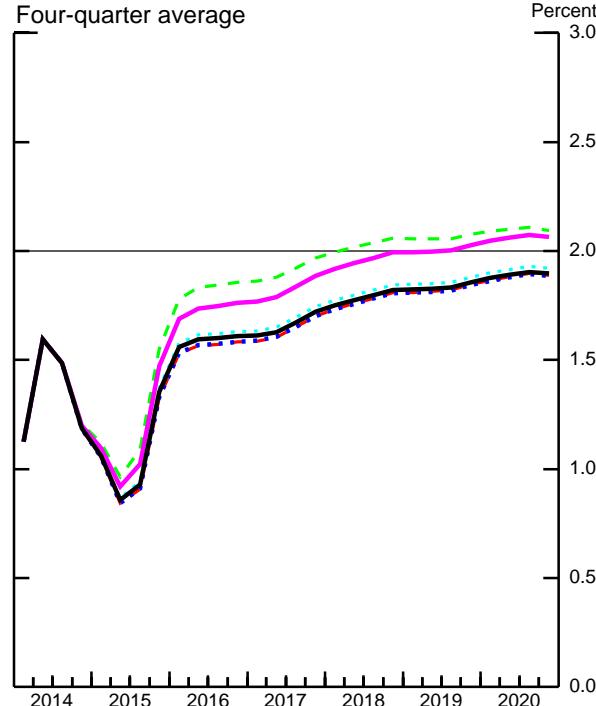
Real 10-year Treasury Yield



Unemployment Rate



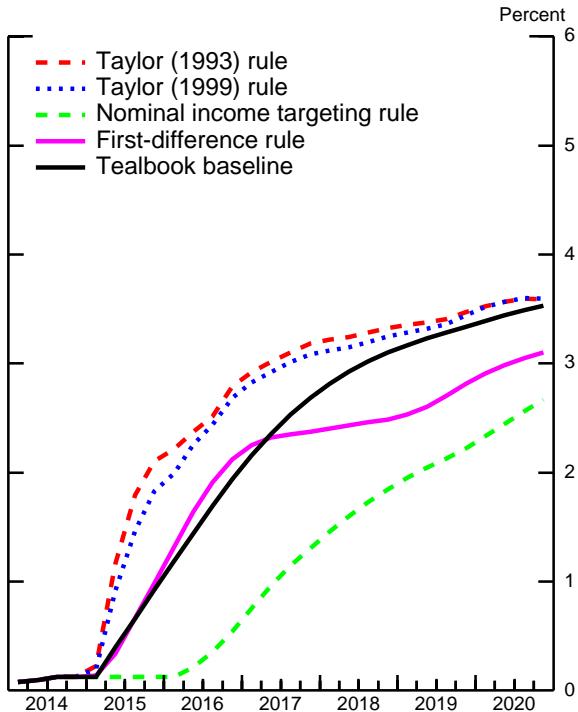
PCE Inflation



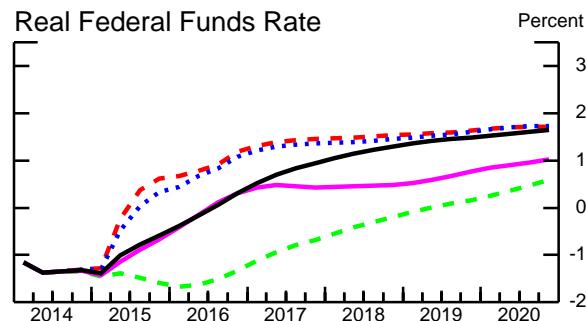
Note: The policy rule simulations in this exhibit are based on rules that respond to core inflation. This choice of rule specification was made in light of the tendency for current and near-term core inflation rates to outperform headline inflation rates as predictors of the medium-term behavior of headline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

