Board of Governors of the Federal Reserve System

The Federal Reserve, the central bank of the United States, provides the nation with a safe, flexible, and stable monetary and financial system.

Accessible Material

September 2012 Tealbook Tables and Charts

Table of Contents

Last update: January 5, 2018

BOARD OF GOVERNORS *of the* FEDERAL RESERVE SYSTEM
20th Street and Constitution Avenue N.W., Washington, DC 20551

Accessible Material

September 2012 Tealbook A Tables and Charts†

Domestic Economic Developments and Outlook

[Box:] Revisions to the Staff Projection since the Previous SEP

Staff Economic Projections Compared with the June Tealbook

Variable	2012 H1	2012 H2	2012	2013	2014	2015	Longer run
Real GDP[1]	1.8	1.5	1.6	2.4	3.2	3.6	2.5
June Tealbook	1.8	1.9	1.9	2.2	3.1		2.5
Unemployment rate[2]	8.2	8.3	8.3	8.0	7.6	6.7	5.2
June Tealbook	8.2	8.2	8.2	8.0	7.7		5.2
PCE inflation[1]	1.6	1.8	1.7	1.4	1.4	1.5	2.0
June Tealbook	1.5	.8	1.2	1.5	1.5		2.0
Core PCE inflation[1]	2.0	1.4	1.7	1.6	1.6	1.7	n.a.
June Tealbook	1.9	1.5	1.7	1.6	1.6		n.a.
Federal funds rate[2]	.15	.13	.13	.13	.65	2.06	4.25
June Tealbook	.15	.13	.13	.13	.50		4.25
Memo:							
Federal funds rate, end of period	.13	.13	.13	.13	.75	2.25	4.25
June Tealbook	.13	.13	.13	.13	.50		4.25

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

2. Percent, final quarter of period indicated. Return to table

n.a. Not available. Return to table

Key Background Factors underlying the Baseline Staff Projection

Figure: Federal Funds Rate

Line chart, by percent, 2007 to 2014. Data are quarterly average. There are three series, Current Tealbook, Previous Tealbook, and Market, expected rate. Current Tealbook begins in 2007 at about 5.15 and generally decreases to about 0.15 by 2009. It remains relatively constant here until mid-2014 when it increases to about 0.6. Previous Tealbook generally follows the same path as Current Tealbook until mid-2014 when it begins increasing at a slower rate. It ends in 2014 at about 0.25. Market, expected rate generally follows the same path as Current Tealbook until about mid-2014 when it begins increasing at a slower rate. It ends in 2014 at about 0.25.

Figure: Long-Term Interest Rates

Line chart, by percent, 2007 to 2014. Data are quarterly average. There are six series, Current BBB corporate yield, Previous BBB corporate yield, Current Conforming mortgage rate, Previous Conforming mortgage rate, Current 10-year Treasury yield, and Previous 10-year Treasury yield. Current BBB corporate yield begins in 2007 at about 6.1 and generally increases to about 9.4 by 2009. It generally decreases to about 4.2 by 2012 and then increases to about 5.25 by 2014. Previous BBB corporate yield generally follows the same path as Current BBB corporate yield. Current Conforming mortgage rate begins in 2007 at about 5.1 and generally decreases to about 3.7 by 2012. It then generally increases to about 5.1 by 2014. Previous Conforming mortgage rate generally follows the same path as Current Conforming mortgage rate. Current 10-year Treasury yield begins in 2007 at about 4.9 and generally decreases to about 1.5 by 2012. It then generally increases to about 3.8 by 2014. Previous 10-year Treasury yield generally follows the same path as Current 10-year Treasury yield.

Figure: Equity Prices

Line chart, by ratio scale where 2007:Q1 = 100, 2007 to 2014. Data are quarter-end. There are two series, Current Dow Jones U.S. Total Stock Market Index and Previous Dow Jones U.S. Total Stock Market Index. Current Dow Jones U.S. Total Stock Market Index begins in 2007 at about 100 and generally decreases to about 55 by 2009. It then generally increases to about 122 by 2014. Previous Dow Jones U.S. Total Stock Market Index generally follows the same path as Current Dow Jones U.S. Total Stock Market Index until 2012 when it begins increasing at a slower rate. It ends in 2014 at about 120.

