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

September 11, 2013

Revisions to the Staff Projection since the Previous SEP

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

The staff projection for real GDP growth is somewhat weaker than in the June Tealbook, the result of both weaker indicators for the near term and less favorable financial assumptions. However, the projection for the unemployment rate is little revised on net: It ends 2013 a bit lower, reflecting the incoming data, and it is unrevised thereafter, reflecting the offsetting influences of the weaker GDP growth outlook and a small further downward revision to our estimate of the natural rate of unemployment. In 2016, the staff projects another year of above-trend GDP growth and a further decline in the unemployment rate to 5½ percent—close to our estimate of the natural rate.

The staff projection for overall PCE inflation has revised up this year relative to the June projection, reflecting the rise in oil prices over the summer. Beyond this year, however, the projection for both core and headline inflation is revised slightly lower, largely the result of a change in the BEA's methodology for measuring the nonmarket component of prices. In 2016, we project inflation to continue to edge higher but still to be below 2 percent.

The unemployment rate is still projected to cross the Committee's 6½ 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 June.

Staff Economic Projections Compared with the June Tealbook

Variable	20	013	2013	2014	2015	2016	Longer run
variable	H1	Н2	2013	2014	2013	2010	Longer run
Real GDP ¹ June Tealbook	2.0 2.0	2.5 2.9	2.3 2.5	3.1 3.4	3.4 3.6	3.2	2.3
Unemployment rate ² June Tealbook	7.5 7.5	7.2 7.3	7.2 7.3	6.6 6.6	5.8 5.8	5.3	5.2
PCE inflation ¹ June Tealbook	.6 .4	1.6 1.3	1.1 .9	1.2 1.4	1.4 1.6	1.6	2.0
Core PCE inflation ¹ June Tealbook	1.1 1.0	1.4 1.4	1.2 1.2	1.5 1.6	1.6 1.8	1.7	n.a. n.a.
Federal funds rate ² June Tealbook	.12 .12	.13 .13	.13 .13	.13 .13	.85 1.04	1.90	4.00 4.00
Memo: Federal funds rate, end of period June Tealbook	.13 .13	.13 .13	.13 .13	.13 .13	1.00 1.25	2.00	1 1 4.00 1 4.00

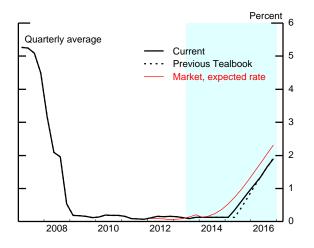
^{1.} Percent change from final quarter of preceding period to final quarter of period indicated.

^{2.} Percent, final quarter of period indicated.

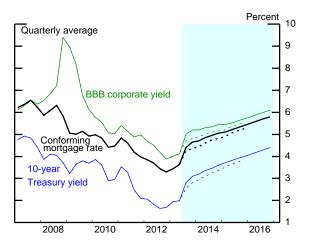
n.a. Not available.

Key Background Factors underlying the Baseline Staff Projection

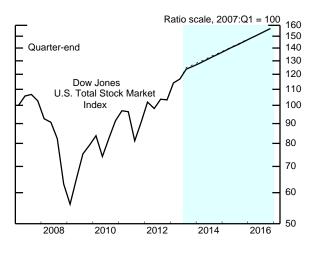
Federal Funds Rate



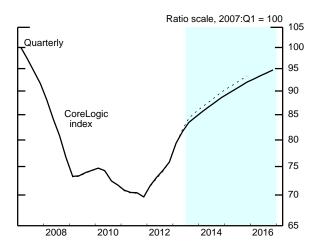
Long-Term Interest Rates



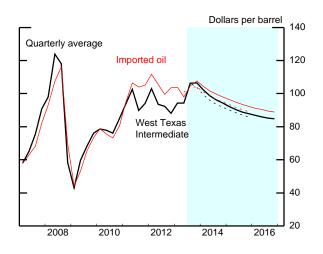
Equity Prices



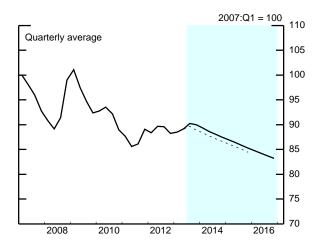
House Prices



Crude Oil Prices



Broad Real Dollar



Summary of the Near-Term Outlook

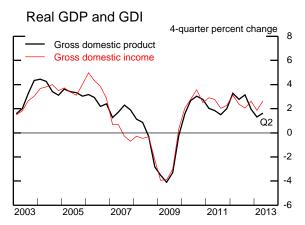
(Percent change at annual rate except as noted)

	201	13:H1	201	13:Q3	2013:Q4		
Measure	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	
Real GDP	1.4	2.0	2.3	2.2	3.3	2.7	
Private domestic final purchases	2.6	2.2	2.8	2.3	4.0	3.7	
Personal consumption expenditures	2.1	2.2	2.6	2.0	3.5	3.1	
Residential investment	11.9	13.3	4.2	2.6	17.3	12.0	
Nonres. private fixed investment	3.7	2	3.7	3.7	4.0	5.1	
Government purchases	-4.2	-2.3	-3.2	-2.5	-2.0	-2.7	
Contributions to change in real GDP							
Inventory investment ¹	1	.8	.2	.4	.6	.2	
Net exports ¹	.1	1	.4	.4	2	1	
Unemployment rate ²	7.5	7.5	7.5	7.3	7.4	7.2	
PCE chain price index	. 5	.6	1.8	1.9	1.0	1.3	
Ex. food and energy	1.1	1.1	1.5	1.5	1.4	1.3	

1. Percentage points.

2. Percent. For 2013:H1, the 2013:Q2 value is shown.

Recent Nonfinancial Developments (1)

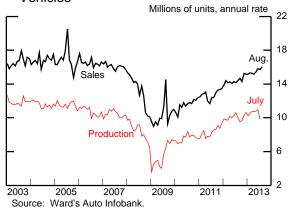


Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

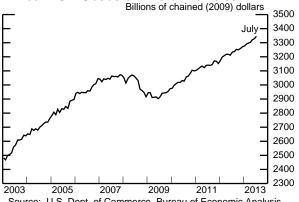


Source: Federal Reserve Board, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

Sales and Production of Light Motor Vehicles



Real PCE Goods ex. Motor Vehicles



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

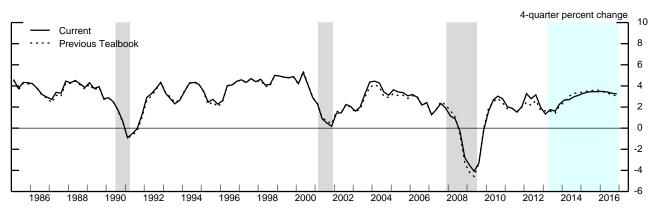
Projections of Real GDP and Related Components

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

Measure	2013	20	013	2014	2015	2016			
Measure	2015	H1	H2	2014	2015	2016			
Real GDP Previous Tealbook	2.3 2.1	2.0 1.4	2.5 2.8	3.1 3.3	3.4 3.6	3.2 3.0			
Final sales	1.7	1.3	2.2	3.1	3.6	3.5			
Previous Tealbook	1.8	1.2	2.4	3.2	3.8				
Personal consumption expenditures	2.4	2.2	2.6	3.6	3.8	3.1			
Previous Tealbook	2.5	2.1	3.0	3.7	3.9				
Residential investment	10.2	13.3	7.2	15.8	14.8	8.9			
Previous Tealbook	11.2	11.9	10.6	18.9	16.0				
Nonresidential structures	-1.0	-6.4	4.6	2.7	2.7	2.5			
Previous Tealbook	1.3	-1.2	3.9	2.5	3.1				
Equipment and intangibles	3.0	1.7	4.4	5.3	5.9	5.7			
Previous Tealbook ¹	4.8	5.8	3.8	5.7	6.2				
Federal purchases	-5.8	-5.1	-6.5	-5.4	-3.8	.0			
Previous Tealbook	-7.6	-8.9	-6.3	-5.5	-3.8				
State and local purchases	2	4	.1	.3	1.1	1.5			
Previous Tealbook	7	-1.1	3	.0	1.0				
Exports	3.5	3.2	3.8	4.4	6.1	7.0			
Previous Tealbook	3.4	3.0	3.8	4.8	6.4				
Imports	2.8	3.4	2.1	4.4	5.1	4.6			
Previous Tealbook	2.9	3.2	2.7	4.7	5.4				
	Contributions to change in real GDP (percentage points)								
Inventory change	.5	.8	.3	.0	2	2			
Previous Tealbook	.3	.3	.4	.1	2				
Net exports	.0	1	.2	1	.0	.2			
Previous Tealbook	.0	1	.1	1	.0				

^{1.} Reflects the values for equipment and software, the most comparable series prior to the comprehensive revision.

Real GDP

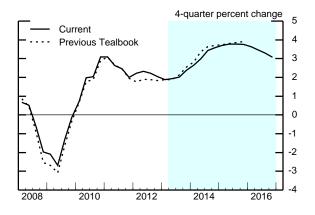


Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research.

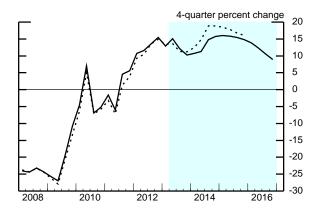
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Components of Final Demand

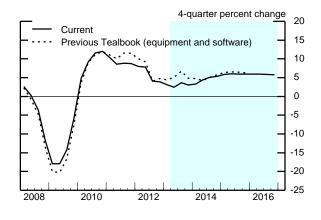
Personal Consumption Expenditures



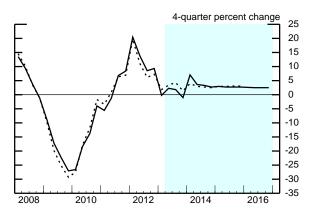
Residential Investment



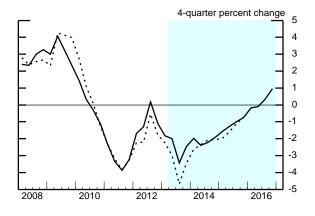
Equipment and Intangibles



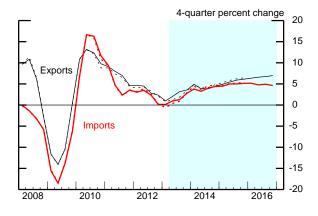
Nonresidential Structures



Government Consumption & Investment



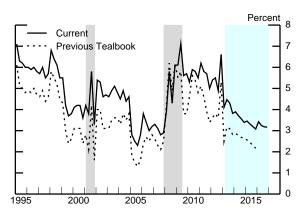
Exports and Imports



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

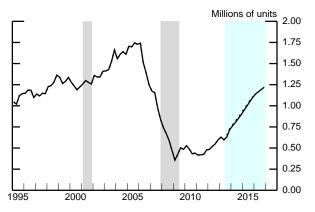
Aspects of the Medium-Term Projection

Personal Saving Rate



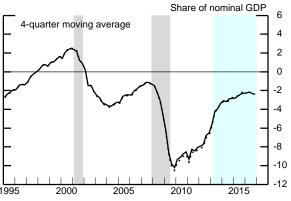
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Single-Family Housing Starts



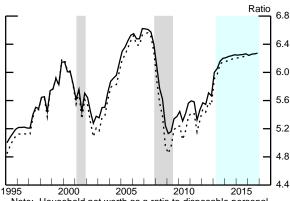
Source: U.S. Census Bureau.

Federal Surplus/Deficit



Source: Monthly Treasury Statement.

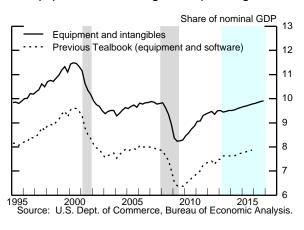
Wealth-to-Income Ratio



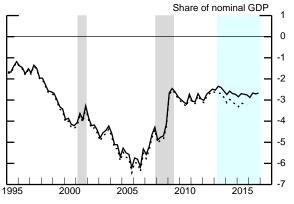
Note: Household net worth as a ratio to disposable personal income.

Source: For net worth, Federal Reserve Board, flow of funds data; for income, U.S. Dept. of Commerce, Bureau of Economic Analysis.

Equipment and Intangibles Spending



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	3.0	3.4	2.1	1.9	2.0	2.1	2.1	
Selected contributions ¹ Structural labor productivity ² Previous Tealbook	1.5 1.4	2.7 2.6	2.2 2.1	1.4 1.4	1.5 1.5	1.7 1.7	1.8 1.7	1.9
Structural hours	1.5	1.0	.6	.7	.7	.6	.6	.5
Previous Tealbook	1.5	1.0	.6	.7	.7	.6	.6	
Labor force participation	.4	.0	3	3	5	3	3	3
Previous Tealbook	.4	.0	3	3	4	3	3	
Memo: GDP gap ³ Previous Tealbook	-2.4 -2.4	1.9 1.9	-3.6 -3.6	-3.6 -3.9	-3.4 -3.8	-2.5 -2.6	-1.3 -1.2	2

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.

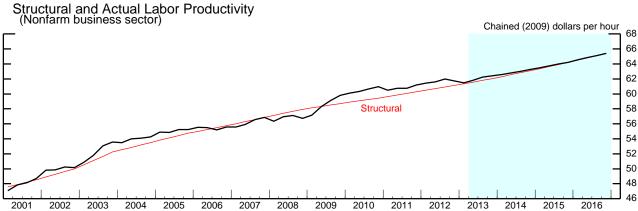
1. Percentage points.

GDP Gap

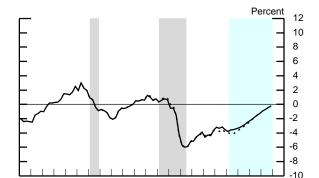
2000

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.



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



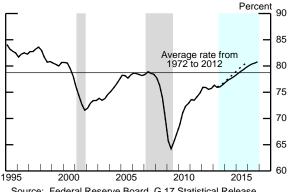
Note: The GDP gap is the percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential.

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

2010

2005

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.

2015

^{2.} Due to substantial revisions from the Bureau of Economic Analysis to productive investment as part of the latest comprehensive

The Outlook for the Labor Market

	2012	20	13	2014	2015	2016
Measure	2013	H1	H2	2014	2015	2016
Output per hour, nonfarm business ¹	1.1	.3	1.9	1.4	1.5	1.8
Previous Tealbook	.3	7	1.4	1.6	1.7	
Nonfarm private employment ²	181	201	162	202	241	198
Previous Tealbook	198	206	190	209	250	
Labor force participation rate ³	63.3	63.4	63.3	63.3	63.2	63.1
Previous Tealbook	63.4	63.4	63.4	63.3	63.3	
Civilian unemployment rate ³	7.2	7.5	7.2	6.6	5.8	5.3
Previous Tealbook	7.4	7.5	7.4	6.8	6.0	5.5

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

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)

	2012	20	013	2014	2015	2015
Measure	2013	H1	Н2	2014	2015	2016
PCE chain-weighted price index	1.1	.6	1.6	1.2	1.4	1.6
Previous Tealbook	.9	.5	1.4	1.3	1.5	1.7
Food and beverages	.9	.9	1.0	.7	1.3	1.4
Previous Tealbook	1.0	.9	1.1	.8	1.3	
Energy	-1.1	-7.7	6.0	-3.1	-1.4	7
Previous Tealbook	-4.0	-8.5	.8	-2.4	-1.6	
Excluding food and energy	1.2	1.1	1.4	1.5	1.6	1.7
Previous Tealbook	1.3	1.1	1.5	1.6	1.7	1.8
Prices of core goods imports ¹	-1.0	-1.0	-1.0	1.5	1.5	1.6
Previous Tealbook	4	9	.1	1.4	1.5	

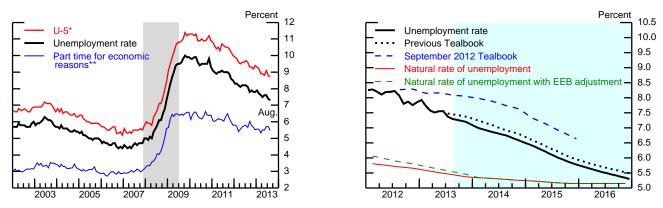
^{1.} Core goods imports exclude computers, semiconductors, oil, and natural gas.

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

Torcent change from man quarter of preceding period.
 Thousands, average monthly changes.
 Percent, average for the final quarter in the period.

Labor Market Developments and Outlook

Measures of Labor Underutilization

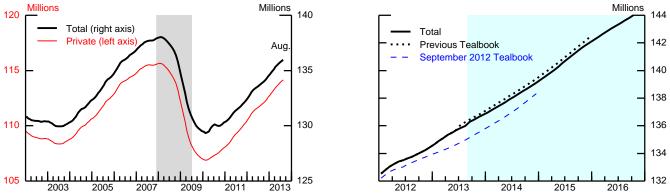


^{*} U-5 measures total unemployed plus all marginally attached to the labor force, as a percent of the labor force plus persons marginally attached to the labor force.

Percent of Current Population Survey employment.