Policy Rule Simulations with an Unemployment Rate Threshold

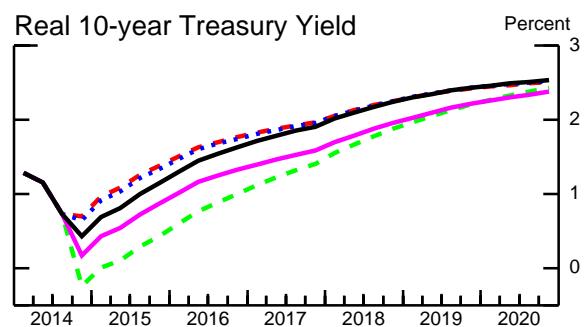
Effective Nominal Federal Funds Rate



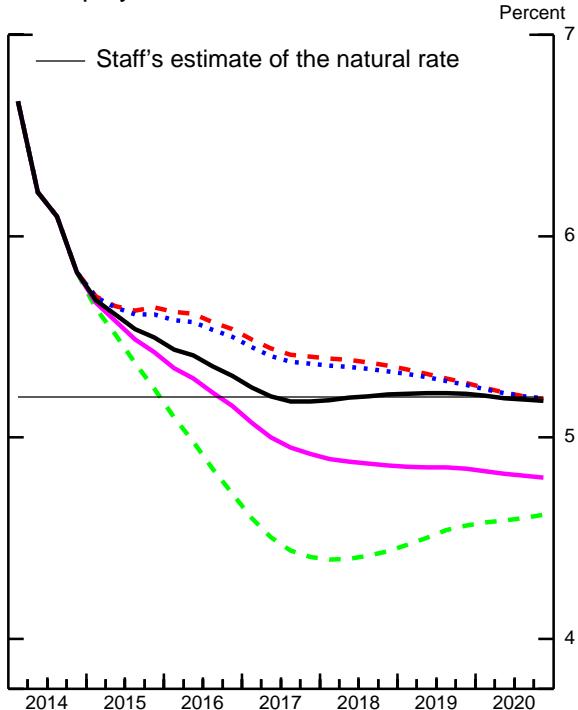
Real Federal Funds Rate



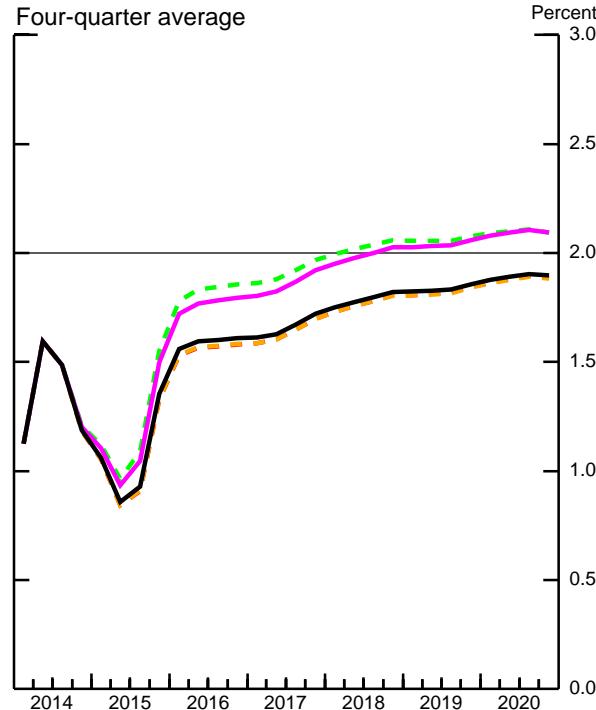
Real 10-year Treasury Yield



Unemployment Rate



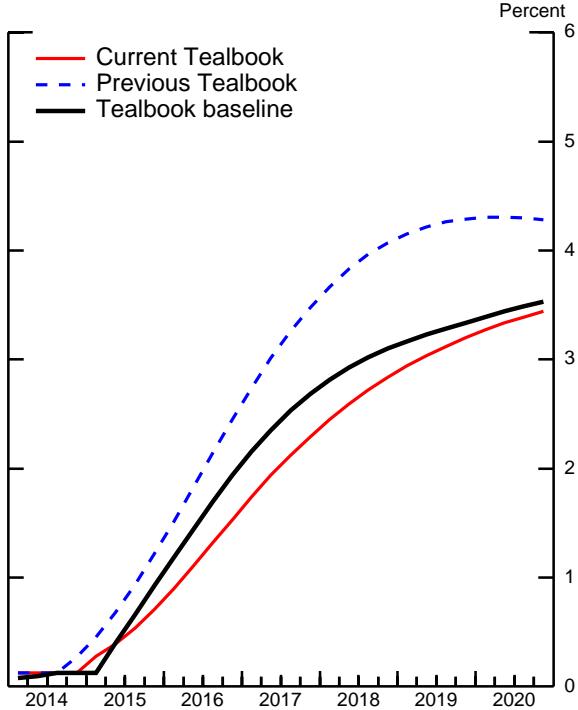
PCE Inflation



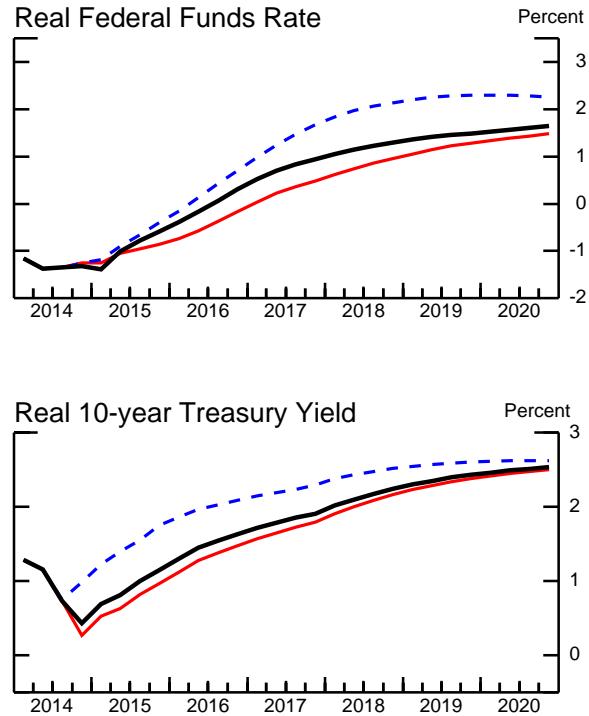
Note: The policy rule simulations in this exhibit keep the federal funds rate at an effective lower bound of 12½ basis points as long as the unemployment rate is 5.7 percent or more. Thereafter, the federal funds rate follows the prescriptions of the specified rule. A value of 5.7 percent was chosen because, in the Tealbook baseline, the unemployment rate crosses that level just before firming begins. In addition, the simulations are based on rules that respond to core inflation.