Figure: House Prices

Line chart, by ratio scale where 2007:Q1 = 100, 2007 to 2014. Data are quarterly. There are two series, Current CoreLogic index and Previous CoreLogic index. Current CoreLogic index begins in 2007 at about 100 and generally decreases to about 68 by 2011. It then generally increases to about 76 by 2014. Previous CoreLogic Index generally follows the same path as Current CoreLogic index until 2012 when it begins increasing at a slower rate. It ends in 2014 at about 75.

Figure: Crude Oil Prices

Line chart, by dollars per barrel, 2007 to 2014. Data are quarterly average. There are four series, Current Imported oil, Previous Imported oil, Current West Texas Intermediate, and Previous West Texas Intermediate. Current Imported oil begins in 2007 at about 59 and generally increases to about 118 by 2008. It decreases to about 42 by 2009 and then generally increases to about 116 by 2012. It then generally decreases to about 95 by 2014. Previous Imported oil generally follows the same path as Current Imported oil until 2012 when it begins decreasing at a faster rate. It ends in 2014 at about 83. Current West Texas Intermediate begins in 2007 at about 59 and increases to about 123 by 2008. It decreases to about 42 by 2009 and then generally increases to about 103 by 2012. It then generally decreases to about 90 by 2014. Previous West Texas Intermediate generally follows the same path as Current West Texas Intermediate until 2012 when it begins decreasing at a faster rate. It ends in 2014 at about 81.

Figure: Broad Real Dollar

Line chart, by ratio scale where 2007:Q1 = 100, 2007 to 2014. Data are quarterly average. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 2007 at about 100 and generally decreases to about 88 by 2008. It increases to about 101 by 2009 and then generally decreases to about 85 by 2014. Previous Tealbook generally follows the same path as Current Tealbook.

Note: Blue shading represents the projection period, which begins in 2012:Q3.

[Box:] Effects of the European Situation on the U.S. Outlook

Figure: Euro-Area GDP

Line chart, by ratio where 2011:Q2 = 100, 2011 to 2013. There are two series, Current data/forecast and June 2011 Tealbook. Current data/forecast begins in 2011 at about 100 and generally decreases to about 99 by 2013. June 2011 Tealbook begins in 2011 at about 100 and generally increases to about 105 by 2013.

Note: Blue shading represents the projection period, which begins in 2012:Q3.

Source: Haver Analytics, staff calculation, and staff projection.

Figure: Broad Nominal Exchange Rate

Line chart, by ratio where 2011:Q2 = 100, 2011 to 2013. There are two series, Current data/forecast and June 2011 Tealbook. Current data/forecast begins in 2011 at about 100 and generally increases to about 106 by 2012. It then generally increases to about 104.5 by 2013. June 2011 Tealbook begins in 2011 at about 100 and generally decreases to about 96 by 2013.

Note: Blue shading represents the projection period, which begins in 2012:Q3.

Source: Staff calculation and staff projection.

Aggregate Effects of European Crisis on U.S. Economic Activity

(percentage point changes)

	2011	2012	2013
1. Real GDP (Q4/Q4)	-.2	-.8	-.7
Contributions to Q4/Q4 change in real GDP:[a]			
2. Exchange rate	-.1	-.5	-.5
3. Euro area GDP	-.1	-.1	-.1
4. Rest of world GDP spillovers	-.1	-.1	-.1
5. Domestic asset prices	.0	-.1	.0
6. Unemployment rate (Q4 level)	.1	.4	.8
7. PCE inflation (Q4/Q4)	-.1	-.1	-.1

a. Contributions include estimated general equilibrium effects. Contributions may not add to the total because of rounding. Return to table

Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

Measure	2012:Q2 Previous Tealbook	2012:Q2 Current Tealbook	2012:Q3 Previous Tealbook	2012:Q3 Current Tealbook	2012:Q4 Previous Tealbook	2012:Q4 Current Tealbook
Real GDP	**1.0**	**1.7**	**1.5**	**1.3**	**1.8**	**1.7**
Private domestic final purchases	1.8	2.0	2.2	2.1	2.5	2.2
Personal consumption expenditures	1.1	1.7	2.1	2.3	2.4	2.2
Residential investment	8.9	8.4	12.3	9.7	3.3	5.5
Business fixed investment	5.1	3.1	.6	-1.0	3.1	1.5
Government purchases	-3.0	-.7	-1.4	-1.7	-1.4	-1.1
Contributions to change in real GDP						
Inventory investment[1]	.0	-.2	.3	-.1	.3	.2
Net exports[1]	.0	.3	-.4	.0	-.4	-.2
Unemployment Rate[2]	**8.2**	**8.2**	**8.3**	**8.3**	**8.3**	**8.3**
PCE Chain Price Index	**.8**	**.7**	**.8**	**1.9**	**1.5**	**1.7**
Ex. food and energy	1.8	1.8	1.6	1.3	1.5	1.5

1. Percentage points. Return to table

2. Percent. Return to table

Recent Nonfinancial Developments (1)

Figure: Real GDP and GDI

Line chart, by 4-quarter percent change, 2003 to 2012. There is a horizontal line at zero. There are two series, Gross domestic product and Gross domestic income. Gross domestic product begins in 2003 at about 1.8 and generally increases to about 4 by 2004. It generally decreases to about -4.3 by 2009 and then increases to about 2.1 by 2012:Q2. Gross domestic income begins in 2003 at about 1.6 and generally increases to about 4 by 2006. It generally decreases to about -5 by 2009 and then increases to about 4 by 2010. It then decreases to about 2 by 2012.

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

Figure: Change in Private Payroll Employment

Line chart, by thousands of employees, 2003 to 2012. There are two series, Current Tealbook and 3-month moving average. Current Tealbook begins in 2003 at about 10 and generally increases to about 380 by 2006. It generally decreases to about -875 by 2009 and then generally increases to about 195 by 2012. 3-month moving average begins in 2003 at about -5 and generally increases to about 300 by 2006. It generally decreases to about -775 by 2009 and then generally increases to about 100 by 2012.

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

Figure: Unemployment Rate

Line chart, by percent, 2003 to 2012. The series begins in 2003 at about 5.95 and generally decreases to about 4.5 by 2006. It generally increases to about 10 by 2009 and then generally decreases to about 8.1 by July 2012.

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

Figure: Manufacturing IP excluding Motor Vehicles and Parts

Line chart, by 3-month percent change, annual rate, 2003 to 2012. There is a horizontal line at zero. The series begins in 2003 at about 0.1 and generally decreases to about -25 by 2009. It generally increases to about 14 by 2010 and then generally decreases to about 0.1 by 2012.

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

[Box:] The Labor Force Participation Rate

Figure: Labor Force Participation Rate Forecast and Trend

Line chart, by percent, 2007 to 2014. There are two series, Actual and staff forecast and Staff trend. Actual and staff forecast begins in 2007 at about 65.99 and generally decreases to about 63.7 by 2012 where it remains relatively constant until 2014. Staff trend begins in 2007 at about 65.55 and generally decreases to about 63.8 by 2014.

Note: Adjusted for revisions to population controls. Green shading represents the projection period, which begins in 2012:Q3.

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

Figure: Labor Force Participation Rate by Age Category

Line chart, by percent, 2007 to 2012. There are three series, Ages 16-24, Ages 25-54, and Ages 55+. Ages 16-24 begins in 2007 at about 59.9 and generally decrease to about 53 by 2010 where it remains relatively constant until 2012. Ages 25-54 begins in 2007 at about 82 and generally decreases to about 81.6 by 2012. Ages 55+ begins in 2007 at about 38 and generally increases to about 41 by 2012.

Note: Adjusted for revision to population controls.