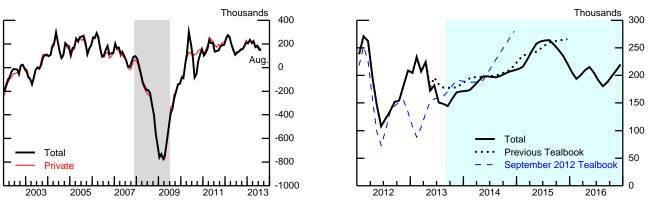
EEB Extended and emergency unemployment benefits. Source: U.S. Department of Labor, Bureau of Labor Statistics.

Level of Payroll Employment*



^{* 3-}month moving averages in history; average levels in each quarter during the forecast period. Source: U.S. Department of Labor, Bureau of Labor Statistics.

Change in Payroll Employment*

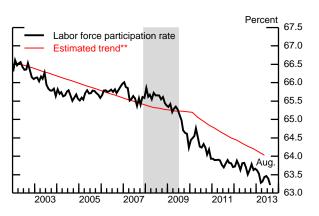


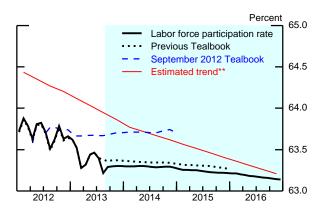
^{* 3-}month moving averages in history; average monthly changes in each quarter during the forecast period. Source: U.S. Department of Labor, Bureau of Labor Statistics.

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

Labor Market Developments and Outlook (2)

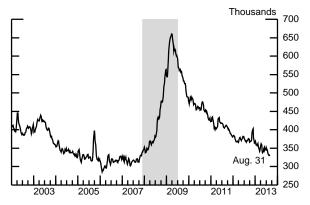
Labor Force Participation Rate*





- * Published data adjusted by staff to account for changes in population weights.
- ** Includes staff estimate of the effect of extended and emergency unemployment benefits. Source: U.S. Department of Labor, Bureau of Labor Statistics; staff assumptions.

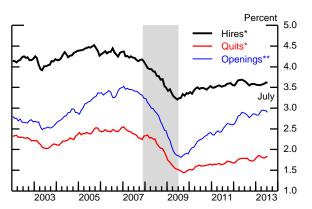
Initial Unemployment Insurance Claims*



* 4-week moving average. Source: U.S. Department of Labor, Employment and Training Administration.

Indexes of Selected Labor Market Indicators

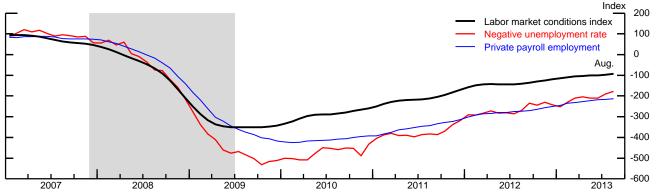
Private Hires, Quits, and Job Openings



- * 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.



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

Labor Market Data and Projections

	Aug	Projection for mid-2014 ² in the Tealbook dated:						
Indicator	Aug. 2012 ¹	Sept. 2012	Dec. 2012	June 2013 ³	Sept. 2013 ³			
Unemployment rate (percent)	8.1	7.8	7.6	6.9	6.8			
Labor force participation rate (percent)	63.5	63.7	63.7	63.3	63.3			
Monthly change in payroll employment (thousands, three-month averages) Total Private	94 109	212 210	197 195	211 219	197 205			
Level of total payroll employment (millions)	133.3	137.0	137.1	138.1	138.0			
Total hours worked (percent change) ⁴	1.0	2.3	2.0	2.6	2.5			
Total hours worked (billions) ⁴	184.6	190.3	190.8	193.2	193.0			

^{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.

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

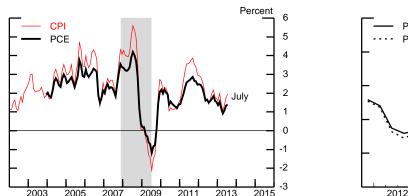
^{2.} Calculated as the mean of the 2014:Q2 and 2014:Q3 projections.3. Projections of payrolls and hours worked include the effects of the benchmark revision to the payroll survey.

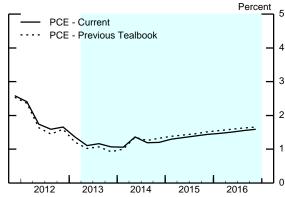
^{4.} Total hours worked are aggregate hours in the nonfarm business sector. Because that series is available only on a quarterly basis, the August 2012 figures refer to the quarterly percent change and level in 2012:Q3. The percent changes and levels in hours are at annual rates.

Inflation Developments and Outlook

(Percent change from year-earlier period)

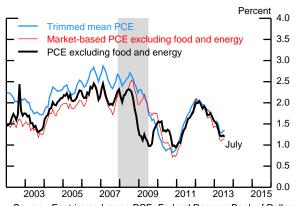
Headline Consumer Price Inflation

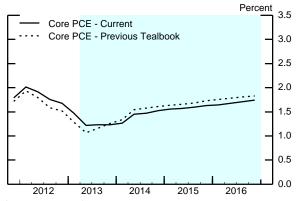




Source: For CPI, U.S. Department of Labor, Bureau of Labor Statistics; for PCE, U.S. Department of Commerce, Bureau of Economic Analysis.

Measures of Underlying PCE Price Inflation



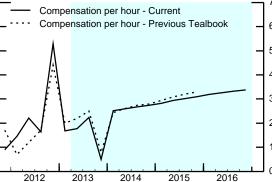


Source: For trimmed mean PCE, Federal Reserve Bank of Dallas; otherwise, U.S. Department of Commerce, Bureau of Economic Analysis.

Labor Cost Growth (Private Industry)







Percent

Note: The compensation per hour value for 2013:Q2 is a staff estimate. Source: U.S. Department of Labor, Bureau of Labor Statistics.

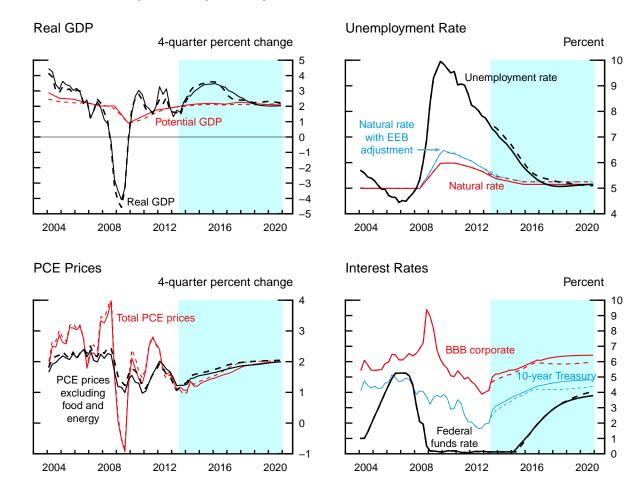
Domestic Econ Devel & Outlook

The Long-Term Outlook

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

Measure	2013	2014	2015	2016	2017	2018	Longer run
Real GDP	2.3	3.1	3.4	3.2	2.6	2.2	2.3
Previous Tealbook	2.1	3.3	3.6	3.0	2.4	2.2	2.3
Civilian unemployment rate ¹	7.2	6.6	5.8	5.3	5.1	5.1	5.2
Previous Tealbook	7.4	6.8	6.0	5.5	5.3	5.2	5.2
PCE prices, total	1.1	1.2	1.4	1.6	1.8	1.9	2.0
Previous Tealbook	.9	1.3	1.5	1.7	2.0	2.0	2.0
Core PCE prices	1.2	1.5	1.6	1.7	1.8	1.9	2.0
Previous Tealbook	1.3	1.6	1.7	1.9	2.0	2.0	2.0
Federal funds rate ¹	.1	.1	.8	1.9	2.8	3.3	4.0
Previous Tealbook	.1	.1	.7	1.9	2.8	3.4	4.0
10-year Treasury yield ¹	3.1	3.6	4.0	4.4	4.6	4.7	4.8
Previous Tealbook	2.8	3.4	3.9	4.2	4.2	4.2	4.8

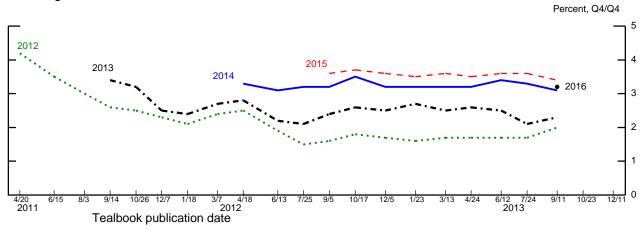
1. Percent, average for the final quarter of the period.



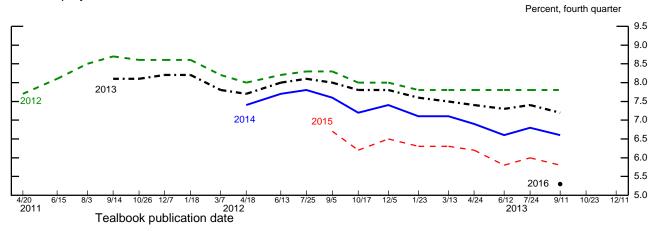
Note: In each panel, shading represents the projection period, and dashed lines are the previous Tealbook.

Evolution of the Staff Forecast

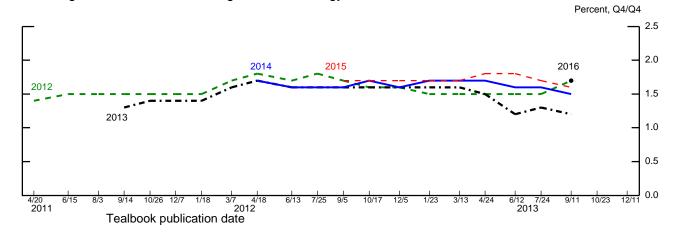
Change in Real GDP



Unemployment Rate



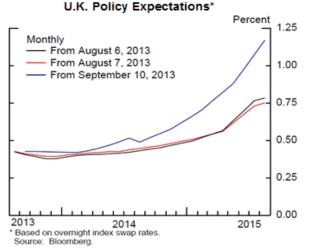
Change in PCE Prices excluding Food and Energy

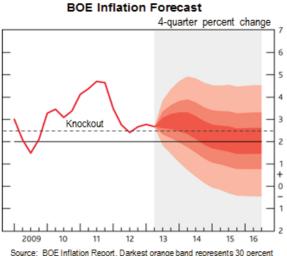


unemployment, even as GDP growth picks up. However, market participants may expect productivity to underperform and the unemployment rate to fall more rapidly.

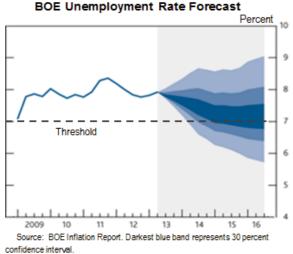
Markets also may be assigning some probability to the prospect that one of the inflation knockouts could be triggered before the unemployment rate crosses the 7 percent threshold. In particular, the BOE's current inflation forecast, shown in the lower-left figure, has a central tendency within the 18-to-24-month window of just above 2 percent. However, with U.K. inflation running persistently above 2½ percent, markets may be concerned that inflation could fall more slowly than currently forecast. In addition, as shown in the lower-right figure, the BOE's forecast for inflation 18 to 24 months ahead, which over the past six years has almost uniformly underpredicted actual inflation, has been rising over time and is currently quite near the 2½ percent knockout level.

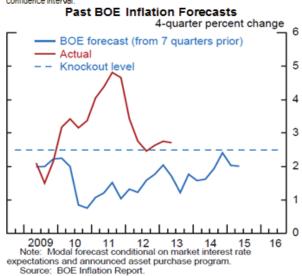
Our projection for the path of the U.K. policy rate falls between that of the market and that implied by the BOE's forecast for the unemployment rate. In our baseline forecast, which assumes some pickup in labor productivity, the unemployment rate falls below 7 percent in 2015, and we see the first BOE rate hike late that year.





confidence interval





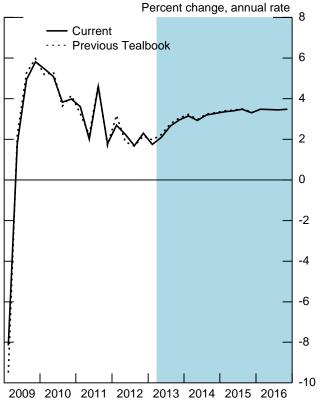
The Foreign GDP Outlook

Real GDP*	Percent change, annual rate
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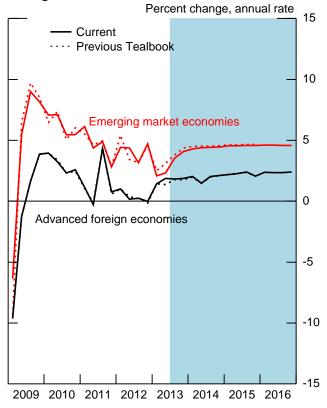
		2012		20	013		2014	2015	2016
			Q1	Q2	Q3	Q4			
1. T	otal Foreign	2.2	1.8	2.1	2.7	3.0	3.1	3.4	3.5
	Previous Tealbook	2.2	2.0	2.2	2.8	3.1	3.2	3.4	
2.	Advanced Foreign Economies	0.4	1.4	1.9	1.8	1.9	1.9	2.2	2.4
	Previous Tealbook	0.4	1.4	1.4	1.8	1.8	1.9	2.2	
3.	Canada	1.0	2.2	1.7	2.5	2.2	2.5	2.6	2.8
4.	Euro Area	-1.0	-0.6	1.2	0.3	0.9	1.3	1.9	2.1
5.	Japan	0.3	4.1	3.8	2.5	3.1	0.8	1.0	1.2
6.	United Kingdom	-0.0	1.1	2.9	2.9	2.5	2.3	2.5	2.5
7.	Emerging Market Economies	4.2	2.1	2.3	3.5	4.1	4.4	4.6	4.6
	Previous Tealbook	4.1	2.5	3.1	3.8	4.4	4.5	4.6	
8.	China	7.8	7.0	6.9	7.6	7.9	7.8	7.7	7.5
9.	Emerging Asia ex. China	3.9	1.8	3.8	3.4	3.9	4.1	4.5	4.6
10.	Mexico	3.2	0.1	-2.9	2.4	3.1	3.6	3.6	3.5
11.	Brazil	1.4	2.6	6.0	0.5	2.0	3.0	3.5	3.7

^{*} GDP aggregates weighted by shares of U.S. merchandise exports. ... Not applicable.





Foreign GDP



Page 50 of 98

The Foreign Inflation Outlook

Con	sumer Prices*						Percent ch	ange, annu	ıal rate
		2012		2	013		2014	2015	2016
			Q1	Q2	Q3	Q4			
1. T	otal Foreign	2.3	2.2	1.9	2.6	2.6	2.6	2.7	2.6
	Previous Tealbook	2.3	2.3	1.9	2.3	2.3	2.6	2.7	
2.	Advanced Foreign Economies	1.3	0.9	0.5	1.9	1.5	1.8	1.8	1.8
	Previous Tealbook	1.3	0.9	0.5	1.3	1.3	1.7	1.8	
3.	Canada	0.9	1.6	0.0	1.7	1.9	1.8	1.8	2.1
4.	Euro Area	2.3	0.7	0.6	1.7	1.5	1.4	1.6	1.7
5.	Japan	-0.2	-0.4	8.0	3.0	0.6	2.7	2.5	1.5
6.	United Kingdom	2.6	2.3	1.5	2.7	2.7	1.9	1.9	1.8
7.	Emerging Market Economies	3.1	3.3	3.0	3.1	3.4	3.3	3.3	3.3
	Previous Tealbook	3.1	3.4	3.0	3.0	3.1	3.3	3.3	
8.	China	2.1	3.2	2.1	2.8	2.9	3.0	3.0	3.0
9.	Emerging Asia ex. China	3.5	3.5	1.8	3.8	3.6	3.4	3.4	3.4
10.	Mexico	4.1	3.2	5.3	2.1	3.8	3.4	3.4	3.4

^{*} CPI aggregates weighted by shares of U.S. non-oil imports. ... Not applicable.

Brazil

11.