Optimal Control Policy under Commitment

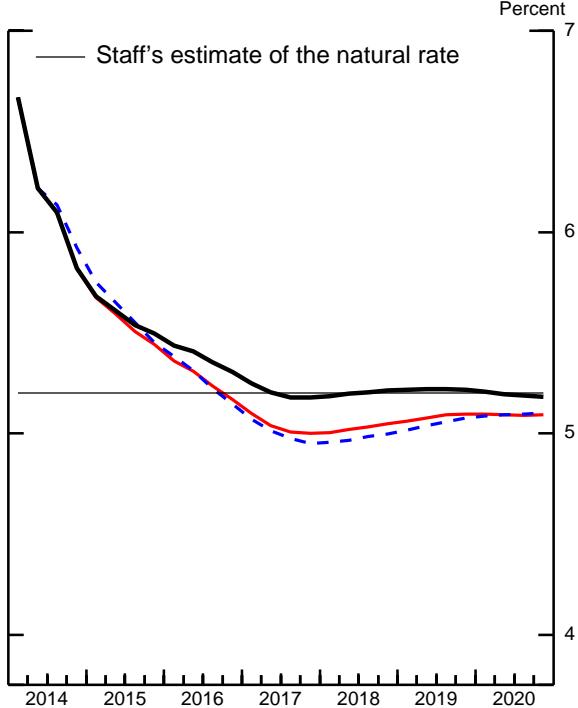
Effective Nominal Federal Funds Rate



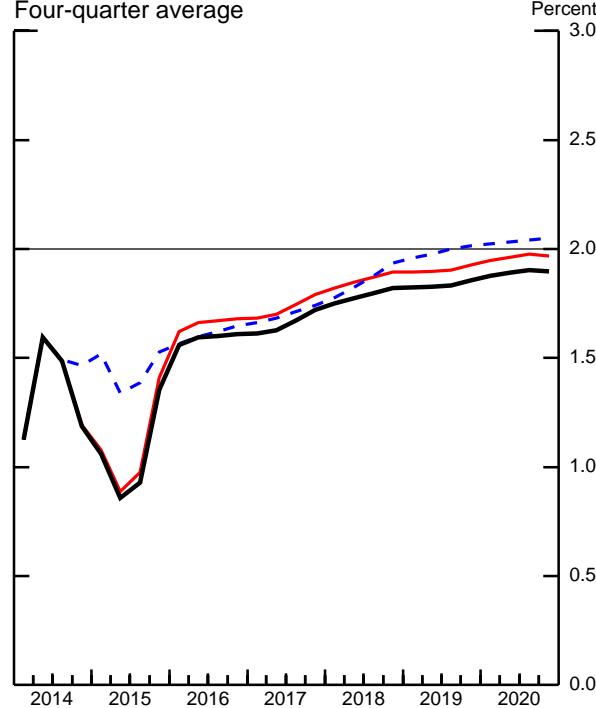
Real Federal Funds Rate



Unemployment Rate



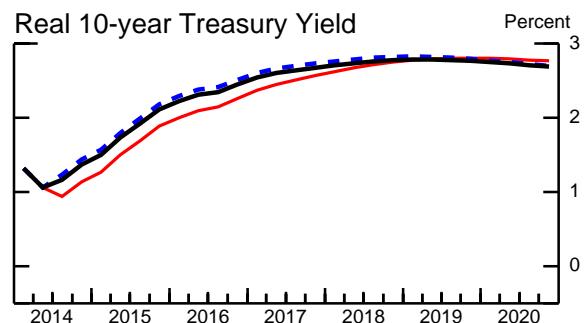
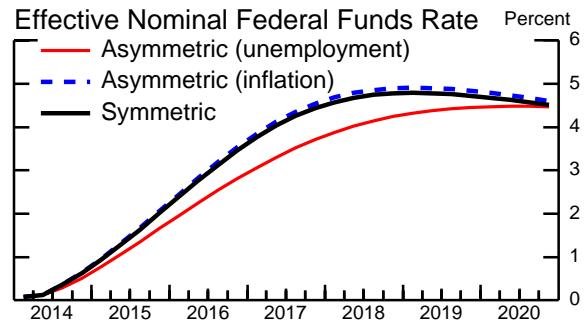
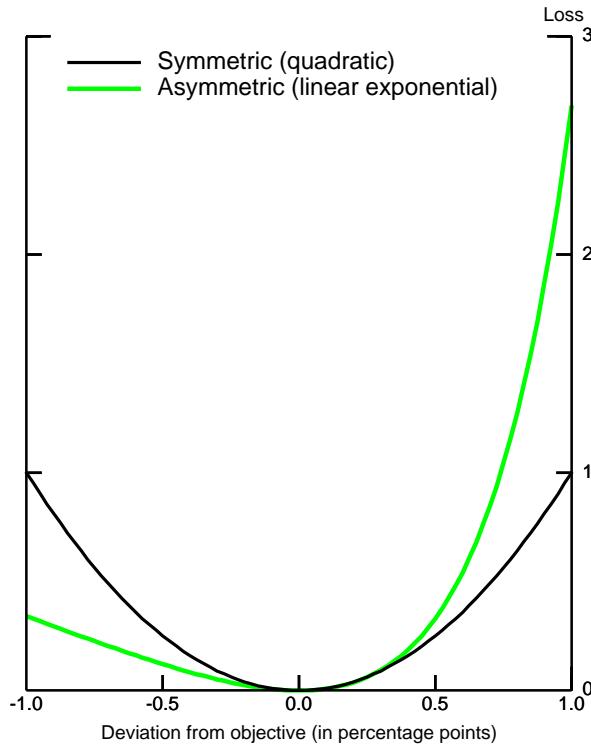
PCE Inflation



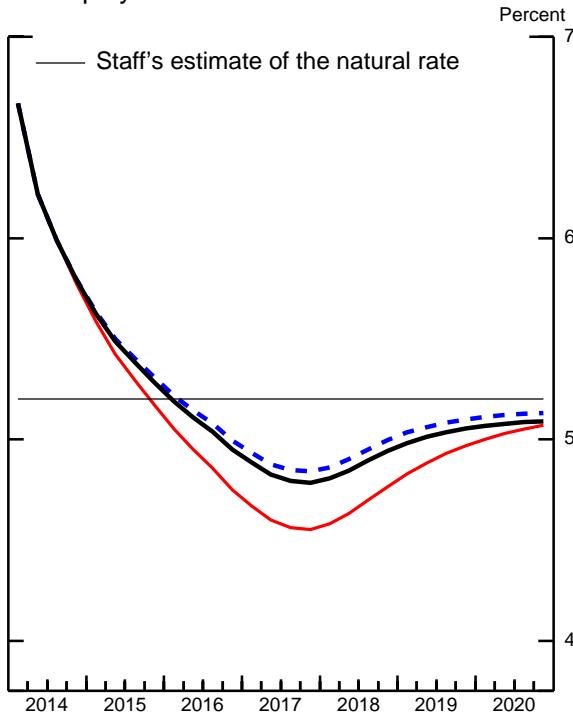
Optimal Control Policy under Asymmetric Preferences (Conditional on July 2014 Tealbook)