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

Figure: Unemployment Rate and Potential Worker Rate

Line chart, by percent, 2007 to 2012. There are three series, Potential worker rate, U-5, and Unemployment rate. Potential worker rate begins in 2007 at about 7.2 and generally increases to about 13.2 by 2009. It then generally decreases to about 11.9 by 2012. U-5 begins in 2007 at about 5.7 and generally increases to about 11 by 2009. It then generally decreases to about 9.8 by 2012. Unemployment rate begins in 2007 at about 4.4 and generally increases to about 9.8 by 2009. It then generally decreases to about 8.1 by 2012.

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

Recent Nonfinancial Developments (2)

Figure: Production of Light Motor Vehicles

Line chart, by millions of units, annual rate, 2003 to 2012. The series begins in 2004 at about 12.7 and generally decreases to about 3.75 by 2009. It then generally increases to about 10.8 by July 2012.

Source: Ward's Auto Infobank.

Figure: Sales of Light Motor Vehicles

Line chart, by millions of units, annual rate, 2003 to 2012. The series begins in 2003 at about 16.2 and generally decreases to about 9 by 2009. It then generally increases to about 14.8 by August 2012.

Source: Ward's Auto Infobank.

Figure: Real PCE Goods excluding Motor Vehicles

Line chart, by billions of chained (2005) dollars, 2003 to 2012. The series begins in 2003 at about 2400 and generally increases to about 2950 by 2007. It generally decreases to about 1800 by 2009 and then generally increases to about 3100 by July 2012.

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

Figure: Single-Family Housing Starts

Line chart, by thousands of units, annual rate, 2003 to 2012. There are two series, Starts and Adjusted permits. Starts begins in 2003 at about 1520 and generally increases to about 1800 by 2005. It generally decreases to about 400 by 2009 and then increases to about 550 by July 2012. Adjusted permits generally follows the same path as Starts.

Note: Adjusted permits equal permits plus starts outside of permit-issuing areas.

Source: U.S. Census Bureau.

Figure: Single-Family Home Sales

Line chart, by thousands of units, annual rate, 2003 to 2012. There are two series, New and Existing. New begins in 2003 at about 1050 and generally increases to about 1350 by 2005. It then generally decreases to about 380 by July 2012. Existing begins in 2003 at about 5400 and generally increases to about 6400 by 2005. It generally decreases to about 3000 by 2010 and then generally increases to about 3750 by July 2012.

Source: For existing, National Association of Realtors; for new, U.S. Census Bureau.

Figure: Nondefense Capital Goods excluding Aircraft

Line chart, by billions of dollars, 2003 to 2012. There are two series, Orders and Shipments. Orders begins in 2003 at about 49.5 and generally increases to about 70 by 2008. It generally decreases to about 45 by 2009 and then generally increases to about 61 by July 2012. Shipments begins in 2003 at about 49.5 and generally increases to about 66 by 2008. It generally decreases to about 52 by 2009 and then generally increases to about 65 by July 2012.

Source: U.S. Census Bureau.

Recent Nonfinancial Developments (3)

Figure: Nonresidential Construction Put in Place

Line chart, by billions of chained (2005) dollars, 2003 to 2012. The series begins in 2003 at about 225 and generally increases to about 410 by 2008. It generally decreases to about 225 by 2011 and then generally increases to about 299 by July 2012.

Source: U.S. Census Bureau.

Figure: Inventory Ratios excluding Motor Vehicles

Line chart, by months, 2003 to 2012. There are two series, Staff flow-of-goods system and Census book-value system. Staff flow-of-goods system begins in 2003 at about 1.6 and generally decreases to about 1.5 by 2008. It generally increases to about 1.63 by 2009 and then generally decreases to about 1.5 by July 2012. Census book-value data begins in 2003 at about 1.3 and generally decreases to about 1.2 by 2008. It generally increases to about 1.4 by 2009 and then generally decreases to about 1.23 by June 2012.

Note: Flow-of-goods system covers total industry excluding motor vehicles and parts, and inventories are relative to consumption. Census data cover manufacturing and trade excluding motor vehicles and parts, and inventories are relative to sales.