Foreign Monetary Policy

5.8

4.7

5.7

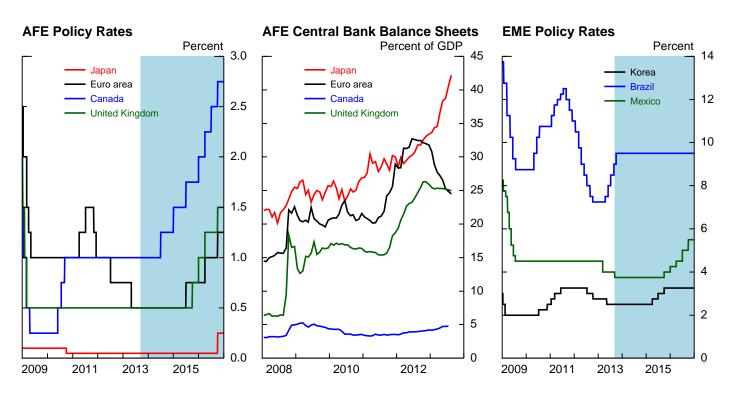
5.5

5.3

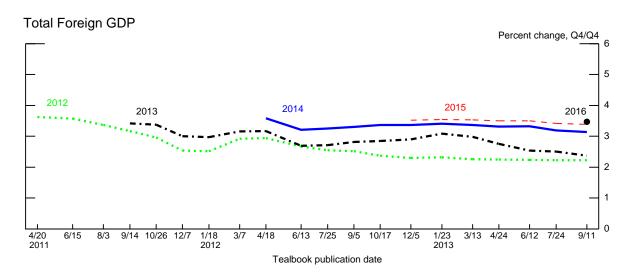
5.3

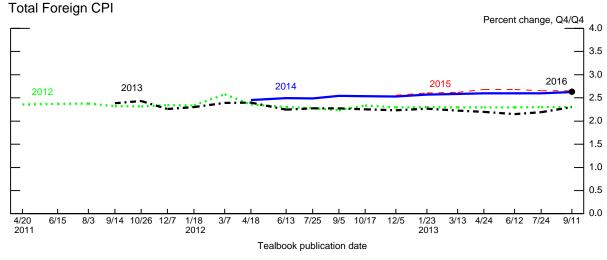
7.0

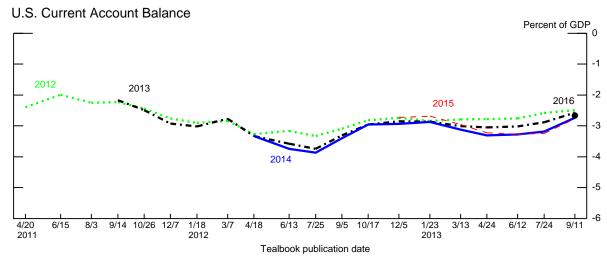
5.6



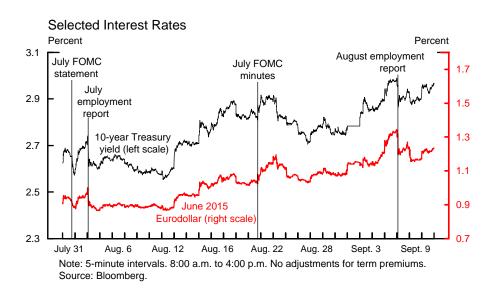
Evolution of Staff's International Forecast

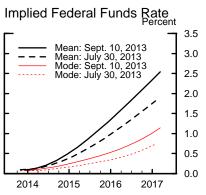






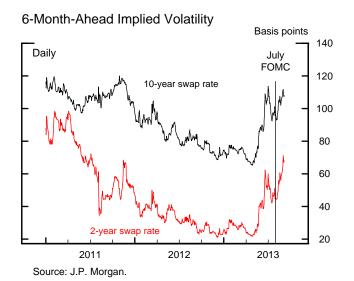
Longer-Term Interest Rates and Policy Expectations

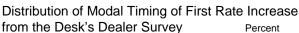


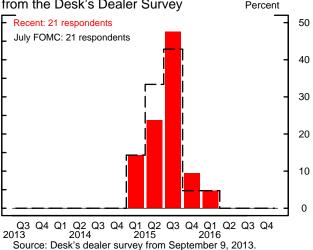


Note: Mean is estimated using overnight index swap quotes. Mode is estimated from the distribution of federal funds rate implied by interest rate caps. Both include a term premium of zero basis points per month.

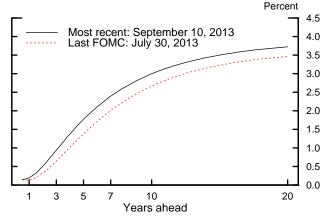
Source: Bloomberg and CME Group.







Treasury Yield Curve



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

Inflation Compensation

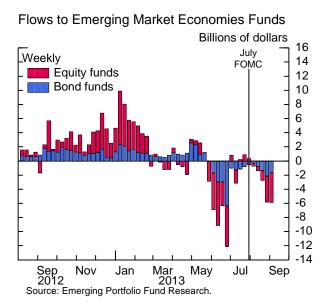


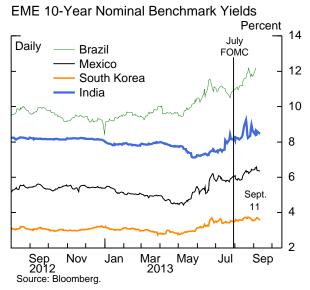
Note: Estimates based on smoothed nominal and inflation-indexed Treasury yield curves.

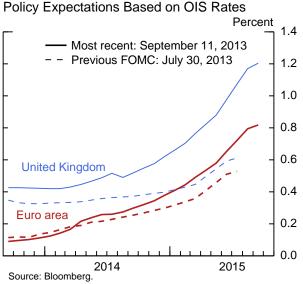
* Adjusted for lagged indexation of Treasury inflationprotected securities (carry effect).

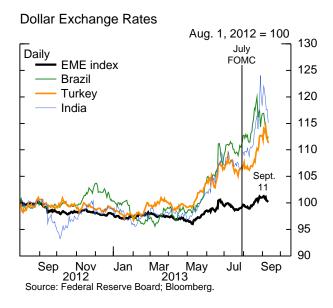
Source: Barclays PLC and staff estimates.

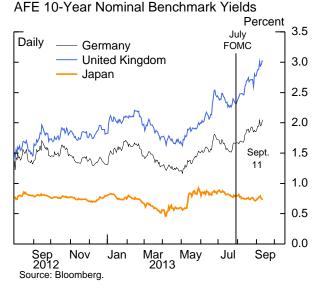
Foreign Developments

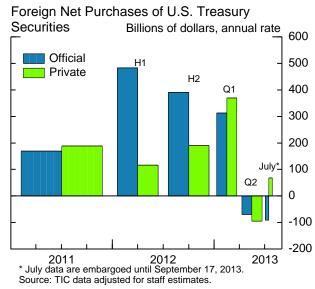












Page 62 of 98

Alternative Scenarios

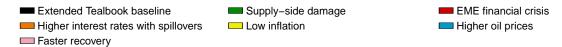
(Percent change, annual rate, from end of preceding period except as noted)

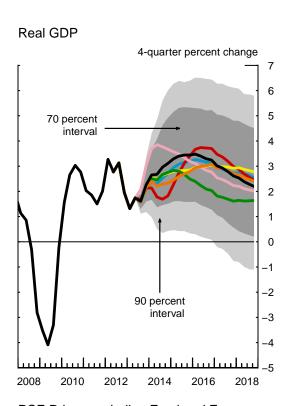
Measure and scenario	20	013	2014	2015	2016	2017-
weasure and scenario	H1	H2	2014	2013	2010	18
Real GDP		•				
Extended Tealbook baseline	2.0	2.5	3.1	3.4	3.2	2.4
Higher interest rates with spillovers	2.0	2.3	2.3	2.7	3.0	2.5
Faster recovery	2.0	4.0	3.7	3.1	2.7	2.1
Supply-side damage	2.0	2.4	2.7	2.5	2.0	1.6
Low inflation	2.0	2.4	2.7	2.8	3.0	2.8
EME financial crisis	2.0	2.2	1.8	3.4	3.7	2.7
Higher oil prices	2.0	2.2	2.7	3.1	3.1	2.6
Unemployment rate ¹						
Extended Tealbook baseline	7.5	7.2	6.6	5.8	5.3	5.1
Higher interest rates with spillovers	7.5	7.2	6.9	6.5	6.1	5.7
Faster recovery	7.5	7.0	6.0	5.3	5.1	5.2
Supply-side damage	7.5	7.1	6.1	5.0	4.8	5.2
Low inflation	7.5	7.2	6.8	6.2	5.8	5.1
EME financial crisis	7.5	7.2	7.1	6.4	5.8	5.3
Higher oil prices	7.5	7.2	6.8	6.1	5.6	5.3
Total PCE prices						
Extended Tealbook baseline	.6	1.6	1.2	1.4	1.6	1.8
Higher interest rates with spillovers	.6	1.6	1.2	1.3	1.5	1.6
Faster recovery	.6	1.6	1.2	1.4	1.7	1.9
Supply-side damage	.6	1.7	1.4	1.8	2.0	2.1
Low inflation	.6	1.2	.3	.2	.2	.3
EME financial crisis	.6	.6	.1	1.3	1.9	2.2
Higher oil prices	.6	4.4	1.0	1.4	1.7	1.8
Core PCE prices						
Extended Tealbook baseline	1.1	1.4	1.5	1.6	1.7	1.9
Higher interest rates with spillovers	1.1	1.4	1.5	1.5	1.6	1.7
Faster recovery	1.1	1.4	1.5	1.6	1.8	2.0
Supply-side damage	1.1	1.5	1.7	2.0	2.1	2.2
Low inflation	1.1	1.0	.6	.4	.3	.4
EME financial crisis	1.1	1.3	1.0	1.4	1.8	2.1
Higher oil prices	1.1	1.5	1.8	1.8	1.8	1.9
Federal funds rate ¹		1	1	0	1.0	2.2
Extended Tealbook baseline	.1	.1	.1	.8	1.9	3.3
Higher interest rates with spillovers	.1	.1	.1	.1	.8	2.1
Faster recovery	.1	.1	.7	1.8	2.8	3.5
Supply-side damage	.1	.1	.7	2.3	3.5	4.1
Low inflation	.1	.1	.1	.1	.4	1.2
EME financial crisis	.1	.1	.1	.2	1.3	3.3
Higher oil prices	.1	.1	.1	.8	1.7	3.0

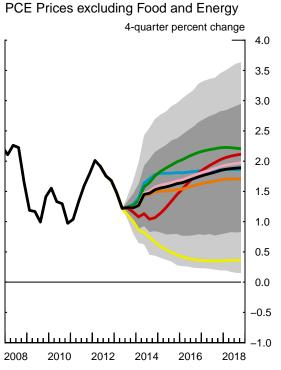
^{1.} Percent, average for the final quarter of the period.

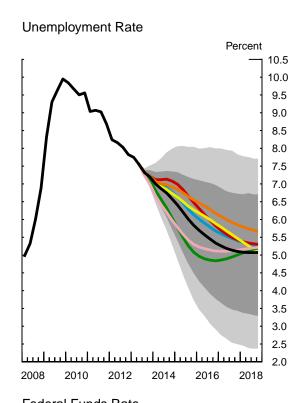
Forecast Confidence Intervals and Alternative Scenarios

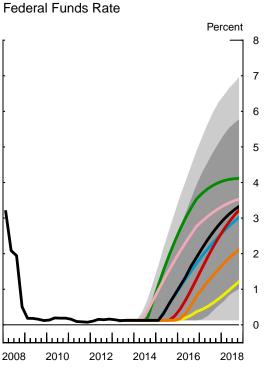
Confidence Intervals Based on FRB/US Stochastic Simulations











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

Measure	2013	2014	2015	2016	2017	2018
Real GDP						
(percent change, Q4 to Q4)						
Projection	2.3	3.1	3.4	3.2	2.6	2.2
Confidence interval						
Tealbook forecast errors	1.4-3.1	1.2 - 5.0	1.3-5.6			
FRB/US stochastic simulations	1.6–2.9	1.5–4.9	1.6–5.3	1.3–5.2	.6–4.8	.2–4.5
Civilian unemployment rate						
(percent, Q4)						
Projection	7.2	6.6	5.8	5.3	5.1	5.1
Confidence interval						
Tealbook forecast errors	6.8–7.6	5.8 - 7.4	4.5 - 7.2			
FRB/US stochastic simulations	7.0–7.4	5.7–7.4	4.5–7.1	3.8–7.0	3.4–6.7	3.3-6.7
PCE prices, total						
(percent change, Q4 to Q4)						
Projection	1.1	1.2	1.4	1.6	1.8	1.9
Confidence interval						
Tealbook forecast errors	.6–1.5	.0-2.4	.2-2.6			
FRB/US stochastic simulations	.7–1.5	.3–2.1	.4–2.5	.4–2.7	.6–2.9	.7–3.1
PCE prices excluding						
food and energy						
(percent change, Q4 to Q4)						
Projection	1.2	1.5	1.6	1.7	1.8	1.9
Confidence interval						
Tealbook forecast errors	.9–1.5	.8–2.2	.6–2.6			
FRB/US stochastic simulations	1.0–1.5	.8–2.2	.8–2.4	.8–2.6	.8–2.8	.8–3.0
Federal funds rate						
(percent, Q4)						
Projection	.1	.1	.8	1.9	2.8	3.3
Confidence interval						
FRB/US stochastic simulations	.1–.1	.1–.8	.1–2.4	.1–3.9	.5–5.1	1.0-5.8

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)

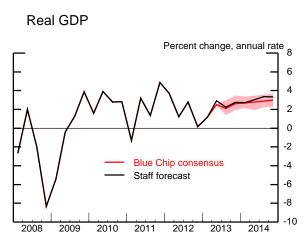
	20	13	20	14	20	15
Measure and projection	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
Real GDP Staff FRB/US EDO Blue Chip	2.1 1.6 2.1 2.1	2.3 1.7 2.2 2.1	3.3 3.0 3.0 2.8	3.1 1.8 3.0 2.8	3.6 3.5 2.9	3.4 2.3 3.0
Unemployment rate ¹ Staff FRB/US EDO Blue Chip	7.4 7.6 7.6 7.3	7.2 7.4 7.5 7.3	6.8 7.7 7.3 6.9	6.6 7.9 7.3 6.8	6.0 7.1 7.1	5.8 7.9 7.1
Total PCE prices Staff FRB/US EDO Blue Chip ²	.9 .9 .9 1.3	1.1 1.0 1.1 1.5	1.3 1.0 1.5 2.0	1.2 .8 1.4 2.0	1.5 .9 1.5	1.4 .8 1.5
Core PCE prices Staff FRB/US EDO Blue Chip	1.3 1.2 1.2	1.2 1.2 1.2	1.6 1.2 1.5	1.5 1.1 1.4	1.7 1.1 1.5	1.6 1.0 1.5
Federal funds rate ¹ Staff FRB/US EDO Blue Chip ³	.1 .1 .7 .1	.1 .1 .4 .1	.1 .1 1.6 .2	.1 .1 1.4 .2	.7 .1 2.3	.8 .1 2.1

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

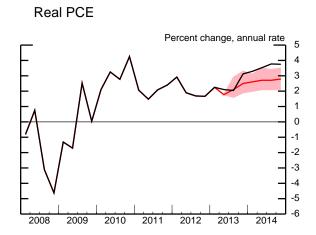
Percent, average for Q4.
 Consumer price index.
 Treasury bill rate.
 Not applicable. The Blue Chip forecast typically extends about 2 years.

Risks & Uncertainty

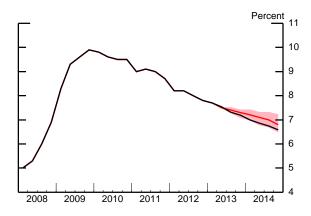
Tealbook Forecast Compared with Blue Chip (Blue Chip survey released September 10, 2013)



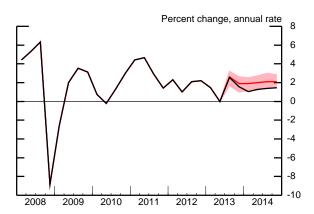
Note: The shaded area represents the area between the Blue Chip top 10 and bottom 10 averages.



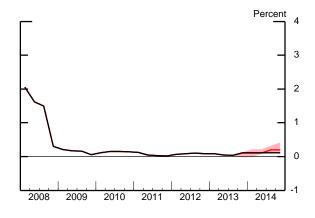
Unemployment Rate



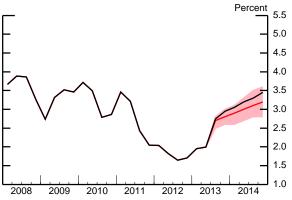
Consumer Price Index



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.

Risks & Uncertainty

Assessment of Key Macroeconomic Risks (1)

Probability of Inflation Events

(4 quarters ahead—2014:Q3)

Probability that the 4-quarter change in total PCE prices will be	Staff	FRB/US	EDO	BVAR
Greater than 3 percent Current Tealbook Previous Tealbook	.02	.01	.06	.04
	.05	.04	.10	.01
Less than 1 percent Current Tealbook Previous Tealbook	.39	.56	.37	.21
	.32	.41	.34	.45

Probability of Unemployment Events

(4 quarters ahead—2014:Q3)

Probability that the unemployment rate will	Staff	FRB/US	EDO	BVAR
Increase by 1 percentage point				
Current Tealbook	.01	.15	.19	.02
Previous Tealbook	.01	.09	.22	.02
Decrease by 1 percentage point				
Current Tealbook	.25	.01	.21	.16
Previous Tealbook	.19	.03	.21	.17

Probability of Near-Term Recession

Probability that real GDP declines in each of 2013:Q4 and 2014:Q1	Staff	FRB/US	EDO	BVAR	Factor Model
Current Tealbook	.02	.08	.04	.05	.09
Previous Tealbook	.02	.04	.05	.09	.16

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.