Strategies

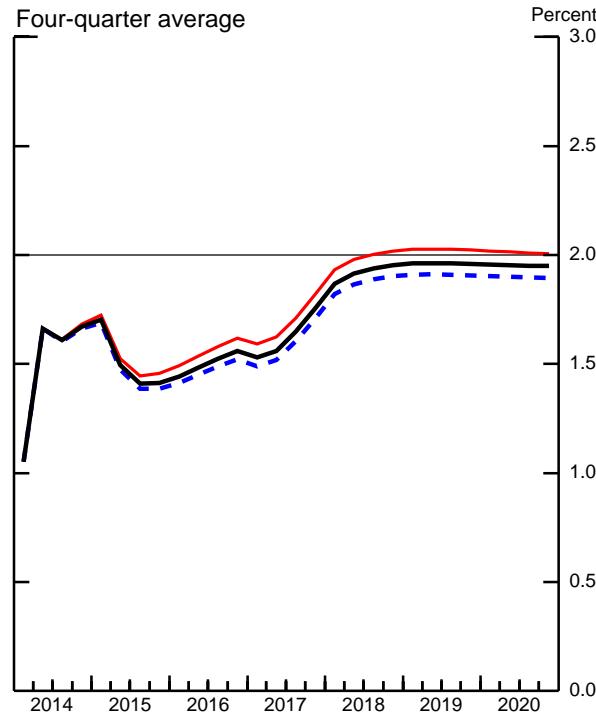
Loss Function



Unemployment Rate



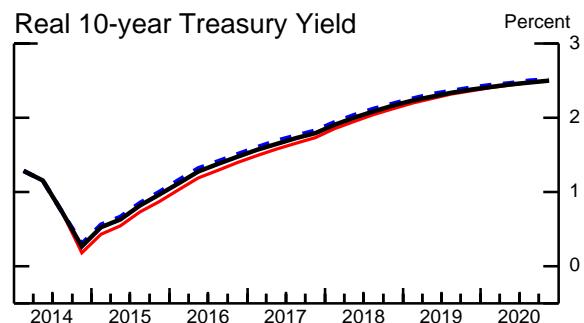
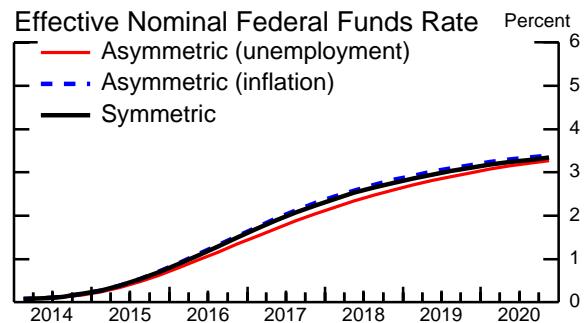
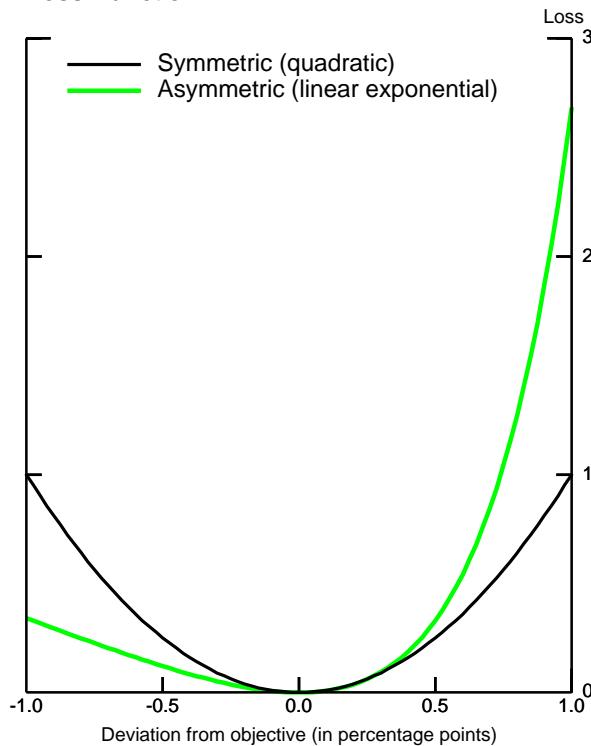
PCE Inflation