Source: U.S. Census Bureau; staff calculation.

Figure: Defense Spending

Line chart, by billions of chained (2005) dollars, 2003 to 2012. There are two series, Unified (monthly) and NIPA (quarterly). Unified (monthly) begins in 2003 at about 451 and generally increases to about 685 by 2012. It then generally decreases to about 590 by July 2012. NIPA (quarterly) begins in 2003 at about 450 and generally increases to about 650 by 2010. It then generally decreases to about 590 by 2012:Q2.

Note: The unified series is seasonally adjusted and deflated by BEA prices. The NIPA series excludes the consumption of fixed capital.

Source: *Monthly Treasury Statement*; U.S. Department of Commerce, Bureau of Economic Analysis.

Figure: Exports and Non-Oil Imports

Line chart, by billions of dollars, 2003 to 2012. There are two series, Non-oil imports and Exports. Non-oil imports begins in 2003 at about 110 and generally increases to about 180 by 2008. It generally decreases to about 130 by 2009 and then generally increases to about 198 by June 2012. Exports begins in 2003 at about 81 and generally increases to about 165 by 2008. It decreases to about 125 by 2009 and then generally increases to about 185 by June 2012.

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

Figure: Total PCE Prices

Line chart, by percent, 2003 to 2012. There is a horizontal line at zero. There are two series, 12-month change and 3-month change. 12-month change begins in 2003 at about 2 and generally increases to about 4 by 2008. It generally decreases to about -1 by 2009 and then generally increases to about 1.8 by July 2012. 3-month change begins in 2003 at about 2 and generally increases to about 8 by 2005. It generally decreases to about -9 by 2008 and then increases to about 4 by 2011. It then generally decreases to about -0.1 by July 2012.

Note: 3-month changes are at an annual rate.

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

Figure: PCE Prices excluding Food and Energy

Line chart, by percent, 2003 to 2012. There are two series, 12-month change and 3-month change. 12-month change begins in 2003 at about 1.8 and generally increases to about 3.5 by 2006. It generally decreases to about 1.1 by 2011 and then generally increases to about 1.75 by July 2012. 3-month change begins in 2003 at about 0.9 and generally increases to about 3.3 by 2007. It generally decreases to about 0.3 by 2010 and then generally increases to about 1.4 by July 2012.

Note: 3-month changes are at an annual rate.

Source: U.S. Department 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	2011	2012 H1	2012 H2	2013	2014
Real GDP	**2.0**	**1.8**	**1.5**	**2.4**	**3.2**
Previous Tealbook	1.6	1.4	1.6	2.1	3.2
Final sales	1.7	2.1	1.4	2.1	3.1
Previous Tealbook	1.5	1.4	1.3	1.8	3.0
Personal consumption expenditures	1.9	2.1	2.3	2.4	3.4
Previous Tealbook	1.6	1.8	2.3	2.2	3.3
Residential investment	3.9	14.3	7.6	11.9	12.4

Previous Tealbook	3.5	14.3	7.7	10.0	11.2
Nonresidential structures	6.9	6.5	-2.3	2.2	2.2
Previous Tealbook	4.4	1.2	-.6	.8	1.6
Equipment and software	11.4	4.8	1.3	5.1	7.2
Previous Tealbook	9.6	5.2	2.7	4.6	6.7
Federal purchases	-4.2	-2.2	-2.8	-4.2	-4.3
Previous Tealbook	-3.2	-5.2	-2.5	-4.1	-4.2
State and local purchases	-2.7	-1.6	-.5	.3	.9
Previous Tealbook	-2.5	-2.3	-.6	.4	1.3
Exports	4.3	5.2	3.3	4.5	5.7
Previous Tealbook	4.7	4.3	3.2	3.7	5.6
Imports	3.5	3.0	3.3	4.2	4.8
Previous Tealbook	3.6	3.0	4.8	4.1	4.7
	Contributions to change in real GDP (percentage points)				
Inventory change	.3	-.3	.0	.3	.1
Previous Tealbook	.1	.1	.3	.3	.2
Net exports	.0	.2	-.1	-.1	.0
Previous Tealbook	.0	.1	-.4	-.2	-.1

Figure: Real GDP

Line chart, by 4-quarter percent change, 1984 to 2014. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1984 at about 8.3 and generally decreases to about -0.75 by 1991. It generally increases to about 6 by 2000 and then generally decreases to about -4.3 by 2009. It then generally increases to about 3.4 by 2014. Previous Tealbook generally follows the same path as Current Tealbook.

Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research: July 1990-March 1991, March 2001-November 2001, and December 2007-June 2009. Blue shading represents the projection period, which begins in 2012:Q2.

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

Components of Final Demand

Figure: Personal Consumption Expenditures

Line chart, by 4-quarter percent change, 2007 to 2014. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 2007 at about 2.9 and generally decreases to about -3.1 by 2009. It generally increases to about 3 by 2010 and then decreases to about 2 by 2011. It then generally increases to about 3.3 by 2014. Previous Tealbook generally follows the same path as Current Tealbook.

Figure: Residential Investment

Line chart, by 4-quarter percent change, 2007 to 2014. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 2007 at about -19 and generally decreases to about -28 by 2009. It generally increase to about 5 by 2010 and then decreases to about -7.5 by 2011. It then generally increases to about 12.5 by 2014. Previous Tealbook generally follows the same path as Current Tealbook and ends in 2014 at about 12.

Figure: Equipment and Software

Line chart, by 4-quarter percent change, 2007 to 2014. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 2007 at about 3 and generally decreases to about -20 by 2009. It generally increases to about 10 by 2011 and then decreases to about 2 by 2013. It then generally increases to about 7.5 by 2014. Previous Tealbook begins in 2007 at about 3 and generally decreases to about -20 by 2009. It generally increases to about 17 by 2010 and then generally decreases to about 7 by 2014.

Figure: Nonresidential Structures

Line chart, by 4-quarter percent change, 2007 to 2014. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 2007 at about 11 and generally decreases to about -30 by 2009. It generally increases to about 20 by 2011 and then generally decreases to about 2 by 2014. Previous Tealbook begins in 2007 at about 11 and generally decreases to about -30 by 2009. It generally increases to about 10 by 2012 and then generally decreases to about 1 by 2014.

Figure: Government Consumption & Investment

Line chart, by 4-quarter percent change, 2007 to 2014. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 2007 at about 0.4 and generally increases to about 4.2 by 2009. It generally decreases to about -4 by 2011 and then generally increases to about -1 by 2014. Previous Tealbook begins in 2007 at about 0.4 and generally increases to about 2.5 by 2008. It generally decreases to about -3 by 2012 and then generally increases to about -1 by 2014.

Figure: Exports and Imports

Line chart, by 4-quarter percent change, 2007 to 2014. There is a horizontal line at zero. There are four series, Current Exports, Previous Exports, Current Imports, and Previous Imports. Current Exports begins in 2007 at about 7.5 and generally decrease to about -14 by 2009. It generally increases to about 12.5 by 2010 and then generally decreases to about 5.1 by 2014. Previous Exports generally follows the same path as Current Exports. Current Imports begins in 2007 at about 4 and generally decreases to about -18 by 2009. It generally increases to about 17 by 2010 and then generally decreases to about 5 by 2014. Previous Imports generally follows the same path as Current Imports.

Note: Blue shading represents the projection period, which begins in 2012:Q2.

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

Aspects of the Medium-Term Projection

Figure: Personal Saving Rate

Line chart, by percent, 1995 to 2015. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about 6 and generally decreases to about 1.25 by 2005. It generally increases to about 6 by 2008 and then decreases to about 3.9 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until 2009 when it begins decreasing at a slower rate. It ends in 2014 at about 4.