Greensheets

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

	Nomin	Nominal GDP	Real	Real GDP	PCE pr	PCE price index	Core PCE	Core PCE price index	Unemployment rate ¹	ment rate ¹
	07/24/13	09/11/13	07/24/13	09/11/13	07/24/13	09/11/13	07/24/13	09/11/13	07/24/13	09/11/13
	3.1	2.8 3.7.4	1.1	1.1	1.0	1.1	£.1. 8. 7.	4.8.7	L.C. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	7.7 2.7 8.7
	. 4 . 4.	4.4. 1.1.	3.3	2.7	1.0	1.3	 4.1	1.3	7.7 4.7	7.2
	6.4 6.4 6.5 6.0 7.0	4.4.4.4.2.8.8.8.8	6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.	2.7 3.0 3.4 3.3	1.3 1.3 1.3 1.3	1.0 1.2 1.3 1.3	1.6 1.6 1.6 1.6	1.5 1.5 1.5 1.5	7.2 7.1 6.9 6.8	7.0 6.9 6.7 6.6
	4.00.00 4.00.00 4.00.00	5.0 5.1 5.2 5.0	3.5 3.5 3.5 3.5	8.8.8.8. 4.8.8.8.4.	1.5 1.5 1.5 1.5	4.1.1.4.4.4.4.4.7.1.4.4.4.7.1.1.1.1.1.1.	1.7	1.6 1.6 1.6 1.6	6.6 6.2 6.0 6.0	6.4 6.0 5.8 5.8
<i>Two-quarter</i> ² 2013:Q2 Q4	2.1	3.3	1.4	2.5	¿. 1.	.6 1.6	1.1	1.1	£:-	હું હું
	4.9	4.3	3.3	2.9	1.3	1.1	1.6	1.5	<i>c</i> i. <i>c</i> i.	<i>c</i> i. <i>c</i> i.
	5.3	5.1	3.6	8. 8. 4. 4.	1.5	1.4	1.7	1.6	4.4.	4.4.
Four-quarter ³ 2012:Q4 2013:Q4 2013:Q4 2015:Q4 2015:Q4	8.8.4 8.4.6 8.3.3 8.3.3	3.3.8 3.4.6 5.1.0 5.0	1.7 2.1 3.3 3.6 3.0	2.0 3.3.3 3.4.4 3.2.4	1.6 .9 .9 .1.3 .1.5	1.7 1.1 1.2 1.4 1.6	1.5 1.3 1.6 1.7 1.8	1.7 1.2 1.5 1.6 1.6	e. 4. 6. 8. 7. 8. 7.	6. 6. 8. 7. 8. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7.
	4.0 2.9 4.5 2.2	4.6 4.3 5.0 5.0 5.0	2.2 1.7 3.0 3.5 3.5	2.2 2.2 3.4 4.8	1.1. 1.2. 1.4. 1.4. 1.4. 1.4. 1.4. 1.4.	1.8 1.2 1.2 1.4 1.5	1.2 1.2 1.5 1.7 1.8	1.8 1.4 1.6 1.6	8.1 7.5 7.0 6.3 5.7	8.1 6.8 6.1 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) Greensheets

Q1 Q2 Q3 Q4 Q1 Q3 Q4 Q1 Q3 Q4 Q4 Q1 Q4 Q4 Q1 Q3 Q4 Q4 Q1 Q3 Q4 Q4<		2013	83		2014	14			2015	5					
3.4 3.5 3.5 3.4 3.5 3.5 3.5 3.1 3.4 3.3 3.4 3.7 3.5 3.5 3.5 3.1 3.3 3.6 3.4 3.5 3.6 3.7 4.0 3.8 1.8 3.2 3.8 4.5 4.5 4.6 4.6 4.6 4.5 3.0 4.4 4.6 4.5 4.5 4.6	Q2 Q3 Q4 Q1	Q4	Q1		Q2	63	Q4	Q1	Q2	03	49	20131	20141	20151	20161
3.0 3.4 3.5 3.6 3.7 4.0 3.8 3.7 1.7 3.1 3.6 4.5 4.4 3.8 1.8 3.2 3.8 3.8 3.8 4.5 4.4 4.6 <td>2.9 2.2 2.7 2.7 1.1 2.3 3.3 3.3</td> <td>3.3</td> <td>2.8.</td> <td>~ ~</td> <td>3.3</td> <td>3.3</td> <td>3.3</td> <td>3.4</td> <td>3.5</td> <td>3.5</td> <td>3.5</td> <td>2.3</td> <td>3.1</td> <td>3.4</td> <td>3.2</td>	2.9 2.2 2.7 2.7 1.1 2.3 3.3 3.3	3.3	2.8.	~ ~	3.3	3.3	3.3	3.4	3.5	3.5	3.5	2.3	3.1	3.4	3.2
4.2 4.5 4.5 4.5 4.5 4.6 <td></td> <td>2.5</td> <td>0.0</td> <td>۶: و:</td> <td>3.0</td> <td>3.3</td> <td>3.5</td> <td>3.6</td> <td>3.5</td> <td>3.8</td> <td>3.7</td> <td>1.7</td> <td>3.1</td> <td>3.6</td> <td>3.5</td>		2.5	0.0	۶: و:	3.0	3.3	3.5	3.6	3.5	3.8	3.7	1.7	3.1	3.6	3.5
3.5 3.8 3.8 3.8 3.6 3.6 3.8 3.8 3.7 3.9 <td>2.9 2.3 3.7 2.5 2.8 4.0</td> <td></td> <td></td> <td>3.7</td> <td>4.3 4.3</td> <td>4.4 5.5</td> <td>4.5 5.5</td> <td>4.5</td> <td>4.5</td> <td>4.5</td> <td>4.4. 4.5.</td> <td>2.6</td> <td>4.4 5.4.</td> <td>4.4.</td> <td>3.6</td>	2.9 2.3 3.7 2.5 2.8 4.0			3.7	4.3 4.3	4.4 5.5	4.5 5.5	4.5	4.5	4.5	4.4. 4.5.	2.6	4.4 5.4.	4.4.	3.6
9.1 9.8 9.3 8.8 8.9 8.9 6.9 9.0 8.9 2.8 3.0 2.9 3.1 3.0 2.9 3.0 2.9 3.0 2.9 3.0 3.1 3.2 3.2 3.1 1.6 2.9 3.0 8.9 16.3 16.3 15.3 14.6 13.4 11.2 15.9 15.9 3.0 19.3 16.5 15.3 14.6 13.4 11.2 18.9 16.0 4.7 5.7 5.6 5.3 5.4 5.5 5.1 11.2 18.9 16.0 5.3 6.4 6.0 15.2 15.2 5.1 11.2 18.9 16.0 5.3 6.4 6.0 6.1 14.2 14.2 14.8 5.3 5.3 5.1 5.2 5.1 3.8 4.8 5.3 5.2 5.3 5.1 5.2 5.3 5.1 4.8 5.3 5.3 5.1	2.1 2.0 3.1 1.5 2.6 3.5			3.3	3.5	3.8	3.8	3.8	3.8	3.8	3.7	2.5	3.6	3.8	3.1
16.3 15.9 15.9 15.9 15.9 15.9 15.9 15.9 14.8 14.8 14.8 14.8 4.9 5.6 5.3 5.1 5.2 5.3 2.1 47 5.2 4.7 5.7 5.6 5.3 5.4 5.5 5.3 3.1 48 5.3 5.3 6.4 6.0 5.8 5.9 6.0 6.1 3.0 5.3 5.9 5.5 6.4 6.0 5.8 5.9 6.0 6.1 3.0 5.3 5.9 5.5 6.4 6.0 5.8 5.9 6.0 6.1 3.0 5.3 5.9 5.5 6.4 6.0 5.8 5.9 6.0 6.1 4.8 5.7 6.2 5.5 2.2 2.3 4.2 4.2 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0				7.7 2.8 2.8	9.1 2.8 2.9	9.8 3.0 3.0	9.3 2.9 3.1	8.9 3.0 3.2	8.8 3.1 3.2	8.9 3.0 3.2	8.9 2.9 3.1	6.9 2.6 1.6	9.0 2.9 2.9	8.9 3.0 3.2	6.3 2.5 2.7
4.9 5.6 5.3 5.1 5.2 5.3 3.1 4.8 5.3 4.7 5.7 5.6 6.0 5.8 5.9 6.0 6.1 3.0 5.3 5.9 5.3 6.4 6.0 5.8 5.9 6.0 6.1 3.0 5.3 5.9 5.5 6.9 6.7 6.1 6.4 6.5 6.0 4.8 5.7 6.2 3.5 2.7 2.8 2.9 2.7 2.6 2.8 -1.0 2.7 6.2 4.0 -4.0 6.1 3.2 3.0 1.3 2.7 6.2 4.0 -4.0 -4.0 -4.0 -4.0 -4.0 -4.0 -4.0 4.0 -4.0 -4.0 -4.0 -4.0 -3.7 -4.0 -4.0 -4.0 3.8 4.7 5.3 5.7 6.1 6.4 6.2 3.5 4.4 6.1 -2.1 -1.8 -1.5 </td <td>14.1 2.6 12.0 9.8 4.2 17.3</td> <td>12 17</td> <td></td> <td>14.7 19.2</td> <td>16.3 19.3</td> <td>16.3 19.6</td> <td>15.9</td> <td>15.9 17.8</td> <td>15.3 16.6</td> <td>14.6 15.6</td> <td>13.4</td> <td>10.2</td> <td>15.8 18.9</td> <td>14.8</td> <td>8.9</td>	14.1 2.6 12.0 9.8 4.2 17.3	12 17		14.7 19.2	16.3 19.3	16.3 19.6	15.9	15.9 17.8	15.3 16.6	14.6 15.6	13.4	10.2	15.8 18.9	14.8	8.9
5.3 6.4 6.0 5.8 5.9 6.0 6.1 3.0 5.3 5.9 5.5 6.9 6.1 6.4 6.5 6.0 4.8 5.7 6.2 3.5 2.7 2.8 2.9 2.7 2.6 2.5 -1.0 2.7 2.7 42.9 2.7 2.6 2.5 -1.0 2.7 2.7 40.2 -40.5 -40.5 -40.8 -40.8 -40.4 -38.7 -40.2 -40.8 40.2 -40.5 -40.5 -40.8 -40.5 -40.4 -38.7 -40.2 -40.5 3.8 4.7 5.3 5.7 6.1 64.4 62.3 3.5 44.4 6.1 4.0 4.6 4.3 4.7 6.3 4.5 4.9 2.8 4.4 5.1 -2.1 -1.8 -1.5 9 8 7 5 -2.5 -1.9 7 5 -2.5 -1.9 7 5 -2.5 -1.9 7 7 5 -2.5 -1.9 <td>4.4 3.7 5.1 7.2 3.7 4.0</td> <td></td> <td></td> <td>3.2</td> <td>4.9 7.4</td> <td>5.6</td> <td>5.3</td> <td>5.1</td> <td>5.2</td> <td>5.2</td> <td>5.3</td> <td>2.1</td> <td>7.4 8.4</td> <td>5.2</td> <td>5.0</td>	4.4 3.7 5.1 7.2 3.7 4.0			3.2	4.9 7.4	5.6	5.3	5.1	5.2	5.2	5.3	2.1	7.4 8.4	5.2	5.0
3.5 2.7 2.8 2.9 2.7 2.6 2.5 -1.0 2.7 2.7 2.9 2.8 2.9 2.7 2.6 2.5 3.0 1.3 2.5 3.1 421 -426 -425 -433 -428 -426 -414 -422 428 402 -405 -408 -405 -404 -387 -402 405 3.8 4.7 5.3 5.7 6.1 6.4 6.2 3.5 4.4 6.1 4.0 4.6 4.3 4.7 6.3 4.5 4.9 2.8 4.4 6.1 -2.1 -1.8 -1.5 -9 -8 7 5 4.4 6.1 -2.7 -2.2 -1.9 -1.2 -1.0 3 3 -3.4 -2.1 7 -5.7 -5.1 -4.6 -4.1 -3.9 -3.8 -3.3 -5.8 -5.4 -3.8 -6.3 -5.1 -4.1 -3.9 -3.8 -3.3 -5.8 -5.4 -3.8 <td>3.6</td> <td></td> <td></td> <td>3.6</td> <td>5.3</td> <td>6.9</td> <td>6.0</td> <td>5.8</td> <td>5.9 6.4</td> <td>6.0</td> <td>6.1</td> <td>3.0</td> <td>5.3</td> <td>5.9</td> <td>5.7</td>	3.6			3.6	5.3	6.9	6.0	5.8	5.9 6.4	6.0	6.1	3.0	5.3	5.9	5.7
421 -426 -425 -433 -428 426 -425 -434 -405 -404 -387 -402 428 -4 4.02 -405 -408 -405 -404 -387 -402 405 -4 3.8 4.7 5.3 5.7 6.1 6.4 6.2 3.5 4.4 6.1 5.1 4.0 4.6 4.3 4.7 6.3 4.5 4.9 2.8 4.4 5.1 5.1 -2.1 -1.8 -1.5 9 8 7 5 2.2 -1.9 7 7 -2.7 -2.2 -1.9 -1.2 -1.0 3 3 -3.4 -2.1 7 7 -2.7 -5.1 -4.6 -4.1 -3.9 -3.8 -3.3 -5.4 -3.8 -3.4 -5.1 -7 -7 -5.7 -5.1 -4.6 -4.1 -3.9 -3.8 -3.3 -5.4 -3.8 -3.8 -5.4 -3.8 -6.3 -5.1 -5.2 -3.1 <td>18.1 4.2 5.0 6.6 3.8 3.9</td> <td></td> <td></td> <td>1.8</td> <td>3.5</td> <td>2.7</td> <td>2.8</td> <td>2.9</td> <td>2.7</td> <td>3.2</td> <td>3.0</td> <td>-1.0</td> <td>2.7</td> <td>2.7</td> <td>2.5</td>	18.1 4.2 5.0 6.6 3.8 3.9			1.8	3.5	2.7	2.8	2.9	2.7	3.2	3.0	-1.0	2.7	2.7	2.5
3.8 4.7 5.3 5.7 6.1 6.4 6.2 3.5 4.4 6.1 5.1 4.0 4.6 4.3 4.7 6.3 4.5 4.9 2.8 4.4 6.1 5.1 -2.1 -1.8 -1.5 9 8 7 5 -2.5 -1.9 7 -2.7 -2.2 -1.9 -1.2 -1.0 3 -3 -3.4 -2.1 7 -5.7 -5.1 -4.6 -4.1 -3.9 -3.8 -3.3 -5.8 -5.1 -7 -7 -5.7 -5.1 -4.6 -4.1 -3.9 -3.8 -3.3 -5.8 -5.4 -3.8 -6.3 -5.7 -5.3 -4.7 -4.3 -4.0 -3.4 -6.8 -6.1 -4.1 -4.7 -4.2 -4.3 -3.3 -3.5 -3.1 -3.3 -3.3 -3.3 -5.7 -3.6 -3.1 -1.0 1.1 1.1 1.1 1.1 -2.2 -4.3 -3.3 -7 -3.6<	-420 -406 -408 -393 -381 -388			-416 -399	-421 -402	-426 -405	-425 -402	-425 -405	-433 -408	-428 -405	-426 -404	-414 -387	-422 -402	428 405	-409
-2.1 -1.8 -1.5 9 8 7 5 -2.5 -1.9 7 -2.7 -2.2 -1.9 -1.2 -1.0 3 3 -2.5 -1.9 7 -5.7 -5.1 -4.6 -4.1 -3.9 -3.8 -3.3 -5.8 -5.4 -3.8 -6.3 -5.7 -5.3 -4.7 -4.3 -4.0 -3.4 -6.8 -6.1 -4.1 -4.7 -4.2 -3.6 -3.1 -3.3 -3.5 -3.1 -3.8 -4.7 -4.2 -3.6 -3.1 -3.3 -3.5 -3.1 -3.3 -4.7 -4.2 -3.6 -3.1 1.1 1.1 1.1 -2. -4.3 -3.3 -5.4 -4.2 -4.3 -4.3 -4.1 -4.2 -4.3 -3.3 -7 76 73 62 52 41 73 66 84 84 79 88 88 79 67 44 82 81 13 13 13 2 2 2 19 13 2	8.0 4.9 2.7 6.2 1.6 2.7			4.0 4.7	3.8	4.7	5.3	5.7 4.7	6.1	6.4 4.5	6.2	3.5	4 4 4 4	6.1	7.0
-5.7 -5.1 -4.6 -4.1 -3.9 -3.8 -3.3 -5.8 -5.4 -3.8 -6.3 -5.7 -5.3 -4.7 -4.3 -4.0 -3.4 -6.8 -6.1 -4.1 -4.7 -4.2 -4.3 -4.0 -3.4 -6.8 -6.1 -4.1 -4.7 -4.2 -4.3 -3.3 -3.5 -3.1 -4.2 -4.3 -3.3 3 .3 .4 1.0 1.1 1.1 1.1 2 .3 1.1 1.1 97 97 91 90 91 81 69 64 95 83 75 76 73 62 52 41 73 66 84 84 79 88 88 79 67 44 82 81 13 13 13 13 2 2 2 2 19 13 2				-2.3	-2.1	-1.8	-1.5	9	8	7	δ 	-2.5 -3.4	-1.9	r	1.0
-0.5 -0.5	-6.0			-6.2	-5.7	-5.1	-4.6	4.1	-3.9	-3.8	-3.3	-5.8	-5.4	-3.8	0.0
97 97 91 90 91 81 69 64 95 83 75 76 73 62 52 41 73 66 84 84 79 88 88 79 67 44 82 81 13 13 13 2 2 2 2 19 13 2	-3.2 -5.1 -4.9 -4.5 -6.1 -4.9 -4.0 .1			6.4- 6.8 6.	5.4 5.7.8 5.0	. 4 . 5. 6.	5.5. 4.	-3.1 1.0	-3.3 1.1	-3.5 -3.5 1.1	-3.1	6.4. 2.2.	 	-3.3 1.1	0. 0. 2.
84 84 79 88 88 79 67 44 82 81 13 13 13 2 2 2 2 19 13 2				95	97	97	91	90	91	81	69 52	49 41	95 73	83	51
	39 55 62 20 20 20			80 15	84 13	84 13	79	88	88	79	67	44 61	82	81	48 2

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

2. Previous Tealbook lines for nonresidential private fixed investment and equipment and intangibles reflect the values for business fixed investment and equipment and software, respectively, the most comparable series prior to the comprehensive revision.