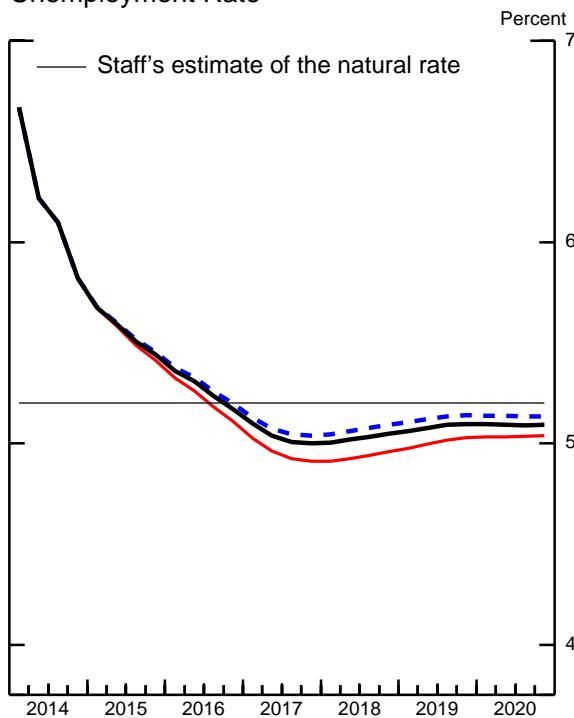
Note: In the simulation labeled "Symmetric," policymakers are assumed to place equal weights on minimizing a discounted sum of squared deviations of inflation from 2 percent and of the unemployment rate from the staff's estimate of the natural rate. In the simulations labeled "Asymmetric (unemployment)" and "Asymmetric (inflation)," policymakers are assumed to have, in place of the quadratic unemployment rate term and the quadratic inflation term, respectively, a loss function that takes the linear-exponential function form displayed in the upper-left panel under the label "Asymmetric (linear exponential)." In addition, all simulations embed the assumption that policymakers' loss function includes a quadratic term that penalizes changes in the federal funds rate.

Optimal Control Policy under Asymmetric Preferences (Conditional on October 2014 Tealbook)

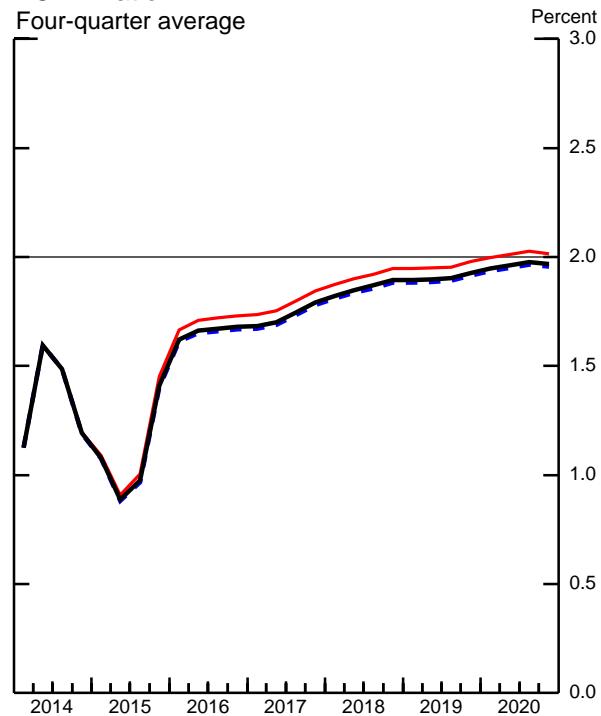
Loss Function



Unemployment Rate



PCE Inflation



Note: In the simulation labeled "Symmetric," policymakers are assumed to place equal weights on minimizing a discounted sum of squared deviations of inflation from 2 percent and of the unemployment rate from the staff's estimate of the natural rate. In the simulations labeled "Asymmetric (unemployment)" and "Asymmetric (inflation)," policymakers are assumed to have, in place of the quadratic unemployment rate term and the quadratic inflation term, respectively, a loss function that takes the linear-exponential function form displayed in the upper-left panel under the label "Asymmetric (linear exponential)." In addition, all simulations embed the assumption that policymakers' loss function includes a quadratic term that penalizes changes in the federal funds rate.

Outcomes under Alternative Policies

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

Measure and policy	2014		2015	2016	2017	2018
	H1	H2				
<i>Real GDP</i>						
Extended Tealbook baseline ¹	1.2	2.8	2.4	2.6	2.1	2.0
Taylor (1993)	1.2	2.8	1.9	2.5	2.2	2.2
Taylor (1999)	1.2	2.8	2.0	2.5	2.2	2.1
Inertial Taylor (1999)	1.2	2.8	2.3	2.7	2.2	2.0
First-difference	1.2	2.8	2.4	2.8	2.3	2.2
Nominal income targeting	1.2	2.8	3.0	3.3	2.5	2.0
Optimal control	1.2	2.8	2.5	2.8	2.2	2.0
<i>Unemployment rate²</i>						
Extended Tealbook baseline ¹	6.2	5.8	5.5	5.3	5.2	5.2
Taylor (1993)	6.2	5.8	5.7	5.6	5.4	5.3
Taylor (1999)	6.2	5.8	5.7	5.5	5.4	5.3
Inertial Taylor (1999)	6.2	5.8	5.5	5.3	5.2	5.2
First-difference	6.2	5.8	5.5	5.2	5.0	5.0
Nominal income targeting	6.2	5.8	5.2	4.7	4.4	4.4
Optimal control	6.2	5.8	5.4	5.2	5.0	5.0
<i>Total PCE prices</i>						
Extended Tealbook baseline ¹	1.9	0.5	1.4	1.6	1.7	1.8
Taylor (1993)	1.9	0.5	1.3	1.6	1.7	1.8
Taylor (1999)	1.9	0.5	1.3	1.6	1.7	1.8
Inertial Taylor (1999)	1.9	0.5	1.4	1.6	1.7	1.8
First-difference	1.9	0.6	1.5	1.8	1.9	2.0
Nominal income targeting	1.9	0.6	1.6	1.9	2.0	2.1
Optimal control	1.9	0.5	1.4	1.7	1.8	1.9
<i>Core PCE prices</i>						
Extended Tealbook baseline ¹	1.6	1.3	1.5	1.6	1.8	1.8
Taylor (1993)	1.6	1.3	1.5	1.6	1.7	1.8
Taylor (1999)	1.6	1.3	1.5	1.6	1.7	1.8
Inertial Taylor (1999)	1.6	1.3	1.5	1.7	1.8	1.8
First-difference	1.6	1.3	1.6	1.8	1.9	2.0
Nominal income targeting	1.6	1.4	1.7	1.9	2.0	2.1
Optimal control	1.6	1.3	1.6	1.7	1.8	1.9
<i>Effective nominal federal funds rate²</i>						
Extended Tealbook baseline ¹	0.1	0.1	0.9	1.9	2.7	3.1
Taylor (1993)	0.1	2.2	2.4	2.9	3.2	3.3
Taylor (1999)	0.1	1.5	1.9	2.7	3.1	3.3
Inertial Taylor (1999)	0.1	0.3	1.1	1.9	2.6	3.1
First-difference	0.1	0.4	1.3	2.3	2.5	2.6
Nominal income targeting	0.1	0.1	0.1	0.5	1.3	1.8
Optimal control	0.1	0.2	0.7	1.5	2.2	2.8