3. Billions of chained (2009) dollars; Previous Tealbook lines in billions of chained (2005) dollars.

(Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise noted) Changes in Real Gross Domestic Product and Related Items

Item	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Real GDP Previous Tealbook	1.9	-2.8	5	2.2 4.2	2.0	2.0	2.3	3.1	3.4	3.2
Final sales Previous Tealbook Priv. dom. final purch. Previous Tealbook	2.0 2.4 8	-2.2 -2.6 -4.1 -4.5	4 5 5 8 8	2.0 1.7 3.5 3.2	1.8 1.7 3.0 2.9	2.5 2.1 2.9 2.6	1.7 1.8 2.6 3.0	8 8 4 4 1.2 5 4 4	3.6 3.8 4.4 5.6	3.5
Personal cons. expend. Previous Tealbook Durables Nondurables	5.1. 7.1. 1.1.	-2.0 -2.5 -12.9 -2.7	1	3.1 9.3 3.3	2.0 1.9 5.7	2.0 1.8 7.8 1.6	4.2.2.2.4.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	3.7 3.7 2.9 9.0	8.8.8 8.0.00.6	3.1 6.3 2.5
Residential investment Previous Tealbook	-21.3 -20.7	-24.3 -24.3	0 -10.8 -13.3	-5.2 -5.7	5.6	15.5 14.9	1.0 10.2 11.2	2.3 15.8 18.9	3.2 14.8 16.0	8.9
Nonres. priv. fixed invest. Previous Tealbook¹ Equipment & intangibles Previous Tealbook¹ Nonres. structures Previous Tealbook	7.1 7.9 3.9 3.9 17.1 17.3	-8.9 -9.4 -11.8 -13.6 -1.2	-12.2 -15.7 -6.0 -7.8 -27.1	8.1 7.7 12.0 11.9 -4.0	8.6 10.2 8.7 11.4 8.3 6.9	0.5.0 4.6.8 7.9 8.9 8.9	2.1 3.8 3.0 4.8 1.0	4 4 8 8 8 5 2 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	55 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5.0
Net exports 2 Previous Tealbook 2 Exports Imports	-704 -649 9.8	-547 -495 -2.9 -5.9	-392 -355 -4 -6.2	-463 -420 9.8 11.7	-446 -408 4.6 3.5	-431 -401 2.4 .1	-414 -387 3.5 2.8	-422 -402 4.4 4.4	-428 -405 6.1 5.1	-409 7.0 4.6
Gov't. cons. & invest. Previous Tealbook Federal Defense Nondefense State & local	1.8 1.9 2.7 2.9 1.2	£ 2.8 £ 4.4 £ 4.5 £ 5.5	2.3 4.0 3.9 3.6 1.3	-1.1 -1.3 3.2 2.0 5.5 -4.0	£££ £££ 6.4 8.5 8.5 8.5	-1.1 -1.8 -2.3 -5.0 -2.6 -3.3	2.5. 2.5. 4.8. 5.8. 5.4. 5.2.	1.9 2.1 5.4 4.3 5.4 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5		1.0 .0 .0 .0 .1.5
Change in priv. inventories ² Previous Tealbook ² Nonfarm ² Farm ²	36 28 37 -1	-34 -36 -35	-148 -139 -146 -2	58 51 66 -7	34 31 40 -4	58 43 69 -7	64 41 44 19	95 73 82 13	83 66 81 2	51 48 2

1. Previous Tealbook lines for nonresidential private fixed investment and equipment and intangibles reflect the values for business fixed investment and equipment and software, respectively, the most comparable series prior to the comprehensive revision.

2. Billions of chained (2009) dollars; Previous Tealbook lines in billions of chained (2005) dollars.

Greensheets

Page 87 of 98

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

	1 20161	3.2		3.1	(1	¿. 4. 2.	4.	9.	9.		6.	'		0.0.0.0	'	2.0
	20151	3.6	3.6	3.8 9.9	2.8	7. S. 4.1	ĸi ĸi	<i>6</i> . <i>6</i> .	i o vi	-: -:	0.0.	∞ ∞	77		: ;;	7 77
	20141	3.1	3.1	3.5	2.5	7. 4. 1.3	.s.	6. <i>i</i> .	<i>v</i> i 4	-: -:		 6	4.4.	4 &	0.	-: -: -;
	20131	2.3	1.7	2.2	1.6	٠. 4 ٢	ui ui	ώ 4 [.]	ώ4.	0.0.	0.0.	ĸi ĸi	¿.'.	¿	, vi	ن ش <i>ن</i>
	Q4	3.5 3.5	3.7	3.7	2.5	r. 4. 1 .	ત્રં ત્યં	r. 9.	6. <i>i</i> .	-: -:	0.0.	∞. ∞.	1		. v.	ပ် က်င
15	63	3.5	3.8	3.8	2.6	r. s. 4.	vi vi	9. 9.	6.7.	-: -:	-: -:	8. 7	10.		. 7.	
201	Q2	3.5	3.5	3.8	2.6	7. S. 1.	.s.	9. 9.	6.73	-: -:	2	.8	-:1	6.5.1.	0	 0. 0.
	Q1	3.4	3.6	3.8	2.6	7. 2.1	9. 9.	6. 6.	, vi vi	-: -:	0. 1	∞ ∞.		ώ. ¿i -i -	: ?-	-i 4
	Q4	3.3	3.5	 	2.6	7. 2. 4.1	ત્યં ત્યં	9. 9.	6. c	-: -:	0. 1.	r. r.	<i>&</i> &	6.5.1.0	: 7	o
2014	Q3	3.3	3.3	 	2.6	7. S. 4.1	.s.	r. 9.	6 N	-: -:	7. 7.	9.	έ. <u>4</u> .	4.5.1.0	0.0	0.00
2(Q2	3.3	3.0	3.5	2.4	7. 4. T. S. I. S.	<i>i</i> . 6	6. č	ν; 4 [;]	-: -:	-: -:	5.	4. v.	4.6.1.0	9 0.0	ئىت ن
	Q1	2.7	2.4	3.5	2.3	6. 4. T. S.	4. <i>i</i> .	4. w	w.w.	1.0.	5.5	٠ċ &:	4. č.	ذ: <u></u>	. w.	ט איל
	Q4	2.7	2.5	3.1	2.1	6. 4. T. I. I	4. <i>i</i> .	6 4	, ri wi			4. 4.	¿. 4.	¿	3 47	6 4 0
2013	03	2.2	1.9	1.9	1.4	<i>i i i</i> 4	ΞΞ.	٠ċ 4	u u	-: -:	4.4.	7. 6	5 6	¿	4.0	.i 4: -
	Q2	2.9	2.4	2.4	1.5	れない	4. K.	ئ. ر:	v.	4. 6.	0. 2	1.0	1 7	<u>.</u>	9.	. · ·
	Item	Real GDP Previous Tealbook	Final sales Previous Tealbook	Priv. dom. final purch. Previous Tealbook	Personal cons. expend. Previous Tealbook	Durables Nondurables Services	Residential investment Previous Tealbook	Nonres. priv. fixed invest. Previous Tealbook ²	Equipment & intangibles Previous Tealbook ²	Nonres. structures Previous Tealbook	Net exports $Previous\ Tealbook$	Exports Imports	Gov't. cons. & invest. Previous Tealbook	Federal Defense Nondefense State & Jocal	Change in priv. inventories	Previous Leatbook Nonfarm Farm

^{1.} Change from fourth quarter of previous year to fourth quarter of year indicated.

2. Previous Tealbook lines for nonresidential private fixed investment and equipment and intangibles reflect the values for business fixed investment and equipment and software, respectively, the most comparable series prior to the comprehensive revision.

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

I			2013			2014	4			2015	٧.					
	Item	02	63	49	01	02	63	\$	01	02	63	40	20131	20141	20151	20161
1 9	GDP chain-wt. price index Previous Tealbook	8: O:	1.9	1.3	1.4	1.5	4:1	4:1 4:1	1.6	1.6	1.6	1.6	1.1	4:1	1.6	1.7
Ь	PCE chain-wt. price index Previous Tealbook	0. 1	1.9	1.3	1.0	1.3	1.3	5.1	1.5	1.5	1.5	5:1	1.1	1.2	1.4	1.6
	Energy Previous Tealbook	-11.9	10.6	1.5	-5.4 -2.7	-3.1	-2.1	-1.7	-1.3	-1.7	-1.5	-1.1	-1.1	-3.1 -2.4	-1.4	<i>L</i>
	Food Previous Tealbook	٠ć 4	1.2	∞ 0	9.1.	<i>6</i> . ⊗:	r∵ ⊗:	8. 0.1	1.1	1.3	1.3	4.1.	9. 0.1	r: 8:	1.3	1.4
	Ex. food & energy Previous Tealbook	∞∞	1.5	1.3	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.3	1.5	1.6	1.7
	Ex. food & energy, market based Previous Tealbook	9. 9.	1.5	1.2	1.5	1.5	1.5	5:1	1.6	1.6	1.6	1.6	1.2	1.5	1.6	1.7
	CPI Previous Tealbook	0.0.	2.5	1.5	1.0	1.3	1. 1. 4. 4.	4. 4.	1.6	1.6	1.6	5:1	1.4 1.2	1.3	1.6	1.7
e 89 of 9	Ex. food & energy Previous Tealbook	1.4	1.8	1.6	1.8	1.8	1.8	1.9	2.0	1.9	1.9	1.8	1.7	1.8	1.9	1.9
	ECI, hourly compensation ² Previous Tealbook ²	2.2 4.4	2.5	2.5	2.5	2.5	2.6	2.6	2.7	2.7	2.7	2.7	2.2	2.5	2.7	3.0
Z	Nonfarm business sector Output per hour Previous Tealbook	2.5	2.7	1.1	1.1	1.3	1.6	1.5	4.1	1.6	1.7	1.5	1.1	1.4	1.5	1.8
	Compensation per hour Previous Tealbook	2.3	2.5	2.6	2.7 2.7	2.7	2.8	2.9	3.0	3.1	3.1	3.2	∧i ∞i	2.7	3.1	3.4
	Unit labor costs Previous Tealbook	3.1	-:1	1.5	1.6	1.3	1.2	4:1	1.6	1.5	1.4	1.7	6 4.	1.1	1.6	1.5
O	Core goods imports chain-wt. price index ³ Previous Tealbook ³	-2.5	-2.3	5. 9.	1.1	1.5 4.1	1.8	5:15	1.6	1.5	1.5	1.5	-1.0	1.5	1.5	1.6
ľ	1 Change from formal arrange of association	dimension of account	44000	713 40 40 40.	1000	7										

Change from fourth quarter of previous year to fourth quarter of year indicated.
 Private-industry workers.
 Core goods imports exclude computers, semiconductors, oil, and natural gas.

Greensheets

Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise noted)

	Item 2007 2008		PCE chain-wt. price index Previous Tealbook Energy 19.1 -8.2 19.1 -8.2	5.51 7.4	2.2.2	$ \begin{array}{c c} \text{urket based} & 2.1 \\ \hline 2.1 \end{array} $						Unit labor costs 1.6 3.2 Previous Tealbook 1.1 3.7	Core goods imports chain-wt. price index ² 3.0 3.9 $\frac{3.0}{2.9}$ 3.7
	2009	4 vi	2.1. 2.0 2.4. £.0	-1.8	1.4	1.8	1.5	1.7	1.2	5.4	1.2	-4.0	-1.9
,	2010	1.8	1.3 6.4 6.4		1.0	r: r:	1.2	9. 9.	2.1	1.9	1.6	6.4	2.3
	2011	1.8	2.5	5.1	1.8	1.9	3.3 3.3	2.2	2.2	4. 4.	9.	5.1	4.4 5.5 6.4
	2012	1.8	1.7	2:2	1.7	1.5	1.9	1.9	1.8	<i>e</i> : 6	5.3 4.4	4.4	-: -:
	2013	1.4	1.1 9.	0.4 6. 1	1.3	1.2	1.4	1.7	2.2	1.1	ત્રં ∞ં	6	-1.0
	2014	1.4	1.3	† r. «	1.5	1.5	1.3	1.8	2.5	1.4	2.7	1.4	1.5
	2015	1.6	4. 1. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.		1.6	1.6	1.6	1.9	2.7	1.5	3.1	1.6	1.5
	2016	1.7	1.6	1.4	1.7	1.7	1.7	1.9	3.0	1.8	3.4	1.5	1.6

1. Private-industry workers.
2. Core goods imports exclude computers, semiconductors, oil, and natural gas.

	2016^{1}	2.4	5.3 5.5	5.2	2	3.5	3.7	80.8	1.7	5.0	3.2	6.7	-671 -100	18.6
	20151	2.9	5.8 6.0	5.2	-1.3	0.4	; 4 <u>4</u> ; 5; 4	79.7 80.5	1.5	5.1 4.8 7.8	3.1	5.4 12.4	-639 -129	18.3
	20141	2.3	6.6 6.8	5.3	-2.5	4.6	3.9	78.1 78.6 78.6	1.2	4.6 3.1 3.2	3.4	4.4	-671 -175	18.0
	20131	2.2	7.2 4.7	4.6.	4.6	3.1	5.6	76.5 76.7	1.0	3.7	23.8	3.7	-744 -210	17.7
	Q4	7.	5.8	5.2	-1.3	3.8	2.4.	79.7	1.6	3.2	3.1	4.9	-617	18.3
15	03	∞.	6.0 6.2	5.5	1.5	3.7	3.9	79.3 80.1	1.5	3.2 4.2 4.2	3.2	6.9 12.4	-631 -124	18.2
201	Q 2	7.	6.2 6.4	5.5	-1.9	4. 4 1. 4	. 4. 4 5. 4. 6	78.9 79.7	1.5	5.1 3.3 5.6	3.3	6.4	-644 -130	18.1
	Q1	9.	6.4	5.2	-2.2	4.3 6.4	. 4. 4 . 1. 0	78.5 79.2	1.4	5.0	3.5	3.3	-663 -148	18.0
	Q4	9:	6.6	5.3	-2.5	4.6	3.6	78.1 78.6	1.3	4.8 3.1 7.8	3.4	6.9	-660 -154	18.0
4	Q 3	9:	6.9	5.3	-2.7	4.0	 	77.7	1.3	4.8 3.1 5.2	3.6	6.5	-667	17.9
201	Q2	9.	6.9 7.1	8. 4.	-3.0	5.0	3.9	2.4 4.77 7.77	1.2	4. 5. 8. 5. 8. 5. 5. 8. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	3.7	4.3	-670 -179	17.8
	Q1	s.	7.0	5.3	-3.2	5.9	. 4. 4 . 7. 4	4.4 77.0 77.2	1.1	4.8.6 9.6 9.6	3.9	.1	-690 -200	17.7
	Q4	κi	2; ₇ .	4. c.	-3.8 -3.8	5.6	. 4 ¢	76.5	1.1	4.1 1.0 2.3	2 3 8 8 9 9 9 9	3.5	-758 -205	17.7
2013	Q3	4.	7.3 7.5	4. c.	-3.5 4.1	2.5	122	76.0 76.3	.9 15.8	4.2 5.1 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	3.1	1.3	-711 -206	17.6
	Q2	9.	7.5 7.5	5.5	-3.6 -4.2	4. <i>a</i>	د با د	75.9 76.0	.9 15.5	3.7 7.8 7.8	3.2	16.4 12.4	-653	17.6
	Item	Employment and production Nonfarm payroll employment ²	Unemployment rate ³ Previous Tealbook ³	Natural rate of unemployment ³ Previous Tealbook ³	GDP gap ⁴ Previous Tealbook ⁴	Industrial production ⁵	Manufacturing industr. prod.5	Capacity utilization rate - mfg. ³ Previous Tealbook ³	Housing starts ⁶ Light motor vehicle sales ⁶	Income and saving Nominal GDP ⁵ Real disposable pers. income ⁵ Previous Tealbook ⁵	Personal saving rate ³ Previous Tealbook ³	Corporate profits ⁷ Profit share of GNP ³	Net federal saving ⁸ Net state & local saving ⁸	Gross national saving rate ³ Net national saving rate ³

Greensheets

Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise indicated.
 Change, millions.
 Percent; annual values are for the fourth quarter of the year indicated.
 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.