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

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

Outcomes under Alternative Policies with an Unemployment Rate Threshold¹

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

Measure and policy	2014		2015	2016	2017	2018
	H1	H2				
<i>Real GDP</i>						
Extended Tealbook baseline	1.2	2.8	2.4	2.6	2.1	2.0
Taylor (1993)	1.2	2.8	2.1	2.4	2.1	2.1
Taylor (1999)	1.2	2.8	2.1	2.5	2.1	2.1
First-difference	1.2	2.8	2.5	2.8	2.3	2.1
Nominal income targeting	1.2	2.8	3.0	3.3	2.5	2.0
Optimal control	1.2	2.8	2.5	2.8	2.2	2.0
<i>Unemployment rate²</i>						
Extended Tealbook baseline	6.2	5.8	5.5	5.3	5.2	5.2
Taylor (1993)	6.2	5.8	5.6	5.5	5.4	5.4
Taylor (1999)	6.2	5.8	5.6	5.5	5.4	5.3
First-difference	6.2	5.8	5.4	5.2	4.9	4.9
Nominal income targeting	6.2	5.8	5.2	4.7	4.4	4.4
Optimal control	6.2	5.8	5.4	5.2	5.0	5.0
<i>Total PCE prices</i>						
Extended Tealbook baseline	1.9	0.5	1.4	1.6	1.7	1.8
Taylor (1993)	1.9	0.5	1.3	1.6	1.7	1.8
Taylor (1999)	1.9	0.5	1.3	1.6	1.7	1.8
First-difference	1.9	0.6	1.5	1.8	1.9	2.0
Nominal income targeting	1.9	0.6	1.6	1.9	2.0	2.1
Optimal control	1.9	0.5	1.4	1.7	1.8	1.9
<i>Core PCE prices</i>						
Extended Tealbook baseline	1.6	1.3	1.5	1.6	1.8	1.8
Taylor (1993)	1.6	1.3	1.5	1.6	1.7	1.8
Taylor (1999)	1.6	1.3	1.5	1.6	1.7	1.8
First-difference	1.6	1.4	1.7	1.8	2.0	2.0
Nominal income targeting	1.6	1.4	1.7	1.9	2.0	2.1
Optimal control	1.6	1.3	1.6	1.7	1.8	1.9
<i>Effective nominal federal funds rate²</i>						
Extended Tealbook baseline	0.1	0.1	0.9	1.9	2.7	3.1
Taylor (1993)	0.1	0.1	2.1	2.8	3.2	3.3
Taylor (1999)	0.1	0.1	1.8	2.7	3.1	3.2
First-difference	0.1	0.1	1.0	2.1	2.4	2.5
Nominal income targeting	0.1	0.1	0.1	0.5	1.3	1.8
Optimal control	0.1	0.2	0.7	1.5	2.2	2.8

1. With the exception of optimal control, monetary policy is specified to keep the federal funds rate at an effective lower bound of 12½ basis points as long as the unemployment rate is 5.7 percent or more. Once the threshold is crossed, the federal funds rate follows the prescriptions of the specified rule.

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

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

Billions of dollars

		<u>Sep 30, 2014</u>	<u>2015</u>	<u>2017</u>	<u>2019</u>	<u>2021</u>	<u>2023</u>	<u>2025</u>
Total assets		4,450	4,458	3,661	2,671	2,209	2,402	2,620
Selected assets								
Loans and other credit extensions*		2	0	0	0	0	0	0
Securities held outright		4,188	4,213	3,455	2,497	2,056	2,264	2,495
U.S. Treasury securities		2,452	2,457	2,047	1,346	1,115	1,499	1,878
Agency debt securities		40	33	4	2	2	2	2
Agency mortgage-backed securities		1,696	1,723	1,404	1,148	939	763	615
Unamortized premiums		209	191	148	114	90	73	60
Unamortized discounts		-19	-17	-13	-10	-8	-7	-6
Total other assets		69	71	71	71	71	71	71
Total liabilities		4,393	4,399	3,589	2,580	2,093	2,255	2,434
Selected liabilities								
Federal Reserve notes in circulation		1,246	1,351	1,520	1,651	1,797	1,959	2,138
Reverse repurchase agreements		410	210	210	110	110	110	110
Deposits with Federal Reserve Banks		2,728	2,832	1,853	813	180	180	180
Reserve balances held by depository institutions		2,537	2,751	1,773	733	100	100	100
U.S. Treasury, General Account		158	75	75	75	75	75	75
Other Deposits		32	5	5	5	5	5	5
Interest on Federal Reserve Notes due to U.S. Treasury		3	0	0	0	0	0	0
Total capital		56	60	72	92	116	147	186