Greensheets

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

Item	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Employment and production Nonfarm payroll employment ¹ Unemployment rate ² Previous Tealbook ² Natural rate of unemployment ² Provious Tealbook ²	2.1 8.4 8.6 0.0	-2.8 6.9 6.9 5.3	5.5- 9.9 9.9 0.0	8. 6.0 6.0 8. 6.0	2.0 7.88.77 7.88.88	22.7	2 2 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	6.6 6.8 5.3	5.8 6.0 5.2 5.2	4.2 4.3 5.3 5.3 5.3
${ m GDP\ gap}^3$ $Previous\ Tealbook^3$	6. 6.	. 4.4 5.4.3	5.25	-3.9 -4.0	-3.6 -3.6	.3.6 -3.9 -3.9	2. £- 4. £- 8. 8.	-2.5 -2.6	1.3	2
Industrial production ⁴ **Previous Tealbook ⁴ **Manufacturing industr. prod. ⁴ **Previous Tealbook ⁴ Capacity utilization rate - mfg. ² **Previous Tealbook ²	2.9 2.9 7.84 7.84 7.84	-8.9 -8.9 -11.6 -11.6 69.9	-5.5 -5.5 -6.1 -6.1 67.2	6.2 6.2 6.4 72.9 72.9		2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.	3.1 2.6 2.9 76.5 76.7	4.6 3.9 3.9 4.4 78.1 78.6	4.0 4.2 4.2 7.9 7.9 80.8	3.5
Housing starts ⁵ Light motor vehicle sales ⁵	1.4	.9	.6 10.4	.6 11.5	.6	.8 14.4	1.0	1.2	1.5	1.7
Income and saving Nominal GDP ⁴ Real disposable pers. income ⁴ Previous Tealbook ⁴ Personal saving rate ² Provious Tealbook ⁴	4.4 1.2 1.6 2.9 2.9	-1.0 1.1 1.0 6.1	 6 7.7. 7.7.	4 4 6 6 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	3.9 4.1 5.0 7	% 6 % 6 % 6 % 6 % 6 % 6 % 6 % 6 % 6 % 6	3.7. 7.0. 8.8. 8.8.	4.8.8.8.6 4.6.4.6	3.8 3.8 3.6 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	5.0 3.2 3.2
Corporate profits ⁶ Profit share of GNP ²	6.6- 9.9	-30.8 6.9	54.5 10.7	17.0	8.4 12.4	2.7	3.7	4.4	5.4 12.4	6.7
Net federal saving ⁷ Net state & local saving ⁷	-267 -73	-635 -165	-1,250 -272	-1,330	-1,248 -213	-1,110	-744 -210	-671 -175	-639 -129	-671 -100
Gross national saving rate ² Net national saving rate ²	16.3	15.0	14.7	15.2	15.8	16.9	17.7	18.0	18.3	18.6

^{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)

	Q4		677	296	-188	-146	-205	18		$\frac{218}{\hat{\epsilon}}$	-30	70		3,468							-579		-493.1	0.	<u>.</u> .
2015	63		827	889	-62	-53	-28	-35		92	-30	70		3,423	4,034	571	329	3,155	-631	245	-596		-489.0	0.	2
2	Q2		1,019	919	66	108	51	49		69-	-30	70		3,375	4,019	573	332	3,114	-644	247	-612		-482.8	0.	4.
	Q1		699	938	-269	-282	-250	-19		299	-30	70		3,330	3,994	577	334	3,082	-663	249	-636		-485.2	0.	9
	Q4	ted	740	936	-196	9/1-	-219	23		226	-30	70	l rates -	3,270	3,930	580	336	3,013	-660	252	-636		-471.8	0.	4.
14	63	ally adius	765	865	-66	-89	89	-31		129	-30	70	ted annua	3,226	3,893	584 584	339	2.970	L99-	255	-648		-467.4	0.	9
2014	Q2	ot seasons	926	988	69	92	18	.15 52 -31		-39	-30	70	Seasonally adjusted annual rates	3,188	5,859	286 589	343	2.927	-670	259	-657		-460.2	-:1	∞. ∝
	Q1	Ž	638	806	-270	-274	-255	-15		290	10 -30	70	- Season	3,153	3,842	594 594	347	2,902	-690	263	-681		-475.1	·.5	-1.0
	Q4		672	873	-201	-219	-228	27		427	10 -236	80		3,031	3,789	601	351	2.837	-758	268	-756		-552.4	2	-1.0
13	Q3		669	842	-143	911-	-117	-25		63	46 34	68		3,104	5,815	909	355	2.854	-711	276	-718		-509.3	κi	-1.1
2013	Q2 ^a		891	800	91	16	36	55		-17	-56 -18	135		3,164	3,820	616	360	2.844	-656	277	999-		-459.8	-1.1	T
	Q1ª		581	888	-307	-307	-303	4-		336	14 -43	79		2,900	3,733	70 <i>6</i>	363	2,771	-853	273	098-		-649.4	-1.6	-2.0
	2016		3,452	3.894	-442		-444	2		562	0 -120	70		3,532	4,191	568	331	3,291	-659	242	-618		-560.7	ç	1
year	2015		3,254	3.683	-428	-403	-446	18		548	0 -120	70		3,350	3,999	575	333	3,091	-650	248	-620		-482.2	1	4.
Fiscal year	2014		3,032	3.532	-500	-507	-533	33		807	19 -326	70		3,150	3,840	597	345	2,909	969-	261	989-		-488.8	6	<u>r. </u>
	2013		2,786	3,439	-653	-626	-695	42		969	-4 -39	68		2,969	3,794	618	360	2.816	-825	277	-835		-632.0	-2.2	-1.2
	Item	Unified budget	Receipts ¹	Outlays ¹	Surplus/deficit ¹	Previous Tealbook	On-budget	Off-budget	Means of financing:	Borrowing	Cash decrease Other ²	Cash operating balance, end of period	NIPA federal sector	Receipts	Expenditures	Consumption expenditures Defense	Nondefense	Other spending	Current account surplus	Gross investment	Gross saving less gross investment ³	Fiscal indicators ⁴ High-employment (HFB)	surplus/deficit	Change in first, percent of potential GDP	Fiscal impetus (F1), percent of GDP

Page 93 of 98

Greensheets

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

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

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

4. HEB is gross saving less gross investment (NIPA) of the federal government in current dollars, with cyclically sensitive receipts and outlays adjusted to the staff's measure of potential output and the natural rate of unemployment. The sign on Change in HEB, as a percent of nominal potential GDP, is reversed. FI is the weighted difference of discretionary changes in federal spending and taxes in chained (2005) dollars, scaled by real GDP. The FI estimates are calendar year contributions to Q4/Q4 real GDP growth. Also, for FI and the change in HEB and FI are not at annual rates.

a Actual.

Greensheets

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

							Projected	J				
		20	2013			20	2014			20	2015	
Measure and country	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
$Real\ GDP^1$												
Total foreign	1.8	2.1	2.7	3.0	3.2	2.9	3.2	3.3	3.4	3.4	3.5	3.3
Previous Tealbook	2.0	2.2	2.8	3.1	3.2	3.0	3.2	3.3	3.4	3.4	3.5	3.3
Advanced foreign economies	1.4	1.9	1.8	1.9	2.0	1.5	2.0	2.1	2.2	2.3	2.4	2.1
Canada	2.2	1.7	2.5	2.2	2.3	2.4	5.6	5.6	5.6	5.6	2.7	2.6
Japan	4.1	3.8	2.5	3.1	3.8	-2.5	1.1	1.1	1.3	1.5	2.3	-1.0
United Kingdom	1.1	2.9	2.9	2.5	2.3	2.2	2.3	2.5	2.5	2.5	2.6	5.6
Euro area	9	1.2	ĸ.	6:	1.0	1.3	1.4	1.6	1.8	1.9	1.9	2.0
Germany	0.	2.9	1.2	1.6	1.7	1.8	2.0	2.1	2.2	2.4	2.5	2.5
Emerging market economies	2.1	2.3	3.5	4.1	4.3	4.4	4.4	4.4	4.6	4.6	4.6	4.6
Asia	3.6	4.9	4.8	5.3	5.2	5.4	5.5	5.5	5.6	9.6	5.6	5.7
Korea	3.4	4.5	3.4	3.7	3.6	3.8	4.0	4.1	4.2	4.4	4.5	4.6
China	7.0	6.9	7.6	7.9	7.9	7.9	7.8	7.8	7.7	7.7	7.7	7.7
Latin America	9:	4.	2.2	2.9	3.4	3.5	3.4	3.4	3.5	3.5	3.5	3.5
Mexico	Т.	-2.9	2.4	3.1	3.7	3.7	3.5	3.5	3.6	3.6	3.6	3.6
Brazil	2.6	0.9	3.	2.0	2.7	3.0	3.2	3.2	3.5	3.5	3.5	3.5
ć												
Consumer prices ²												
Total foreign	2.2	1.9	5.6	5.6	2.4	3.1	2.5	2.5	2.5	2.5	5.6	3.0
Previous Tealbook	2.3	I.9	2.3	2.3	2.4	3.0	2.5	2.5	2.5	2.5	5.6	3.0
Advanced foreign economies	6.	ίς	1.9	1.5	1.4	2.8	1.4	1.5	1.5	1.5	1.6	2.7
Canada	1.6	0.	1.7	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9
Japan	4	∞i	3.0	9.	9.	8.7	۲.	6.	1.0	1.1	1.2	6.7
United Kingdom	2.3	1.5	2.7	2.7	1.6	1.6	1.7	2.7	1.7	1.7	1.7	2.7
Euro area	7.	9:	1.7	1.5	1.4	1.4	1.4	1.4	1.5	1.5	1.6	1.6
Germany	1.4	7.	1.9	1.8	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8
Emerging market economies	3.3	3.0	3.1	3.4	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Asia	3.3	2.0	3.1	3.2	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.2
Korea	9:	ω	1.8	2.8	3.0	3.0	3.0	3.1	3.2	3.2	3.2	3.1
China	3.2	2.1	2.8	5.9	2.9	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Latin America	3.5	5.4	2.7	4.0	3.8	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Mexico	3.2	5.3	2.1	3.8	3.5	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Brazil	7.0	2.8	4.7	5.7	5.7	9.6	5.4	5.3	5.3	5.3	5.3	5.3

Poreign GDP aggregates calculated using shares of U.S. exports.

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

Greensheets

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

Real GDP ¹ Total foreign Previous Tealbook Advanced foreign economies7 Advanced foreign economies -1.5 Lunited Kingdom -4.8 Euro area Germany -2.1 Germany -3.2 Korea Korea China	8	2009 .9 .9 .1.4 .1.5 .1.5 .2.5 .2.2 .2.2 .2.2 .2.2 .3.9 .9 .9 .9 .9 .9 .9 .9 .9 .9	2010 4.6 4.6 3.0 3.6 3.6 3.6 3.6 4.2 4.2 4.2 6.3 7.8 7.8	3.0 3.0 3.0 1.5 2.4 .1 1.1 7.7	2012 2.2 2.2 2.2 3.4 1.0	2013	2014 20	2015	2016
rn Tealbook d foreign economies tda n ed Kingdom area iermany g market economies	<i>└ ∖ ∖</i> '	6. 8. 1-1. 5. 5. 2-2. 2. 2. 2. 2. 3. 9 8. 0 8. 0 8. 0 8. 0 8. 0 8. 0 8. 0 8	4 4 8 8 8 1 2 4 4 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	3.0 3.0 1.5 2.4 1.1 1.1	2.2 2.2 4. 1.0 0.				
gn Tealbook Sed foreign economies Inda In ed Kingdom Sarea Sermany Ig market economies		6. 8. 1. 4. 4. 4. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	4 4 8 8 8 1 1 4 4 8 5 5 6 6 9 9 8 1 1 1 4 9 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	3.0 3.0 1.5 2.4 2.4 1.1 1.1	2.2. 4. 1.0 0.1 0.0				
foreign economies a Kingdom rea many market economies	V vi — × vi — × vi × vi vi	8. 1.1.5 2.2.2 2.2.2 3.9 8.0 8.0 8.0	4 6 8 8 1 2 4 4 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	3.0 1.5 2.4 2.4 1.1 7.7	2.2 4. 1.0 5. 0.0	2.4	3.1	3.4	3.5
economies	vi — ∞ w — ∞ w ∞ vi w	-1.5 -1.4 -1.4 -2.5 -2.2 -2.2 -2.2 -2.2 -2.3 -2.3 -2.3 -2.3	3.0 3.0 4.2 5.0 5.0 5.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7	2.4 2.4 1.1 7.7	4. 0. E. O	2.5	3.2	3.4	
	- × v - × v × v × v	-1.4 -2.5 -2.2 -2.2 -2.2 -2.2 8.0 6.3 6.3	6 6 1 2 4 4 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	2.4 1.1 2.2 2.2	1.0	1.7	1.9	2.2	2.4
	∞ ~ ~ ∞ ~ ~ ∞ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	5 -2.5 -2.2 -2.2 3.9 8.0 6.3 6.3	8.1.2.4. 8.2.2.8.7.6.8.0.7.9.7.9.7.9.7.9.9.7.9.9.7.9.9.7.9	1.1 7.	w c	2.2	2.5	2.6	2.8
	<i>ω</i> − ∞ <i>ω</i> ∞ <i>α α</i>	-2.5 -2.2 -2.2 3.9 8.0 6.3 -1.3	1.8 2.2 4.2 5.0 7.8 7.0 7.0 7.0	1.1	C	3.4	∞.	1.0	1.2
	8	-2.2 -2.2 3.9 8.0 6.3	254 256 250 250 250 250 250 250 250 250 250 250	.7 2.2	?	2.3	2.3	2.5	2.5
	∞	-2.2 3.9 8.0 6.3	4.2 6.3 7.8 5.0 9.7	2.2	-1.0	4.	1.3	1.9	2.1
	w. ∞. ci a	3.9 8.0 6.3	6.3 7.8 9.7		ĸ.	1.4	1.9	2.4	2.5
	% 7 V	8.0 6.3	7.8 5.0 7.9	4.5	4.2	3.0	4.4	4.6	4.6
	7, 4	6.3	5.0	4.9	5.3	4.6	5.4	5.6	5.6
	9	11 3	6.7	3.4	1.4	3.8	3.9	4.4	4.4
		0:11		8.7	7.8	7.4	7.8	7.7	7.5
Latin America4	4.	-:1	4.7	4.0	3.1	1.3	3.4	3.5	3.5
C	.3	-1.2	4.4	4.1	3.2	9:	3.6	3.6	3.5
Brazil .9	6.	5.3	5.3	1.4	1.4	2.7	3.0	3.5	3.7
Consumer prices ²									
	.3	1.2	3.2	3.4	2.3	2.3	2.6	2.7	2.6
	ε.	1.2	3.2	3.4	2.3	2.2	2.6	2.7	
foreign economies	0.	5.	1.7	2.2	1.3	1.2	1.8	1.8	1.8
Canada 1.8	∞.	∞.	2.2	2.7	6.	1.3	1.8	1.8	2.1
	-:	-2.0	2	£	2	1.0	2.7	2.5	1.5
United Kingdom 3.9	6.	2.2	3.4	4.6	2.6	2.3	1.9	1.9	1.8
	.3	4.	2.0	2.9	2.3	1.1	1.4	1.6	1.7
Germany 1.7	.7	ç.	1.6	2.6	2.0	1.4	1.7	1.8	1.9
Emerging market economies 4.6	9:	2.1	4.3	4.3	3.1	3.2	3.3	3.3	3.3
	.7	1.3	4.3	4.5	2.6	2.9	3.1	3.2	3.2
	.5	2.4	3.2	3.9	1.7	1.4	3.0	3.2	3.2
	.5	9:	4.7	4.6	2.1	2.7	3.0	3.0	3.0
erica	9:	3.9	4.4	4.0	4.3	3.9	3.7	3.7	3.7
0	.2	4.0	4.3	3.5	4.1	3.6	3.4	3.4	3.4
Brazil 6.2	.2	4.2	5.6	6.7	5.6	5.8	5.5	5.3	5.3

 $^1{\rm Foreign}$ GDP aggregates calculated using shares of U.S. exports. $^2{\rm Foreign}$ CPI aggregates calculated using shares of U.S. non-oil imports.

Greensheets

U.S. Current Account
Quarterly Data

		'					Projected	pe				
		2	2013			2	014			7	2015	
	Q1	Q2	Q3	Q4	Q1	Q2	03	Q4	Q1	Q2	Q3	Q4
					Bil	Billions of dollars, s.a.a.r.	ollars, s.a.	a.r.				
U.S. current account balance <i>Previous Tealbook</i>	-420.5 -424.6	-393.4 -429.7	-406.9 -435.6	-438.6 -471.7	-473.3 -520.2	-448.5 -499.7	-474.9 <i>-531.5</i>	-487.7 -547.9	-514.3 -578.7	-494.3 -554.8	-505.9 -572.4	-518.2 -587.8
Current account as percent of GDP Previous Tealbook	-2.5	-2.4 -2.7	-2.4	-2.6	-2.8 -3.1	-2.6	-2.7 -3.1	-2.7	-2.9	-2.7 -3.1	-2.7	-2.8
Net goods & services	-490.5	-471.1	-479.7	-499.7	-505.2	-484.0	-495.6	-504.5	-508.1	-496.3	-497.4	-506.1
Investment income, net Direct. net	215.7	226.2	227.0	206.8	194.4	180.9	169.8	162.5	156.2	147.5	140.5	133.6
Portfolio, net	-66.2	-55.3	-62.4	-82.5	-93.6	-103.0	-112.0	-120.8	-131.4	-143.4	-155.6	-169.1
Other income and transfers, net	-145.7	-148.4	-154.2	-145.7	-162.5	-145.5	-149.1	-145.7	-162.5	-145.5	-149.1	-145.7
				A	Annual Data	ıta						
										Projected-		
	2008		2009	2010	2011		2012	2013	2014	ſ	2015	2016
						Billions	Billions of dollars	s				
U.S. current account balance Previous Tealbook	-681.3 -681.3		.381.6 -381.6	-449.5 -449.5	-457.7		-440.4 -440.4	-414.8 <i>-440.4</i>	-471.1 <i>-524.8</i>		-508.2 -573.4	-527.6
Current account as percent of GDP Previous Tealbook	4.6 4.8		-2.6	-3.0 -3.1	-2.9		-2.7	-2.5	-2.7 -3.1		-2.8 -3.2	-2.7
Net goods & services	-702.3		-383.7	-499.4	-556.8		-534.7	-485.3	-497.3	•	-502.0	-484.3
Investment income, net	157.8		132.3	185.7	240.		232.3	218.9	176.		44.5	107.3
Direct, net	284.3		257.7	288.0	310.6		293.5	285.5	284.3		294.4	315.4
Portfolio, net	-126.5	•	4.5.	-102.3	-69.		-61.2	9.99-	-107.4	•	49.9	-208.1
Other income and transfers, net	-136.9	•	-130.2	-135.8	-141.6	'	.138.0	-148.5	-150.7		-150.7	-150.7

Class I FOMC – Restricted Controlled (FR)

Report to the FOMC on Economic Conditions and Monetary Policy



Book B

Monetary Policy: Strategies and Alternatives

September 12, 2013

Policy Rules and the Staff Projection

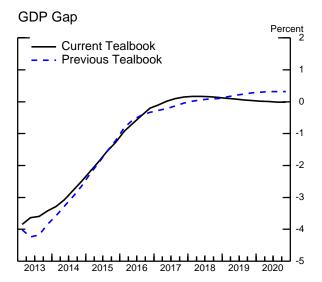
Near-Term Prescriptions of Selected Policy Rules

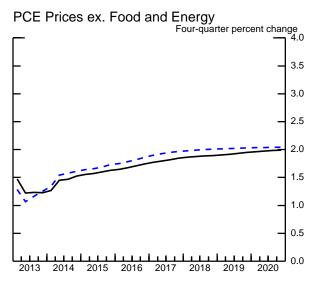
	Constrair	ned Policy	Unconstra	ined Policy
	2013Q4	2014Q1	2013Q4	2014Q1
Taylor (1993) rule	1.18	1.28	1.18	1.28
Previous Tealbook	1.00	1.25	1.00	1.25
Taylor (1999) rule	0.13	0.13	-0.51	-0.33
Previous Tealbook	0.13	0.13	-0.89	-0.50
Inertial Taylor (1999) rule	0.13	0.13	0.03	-0.02
Previous Tealbook outlook	0.13	0.13	-0.03	-0.10
Outcome-based rule	0.13	0.13	0.10	0.08
Previous Tealbook outlook	0.13	0.13	0.11	0.13
First-difference rule	0.25	0.47	0.25	0.47
Previous Tealbook outlook	0.49	0.88	0.49	0.88
Nominal income targeting rule	0.13	0.13	-0.70	-1.32
Previous Tealbook outlook	0.13	0.13	-0.74	-1.32

Memo: Equilibrium and Actual Real Federal Funds Rate

	Current Tealbook	Previous Tealbook
Tealbook-consistent FRB/US r^* estimate Actual real federal funds rate	-1.60 -1.09	−1.57 −0.93

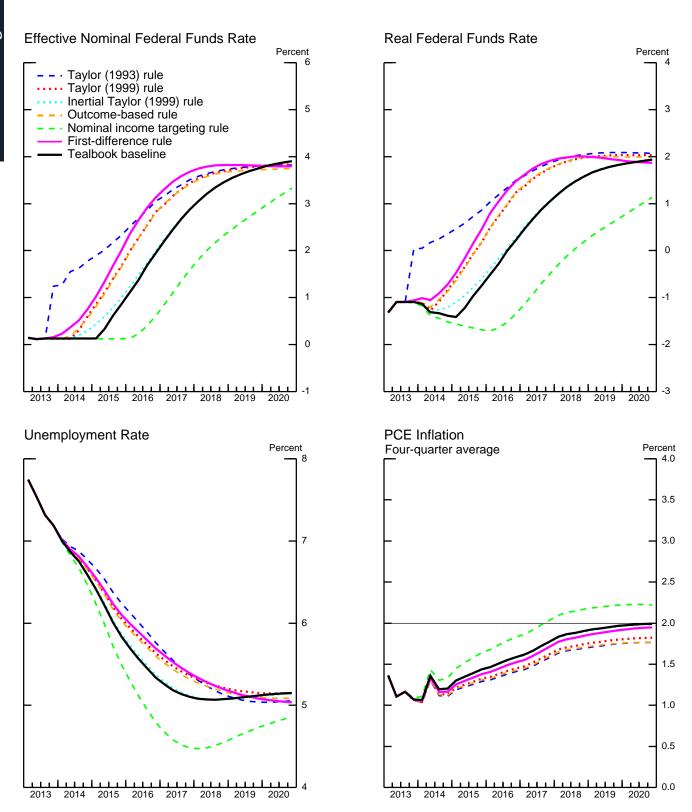
Key Elements of the Staff Projection





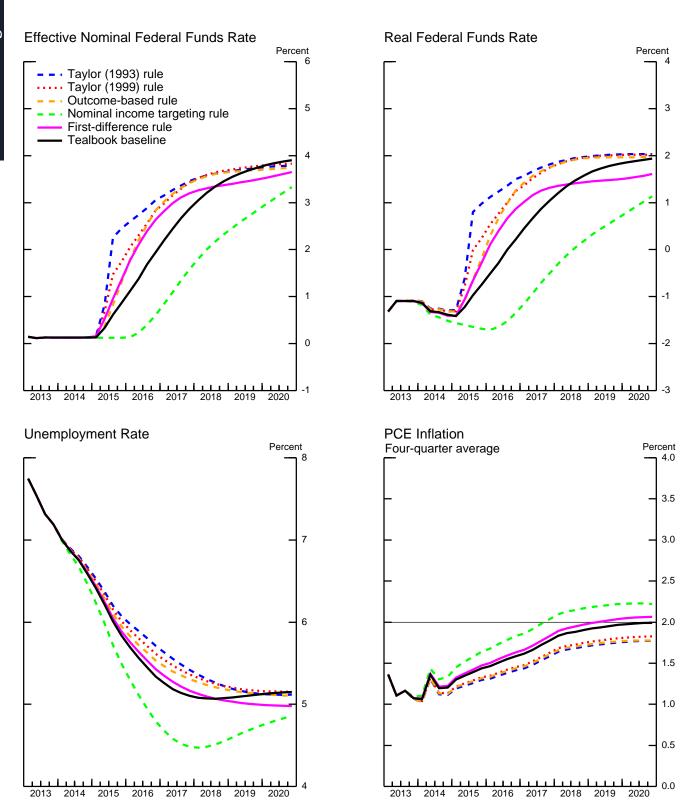
Note: For rules that have the lagged policy rate as a right-hand-side variable, the lines denoted "Previous Tealbook outlook" report rule prescriptions based on the previous Tealbook's staff outlook, but jumping off from the average value for the policy rate thus far in the current quarter.

Policy Rule Simulations without Thresholds



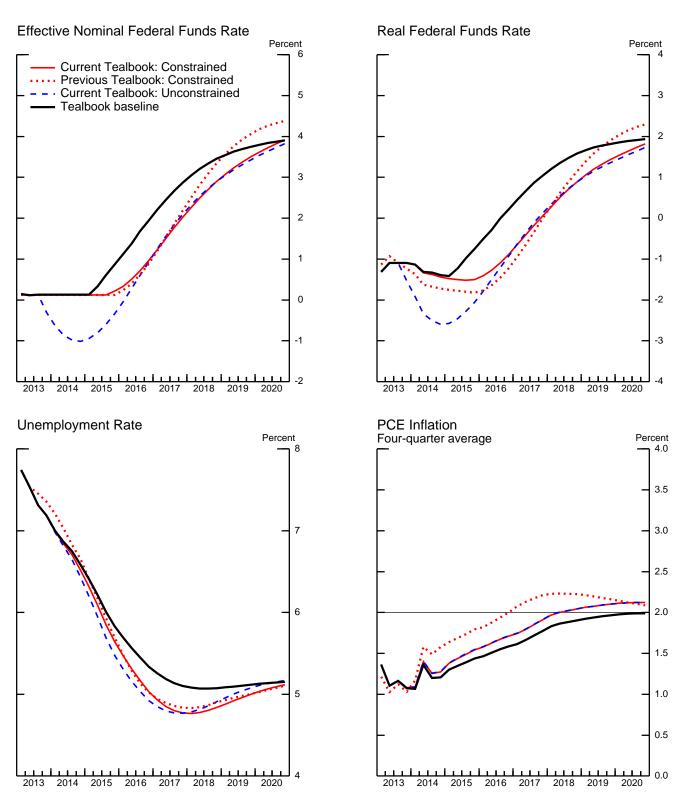
Note: The policy rule simulations in this exhibit are based on rules that respond to core inflation. This choice of rule specification was made in light of the tendency for current and near-term core inflation rates to outperform headline inflation rates as predictors of the medium-term behavior of headline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

Policy Rule Simulations with Thresholds



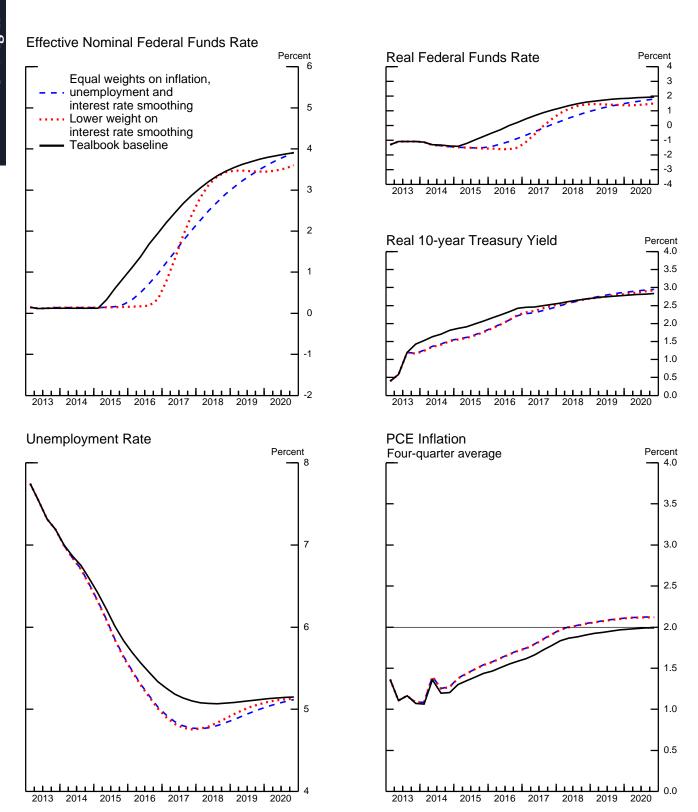
Note: The policy rule simulations in this exhibit are based on rules that respond to core inflation. This choice of rule specification was made in light of the tendency for current and near-term core inflation rates to outperform headline inflation rates as predictors of the medium-term behavior of headline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

Constrained vs. Unconstrained Optimal Control Policy



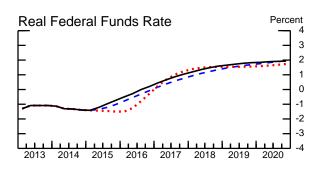
Note: The way policy simulations are generated in FRB/US has changed since June. The paths labeled "Previous Tealbook" in the exhibit have been computed under the new model assumptions, using the June baseline forecast. See footnotes 3 and 8 in the Monetary Policy Strategies text for further details.

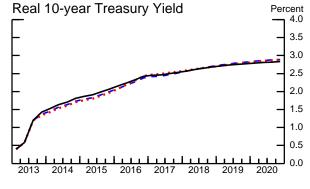
Optimal Control Policy with Lower Weight on Interest Rate Smoothing under Commitment

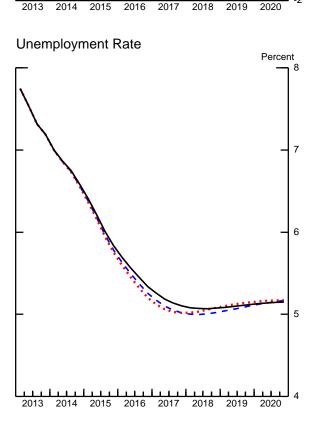


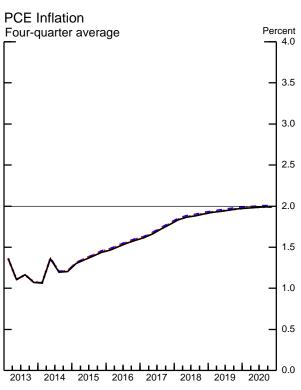
Optimal Control Policy with Lower Weight on Interest Rate Smoothing under Discretion

Equal weights on inflation, --- unemployment and interest rate smoothing --- Tealbook baseline Equal weights on inflation, --- unemployment and interest rate smoothing --- Tealbook baseline 4 --- 0









Outcomes under Alternative Policies without Thresholds

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

Measure and scenario	20	013	2014	2015	2016	2017
	H1	H2				
Real GDP						
Extended Tealbook baseline ¹	2.0	2.5	3.1	3.4	3.2	2.6
Taylor (1993)	2.0	2.5	2.6	3.1	3.3	2.9
Taylor (1999)	2.0	2.5	2.9	3.2	3.1	2.7
Inertial Taylor (1999)	2.0	2.5	3.1	3.4	3.3	2.6
Outcome based	2.0	2.5	2.9	3.2	3.1	2.7
First difference	2.0	2.5	2.8	3.1	3.1	2.7
Nominal income targeting	2.0	2.5	3.5	3.9	3.7	2.8
Constrained optimal control	2.0	2.5	3.3	3.7	3.5	2.6
Unemployment rate ²						
Extended Tealbook baseline ¹	7.5	7.2	6.6	5.8	5.3	5.1
Taylor (1993)	7.5	7.2	6.8	6.2	5.8	5.4
Taylor (1999)	7.5	7.2	6.7	6.1	5.6	5.4
Inertial Taylor (1999)	7.5	7.2	6.6	5.9	5.4	5.1
Outcome based	7.5	7.2	6.6	6.0	5.6	5.3
First difference	7.5	7.2	6.7	6.1	5.7	5.4
Nominal income targeting	7.5	7.2	6.5	5.5	4.8	4.5
Constrained optimal control	7.5	7.2	6.5	5.6	5.0	4.8
Total PCE prices						
Extended Tealbook baseline ¹	0.6	1.6	1.2	1.4	1.6	1.8
Taylor (1993)	0.6	1.6	1.1	1.3	1.4	1.6
Taylor (1999)	0.6	1.6	1.1	1.3	1.5	1.6
Inertial Taylor (1999)	0.6	1.6	1.2	1.4	1.6	1.8
Outcome based	0.6	1.6	1.1	1.3	1.4	1.6
First difference	0.6	1.6	1.2	1.4	1.5	1.7
Nominal income targeting	0.6	1.6	1.3	1.6	1.8	2.0
Constrained optimal control	0.6	1.6	1.3	1.5	1.7	1.9
Core PCE prices						
Extended Tealbook baseline ¹	1.1	1.4	1.5	1.6	1.7	1.8
Taylor (1993)	1.1	1.3	1.4	1.5	1.6	1.7
Taylor (1999)	1.1	1.3	1.5	1.5	1.6	1.7
Inertial Taylor (1999)	1.1	1.4	1.5	1.6	1.7	1.8
Outcome based	1.1	1.3	1.4	1.5	1.6	1.7
First difference	1.1	1.4	1.5	1.6	1.7	1.8
Nominal income targeting	1.1	1.4	1.7	1.8	2.0	2.1
Constrained optimal control	1.1	1.4	1.6	1.7	1.9	2.0
Effective federal funds rate ²						
Extended Tealbook baseline ¹	0.1	0.1	0.1	0.9	1.9	2.9
Taylor (1993)	0.1	1.2	1.8	2.3	3.0	3.5
Taylor (1999)	0.1	0.1	0.6	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	0.6	1.7	2.8	3.4
First difference	0.1	0.2	0.8	2.0	3.1	3.7
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	0.9	2.0

^{1.} Policy in the Tealbook baseline keeps the federal funds rate at its effective lower bound of 12.5 basis points as long as the unemployment rate is above 6.5 percent and projected one-year-ahead inflation is less than 2.5 percent. Once either threshold is crossed, the federal funds rate follows the prescription of the inertial Taylor (1999) rule.