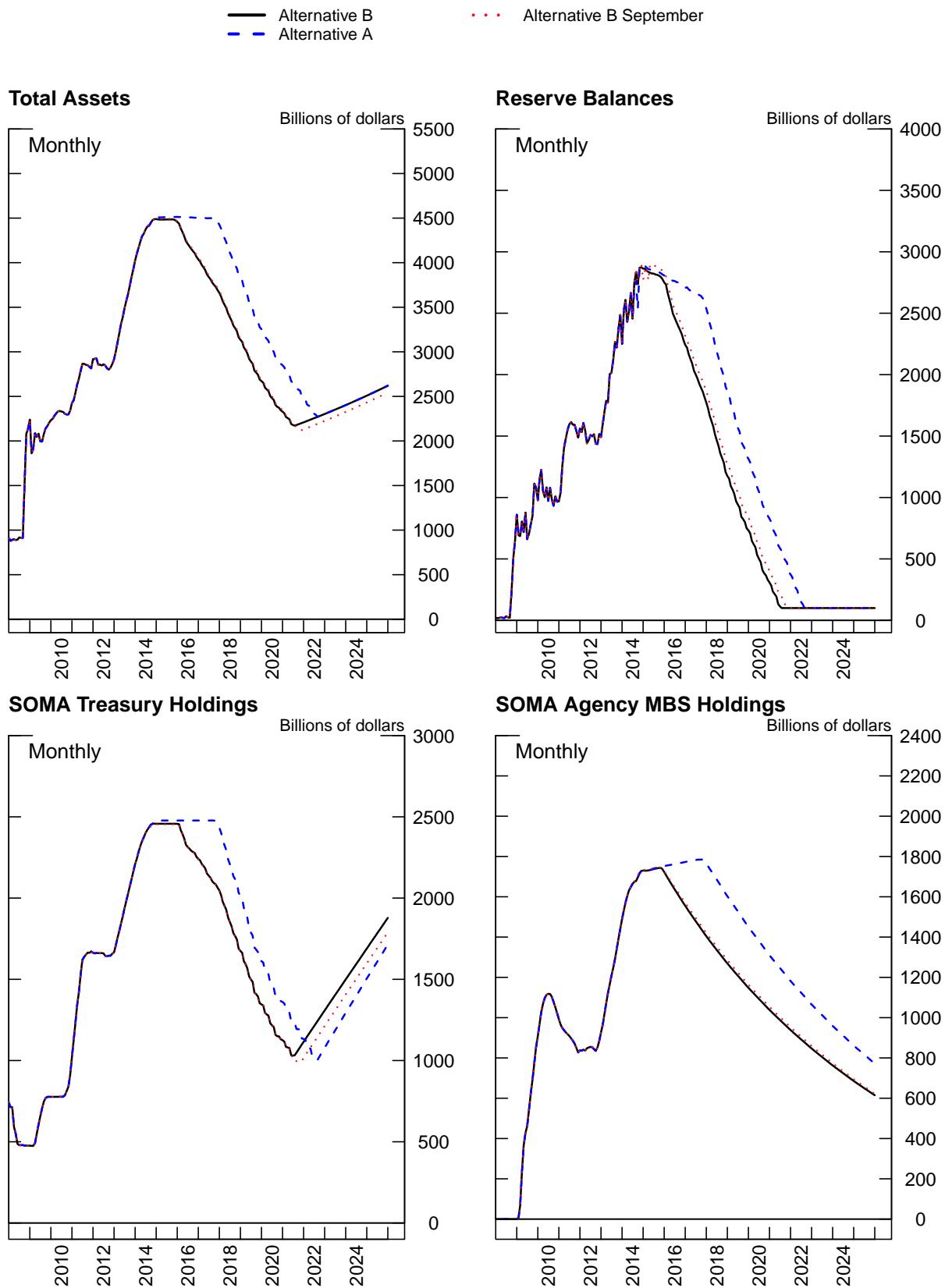
Projections

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

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

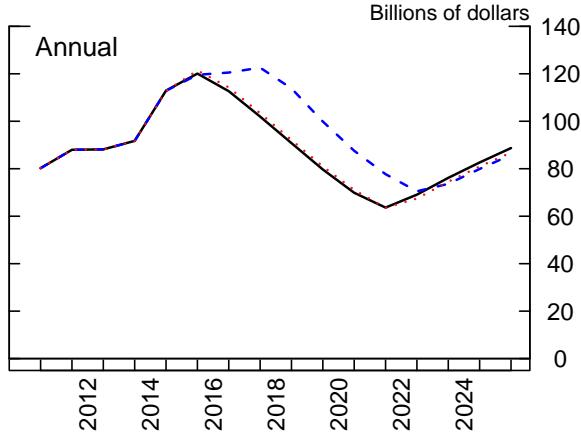
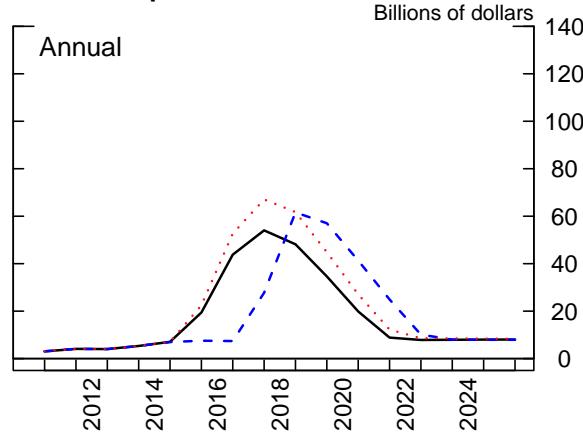
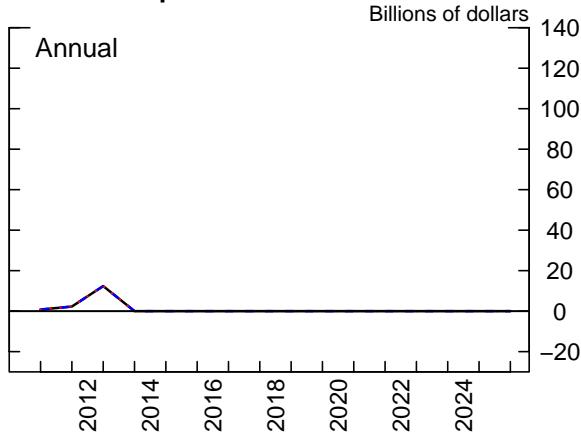
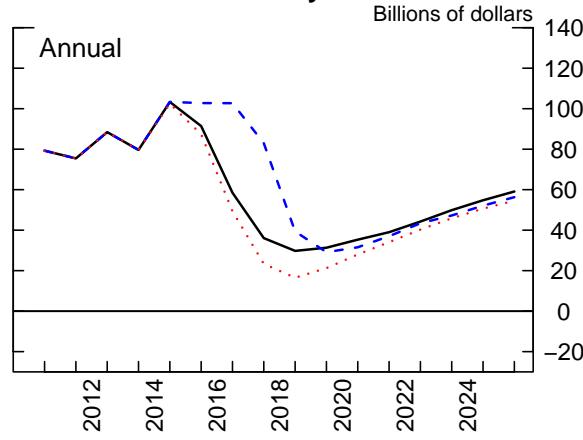
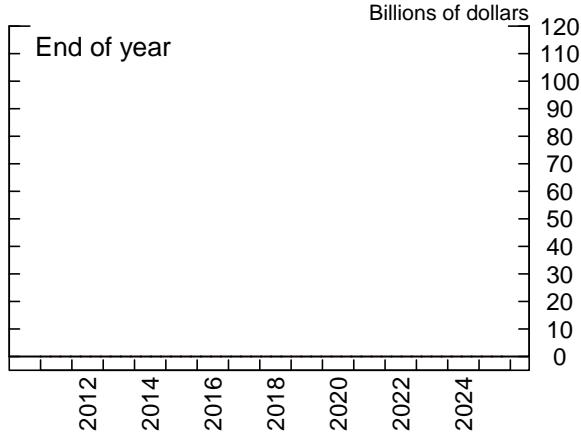
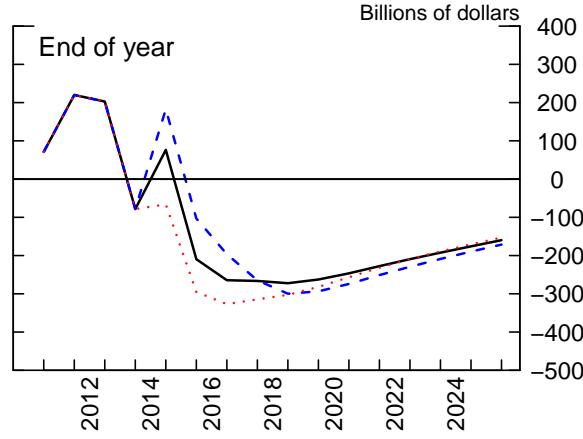
* Loans and other credit extensions includes primary, secondary, and seasonal credit; central bank liquidity swaps; Term Asset-Backed Securities Loan Facility (TALF); net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC; and net portfolio holdings of TALF LLC.

Total Assets and Selected Balance Sheet Items



Income Projections

— Alternative B ····· Alternative B September
 — Alternative A

Interest Income**Interest Expense****Realized Capital Gains****Remittances to Treasury****Deferred Asset****Memo: Unrealized Gains/Losses**

Projections

Alternative Projections for the 10-Year Treasury Term Premium Effect

Date	Alternative B	Alternative A	September Alternative B
Basis Points			
Quarterly Averages			
2014: Q4	-116	-133	-117
2015: Q1	-111	-128	-111
Q2	-106	-124	-106
Q3	-101	-119	-101
Q4	-96	-115	-96
2016: Q1	-91	-111	-91
Q2	-87	-106	-87
Q3	-82	-102	-82