^{2.} Percent, average for the final quarter of the period.

Outcomes under Alternative Policies with Thresholds¹

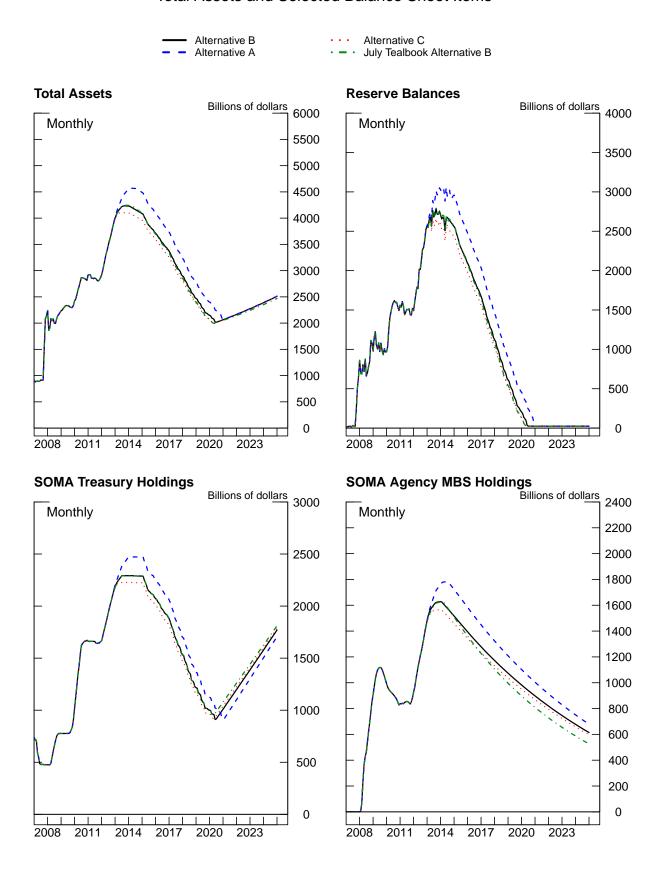
(Percent change, annual rate, from end of preceding period except as noted)

Measure and scenario	20)13	2014	2015	2016	2017
	H1	H2				
Real GDP						
Extended Tealbook baseline ¹	2.0	2.5	3.1	3.4	3.2	2.6
Taylor (1993)	2.0	2.5	2.9	3.1	3.0	2.7
Taylor (1999)	2.0	2.5	2.9	3.2	3.1	2.7
Outcome based	2.0	2.5	3.0	3.3	3.1	2.6
First difference	2.0	2.5	3.1	3.4	3.2	2.7
Nominal income targeting	2.0	2.5	3.5	3.9	3.7	2.8
Constrained optimal control	2.0	2.5	3.3	3.7	3.5	2.6
Unemployment rate ²						
Extended Tealbook baseline ¹	7.5	7.2	6.6	5.8	5.3	5.1
Taylor (1993)	7.5	7.2	6.7	6.1	5.7	5.4
Taylor (1999)	7.5	7.2	6.6	6.0	5.6	5.4
Outcome based	7.5	7.2	6.6	5.9	5.5	5.3
First difference	7.5	7.2	6.6	5.9	5.4	5.2
Nominal income targeting	7.5	7.2	6.5	5.5	4.8	4.5
Constrained optimal control	7.5	7.2	6.5	5.6	5.0	4.8
Total PCE prices						
Extended Tealbook baseline ¹	0.6	1.6	1.2	1.4	1.6	1.8
Taylor (1993)	0.6	1.6	1.1	1.3	1.4	1.6
Taylor (1999)	0.6	1.6	1.1	1.3	1.5	1.6
Outcome based	0.6	1.6	1.1	1.3	1.4	1.6
First difference	0.6	1.6	1.2	1.5	1.6	1.8
Nominal income targeting	0.6	1.6	1.3	1.6	1.8	2.0
Constrained optimal control	0.6	1.6	1.3	1.5	1.7	1.9
Core PCE prices						
Extended Tealbook baseline ¹	1.1	1.4	1.5	1.6	1.7	1.8
Taylor (1993)	1.1	1.3	1.4	1.5	1.6	1.7
Taylor (1999)	1.1	1.4	1.5	1.5	1.6	1.7
Outcome based	1.1	1.3	1.4	1.5	1.6	1.7
First difference	1.1	1.4	1.5	1.7	1.8	1.9
Nominal income targeting	1.1	1.4	1.7	1.8	2.0	2.1
Constrained optimal control	1.1	1.4	1.6	1.7	1.9	2.0
Effective federal funds rate ²						
Extended Tealbook baseline ¹	0.1	0.1	0.1	0.9	1.9	2.9
Taylor (1993)	0.1	0.1	0.1	2.5	3.1	3.5
Taylor (1999)	0.1	0.1	0.1	1.7	2.8	3.4
Outcome based	0.1	0.1	0.1	1.3	2.8	3.4
First difference	0.1	0.1	0.1	1.4	2.6	3.2
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	0.9	2.0

^{1.} With the exception of constrained optimal control, monetary policy is specified to keep the federal funds rate at its effective lower bound of 12.5 basis points as long as the unemployment rate is above 6.5 percent and projected one-year-ahead inflation is less than 2.5 percent. Once either of these thresholds is crossed, the federal funds rate follows the prescriptions of the specified rule. Policy in the Tealbook baseline also uses these threshold conditions and switches to the inertial Taylor (1999) rule once either of these thresholds is crossed.

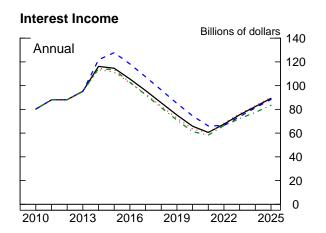
^{2.} Percent, average for the final quarter of the period.

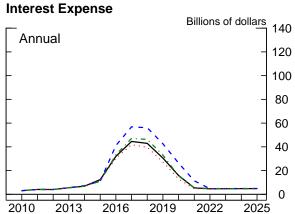
Total Assets and Selected Balance Sheet Items

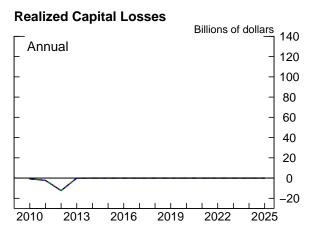


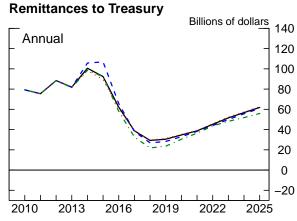
Income Projections

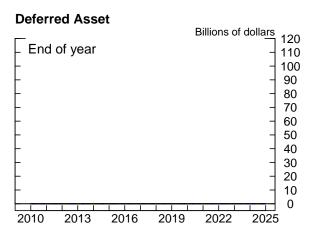


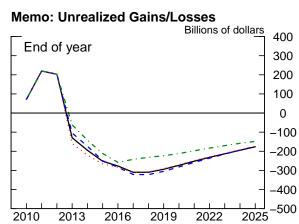












Alternative Projections for the Monetary Base

Per	cent change, and	nual rate; not se	easonally adjus	ted
Date	Alternative B	Alternative C	Alternative A	July Alternative B
Monthly				
2013: May	35.6	35.6	35.6	35.6
Jun	36.3	36.3	36.3	36.3
Jul	33.3	33.3	33.3	50.0
Aug	36.9	36.9	36.9	50.3
Sep	25.5	25.3	25.6	24.6
Oct	24.4	23.2	24.6	21.3
Nov	41.1	38.8	42.0	35.2
Dec	29.4	25.7	31.6	26.8
2014: Jan	9.2	6.0	12.9	8.9
Quarterly				
2013: Q2	38.6	38.6	38.6	38.6
Q3	35.1	35.1	35.1	44.1
Q4	31.1	29.6	31.6	29.6
2014: Q1	20.1	17.0	23.9	18.9
Q2	7.9	3.7	15.6	9.2
Q3	8.6	3.9	17.4	11.6
Q4	1.3	0.9	8.9	-1.2
Annual				
2013	36.6	36.1	36.8	38.9
2014	9.7	6.5	17.5	9.9
2015	-1.5	-1.5	0.1	-1.3
2016	-9.2	-9.4	-7.5	-9.7
2017	-9.8	-10.0	-9.4	-10.2
2018	-14.8	-15.0	-14.1	-15.1
2019	-16.6	-16.8	-16.1	-17.3
2020	-15.6	-15.7	-15.4	-15.9
2021	-7.0	-3.0	-14.5	-3.8
2022	4.8	4.8	0.7	4.1
2023	4.9	4.9	4.9	4.3
2024	4.9	4.9	4.9	4.5
2025	4.9	4.9	4.9	4.6

Note: For years, Q4 to Q4; for historical months and quarters and for projected quarters, calculated from corresponding average levels; for projected months, calculated from corresponding month-end levels.

MONEY

M2 is estimated to have expanded briskly over the third quarter, as investors apparently tilted their portfolios toward safe and liquid assets in M2 amid the sell-off in fixed income markets. We anticipate that M2 will grow more in line with nominal GDP for the remainder of 2013. Beginning in 2014, M2 is projected to grow more slowly than nominal GDP in part because investors are assumed to reallocate a portion of their elevated M2 balances to riskier investments as financial and economic conditions improve; this shift in portfolio composition is expected to persist through the remainder of the forecast horizon. M2 growth is further depressed in 2015 and 2016 as the opportunity cost of holding M2 assets is increased by the assumed rise in short-term market rates.

	-	Aggregate Projections ual rate; seasonally adjusted) ¹
	inge, anni	darrate, seasonary adjusted)
Quarterly		
2013:	Q3	7.9
	Q4	4.9
2014:	Q1	2.7
	Q2	2.1
	Q3	2.4
	Q4	2.5
2015:	Q1	0.4
	Q2	-1.4
	Q3	-1.9
	Q4	-2.2
2016:	Q1	-1.5
	Q2	-1.3
	Q3	-0.7
	Q4	-0.3
Annual		
	2013	5.7
	2014	2.4
	2015	-1.3
	2016	-1.0

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

^{1.} 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.

¹¹ The staff's judgmental forecasts of M2 are constructed using the staff's forecast of nominal income growth and model-based estimates of interest rate effects.

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

Billions of dollars

	Aug 30, 2013	2013	<u>2015</u>	<u>2017</u>	<u>2019</u>	<u>2021</u>	2023	202
Γotal assets	3,649	4,004	4,088	3,373	2,470	2,063	2,273	2,51
Selected assets								
Liquidity programs for financial firms	0	1	0	0	0	0	0	
Primary, secondary, and seasonal credit	0	0	0	0	0	0	0	
Central bank liquidity swaps	0	1	0	0	0	0	0	
Term Asset-Backed Securities Loan Facility (TALF) 1	0	0	0	0	0	0	
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	1	0	0	0	0	0	0	
Securities held outright	3,386	3,730	3,838	3,164	2,293	1,910	2,135	2,38
U.S. Treasury securities	2,028	2,192	2,288	1,881	1,217	1,009	1,387	1,77
Agency debt securities	66	57	33	4	2	2	2	
Agency mortgage-backed securities	1,291	1,480	1,517	1,279	1,074	898	746	61
Net portfolio holdings of TALF LLC	0	0	0	0	0	0	0	
Unamortized premiums	203	216	193	151	117	92	75	6
Unamortized discounts	-5	-9	-9	-7	-6	-4	-4	-
Total other assets	64	65	65	65	65	65	65	6
Total liabilities	3,594	3,949	4,026	3,296	2,372	1,940	2,116	2,31
Selected liabilities								
Federal Reserve notes in circulation	1,165	1,189	1,340	1,496	1,636	1,793	1,970	2,16
Reverse repurchase agreements	95	100	100	100	100	100	100	10
Deposits with Federal Reserve Banks	2,325	2,649	2,575	1,691	628	40	40	4
Reserve balances held by depository institutions	2,267	2,559	2,560	1,676	612	25	25	2
U.S. Treasury, General Account	26	80	5	5	5	5	5	
Other Deposits	32	10	10	10	10	10	10	1
Interest on Federal Reserve Notes due to U.S. Treasury	2	0	0	0	0	0	0	

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

	Aug 30, 2013	2013	2015	<u>2017</u>	<u>2019</u>	2021	2023	202
Fotal assets	3,649	3,975	3,961	3,259	2,381	2,063	2,272	2,51
Selected assets								
Liquidity programs for financial firms	0	1	0	0	0	0	0	
Primary, secondary, and seasonal credit	0	0	0	0	0	0	0	
Central bank liquidity swaps	0	1	0	0	0	0	0	
Term Asset-Backed Securities Loan Facility (TALF)	1	0	0	0	0	0	0	
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	1	0	0	0	0	0	0	
Securities held outright	3,386	3,703	3,715	3,053	2,207	1,911	2,137	2,38
U.S. Treasury securities	2,028	2,172	2,223	1,816	1,167	1,040	1,410	1,78
Agency debt securities	66	57	33	4	2	2	2	
Agency mortgage-backed securities	1,291	1,474	1,459	1,232	1,037	869	724	59
Net portfolio holdings of TALF LLC	0	0	0	0	0	0	0	
Unamortized premiums	203	215	189	148	114	90	74	ϵ
Unamortized discounts	-5	-9	-9	-7	-5	-4	-3	-
Total other assets	64	65	65	65	65	65	65	6
Γotal liabilities	3,594	3,920	3,899	3,182	2,284	1,939	2,116	2,31
Selected liabilities								
Federal Reserve notes in circulation	1,165	1,189	1,340	1,496	1,636	1,793	1,970	2,16
Reverse repurchase agreements	95	100	100	100	100	100	100	10
Deposits with Federal Reserve Banks	2,325	2,620	2,448	1,577	540	40	40	4
Reserve balances held by depository institutions	2,267	2,530	2,433	1,561	524	25	25	2
U.S. Treasury, General Account	26	80	5	5	5	5	5	
Other Deposits	32	10	10	10	10	10	10	
Interest on Federal Reserve Notes due to U.S. Treasury	2	0	0	0	0	0	0	
Fotal capital	55	55	62	77	98	124	156	19

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

	Aug 30, 2013	2013	<u>2015</u>	<u>2017</u>	<u>2019</u>	<u>2021</u>	<u>2023</u>	<u>202:</u>
Total assets	3,649	4,018	4,491	3,737	2,762	2,085	2,276	2,51
Selected assets								
Liquidity programs for financial firms	0	1	0	0	0	0	0	
Primary, secondary, and seasonal credit	0	0	0	0	0	0	0	
Central bank liquidity swaps	0	1	0	0	0	0	0	
Term Asset-Backed Securities Loan Facility (TALF)	1	0	0	0	0	0	0	
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	1	0	0	0	0	0	0	
Securities held outright	3,386	3,741	4,226	3,516	2,576	1,925	2,134	2,38
U.S. Treasury securities	2,028	2,202	2,470	2,062	1,365	918	1,302	1,70
Agency debt securities	66	57	33	4	2	2	2	
Agency mortgage-backed securities	1,291	1,482	1,723	1,449	1,209	1,004	829	67
Net portfolio holdings of TALF LLC	0	0	0	0	0	0	0	
Unamortized premiums	203	218	211	165	128	100	81	6
Unamortized discounts	-5	-8	-11	-9	-7	-6	-4	-
Total other assets	64	65	65	65	65	65	65	6
Total liabilities	3,594	3,963	4,429	3,660	2,664	1,962	2,120	2,31
Selected liabilities								
Federal Reserve notes in circulation	1,165	1,189	1,340	1,496	1,637	1,794	1,972	2,16
Reverse repurchase agreements	95	100	100	100	100	100	100	10
Deposits with Federal Reserve Banks	2,325	2,664	2,976	2,052	917	59	40	4
Reserve balances held by depository institutions	2,267	2,573	2,960	2,037	902	44	25	2
U.S. Treasury, General Account	26	80	5	5	5	5	5	
Other Deposits	32	10	10	10	10	10	10	1
Interest on Federal Reserve Notes due to U.S. Treasury	2	0	0	0	0	0	0	
Total capital	55	55	62	77	98	124	156	19

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	July Alternative B							
Basis Points											
Quarterly Averages											
2013: Q3	-121	-116	-134	-125							
Q4	-117	-112	-131	-121							
2014: Q1	-112	-107	-127	-116							
Q2	-107	-102	-123	-111							
Q3	-102	-97	-118	-106							
Q4	-97	-93	-112	-100							
2015: Q1	-92	-88	-107	-95							
Q2	-87	-83	-102	-90							
Q3	-83	-78	-96	-85							
Q4	-78	-74	-91	-80							
2016: Q4	-62	-59	-73	-63							
2017: Q4	–49	-46	-58	-49							
2018: Q4	-38	-36	-45	-39							
2019: Q4	-30	-28	-35	-30							
2020: Q4	-23	-22	-27	-24							
2021: Q4	-18	-18	-21	-19							
2022: Q4	-15	-14	-17	-16							
2023: Q4	-11	-11	-13	-13							
2024: Q4	-8	-8	-10	_9							
2025: Q4	-6	-6	-7	- 7							