Q4	-78	-98	-78
Projections			
2017: Q4	-63	-80	-63
2018: Q4	-51	-65	-50
2019: Q4	-42	-52	-41
2020: Q4	-34	-41	-33
2021: Q4	-28	-33	-27
2022: Q4	-24	-26	-22
2023: Q4	-19	-21	-18
2024: Q4	-15	-16	-14
2025: Q4	-10	-11	-10

Alternative Projections for the Monetary Base

Percent change, annual rate; not seasonally adjusted

Date	Alternative B	Alternative A	September Alternative B
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Quarterly

2014: Q4	31.6	32.4	7.9
2015: Q1	5.3	6.8	0.9
Q2	-0.2	0.1	6.4
Q3	0.0	0.2	2.1
Q4	-0.8	-0.1	-1.0
2016: Q1	-6.4	-0.2	-6.4
Q2	-12.7	-0.4	-13.1
Q3	-10.0	-0.2	-10.3
Q4	-8.4	-0.4	-8.7

Annual

2017	-9.6	-1.0	-10.1
2018	-14.4	-13.3	-15.2
2019	-13.1	-13.5	-13.9
2020	-13.3	-13.0	-14.6
2021	-7.4	-12.8	-12.4
2022	3.6	-10.2	3.7
2023	3.7	3.7	4.2
2024	3.8	3.8	4.2
2025	3.8	3.8	4.1

Projections

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

M2 Monetary Aggregate Projections (Percent change, annual rate; seasonally adjusted)*		
<i>Quarterly</i>		
2014:	Q4	3.6
2015:	Q1	2.3
	Q2	-1.0
	Q3	-3.2
	Q4	-2.2
2016:	Q1	-0.7
	Q2	0.1
	Q3	0.7
	Q4	1.2
2017:	Q1	1.5
	Q2	1.7
	Q3	2.0
	Q4	2.2
<i>Annual</i>		
	2014	5.6
	2015	-1.0
	2016	0.3
	2017	1.9

Actual data through October 13, 2014; projections thereafter.

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