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

Figure: Wealth-to-Income Ratio

Line chart, by ratio, 1995 to 2015. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about 4.82 and generally increases to about 6.15 by 1999. It generally decreases to about 5.1 by 2003 and then generally increases to about 6.5 by 2006. It decreases to about 4.8 by 2009 and then generally increases to about 5 by 2014. Previous Tealbook generally follows the same path as Current Tealbook.

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

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

Figure: Single-Family Housing Starts

Line chart, by millions of units, 1995 to 2015. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about 1 and generally increases to about 1.75 by 2006. It generally decreases to about 0.35 by 2009 and then generally increases to about 0.75 by 2014. Previous Tealbook generally follows the same path as Current Tealbook.

Source: U.S. Census Bureau.

Figure: Equipment and Software Spending

Line chart, by share of nominal GDP, 1995 to 2015. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about 8.1 and generally increases to about 9.6 by 2000. It generally decreases to about 6.4 by 2009 and then generally increases to about 7.6 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until 2009 when it begins increasing at a faster rate. It ends in 2014 at about 8.

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

Figure: Federal Surplus/Deficit

Line chart, by share of nominal GDP, 1995 to 2015. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about -2.6 and generally increases to about 2.3 by 2000. It generally decreases to about -10.6 by 2009 and then generally increases to about -3.9 by 2014. Previous Tealbook generally follows the same path as Current Tealbook.

Source: *Monthly Treasury Statement*.

Figure: Current Account Surplus/Deficit

Line chart, by share of nominal GDP, 1995 to 2015. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about -1.9 and generally decreases to about -6.5 by 2005. It generally increases to about -2.5 by 2009 and then generally decreases to about -3.3 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until 2012 when it begins decreasing at a faster rate. It ends in 2014 at about -3.9.

Source: U.S. Department 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: March 2001-November 2001, and December 2007-June 2009. Blue shading represents the projection period, which begins in 2012:Q2.

Decomposition of Potential GDP

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

Measure	1974-1995	1996-2000	2001-2010	2011	2012	2013	2014
Potential real GDP	**3.0**	**3.4**	**2.2**	**1.7**	**1.8**	**2.0**	**2.1**
Previous Tealbook	3.0	3.4	2.2	1.7	1.8	2.0	2.1
Selected contributions[1]							
Structural labor productivity	1.4	2.6	2.2	1.5	1.4	1.6	1.7
Previous Tealbook	1.4	2.6	2.2	1.5	1.4	1.6	1.7

Capital deepening	.7	1.5	.7	.4	.5	.6	.7
Previous Tealbook	.7	1.5	.7	.5	.5	.6	.7
Multifactor productivity	.5	.8	1.2	.9	.8	.9	.9
Previous Tealbook	.5	.8	1.2	.8	.8	.9	.9
Structural hours	1.5	1.0	.6	.5	.6	.6	.6
Previous Tealbook	1.5	1.0	.6	.5	.6	.6	.6
Labor force participation	.4	.0	-.3	-.4	-.3	-.3	-.3
Previous Tealbook	.4	.0	-.3	-.4	-.3	-.3	-.3

Note: Components may not sum to totals because of rounding. 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. Return to table

Figure: Structural and Actual Labor Productivity

Line chart, by chained (2005) dollars per hour, 2001 to 2014. There are two series, Current Tealbook and Structural. Current Tealbook begins in 2001 at about 43.6 and generally increases to about 52 by 2008. It then increases to about 58 by 2014. Structural begins in 2001 at 44 and steadily increases to 58 by 2014.

Note: Blue shading represents the projection period, which begins in 2012:Q2.

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

Figure: Structural and Actual Labor Force Participation Rate

Line chart, by percent, 2001 to 2014. There are two series, Current Tealbook and Structural. Current Tealbook begins in 2001 at about 67.2 and generally decreases to about 66 by 2007. It then decreases to about 63.8 by 2014. Structural begins in 2001 at about 66.75 and generally decreases to about 64.9 by 2014.

Note: Blue shading represents the projection period, which begins in 2012:Q3.

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

The Outlook for the Labor Market and Resource Utilization

(Percent change from final quarter of preceding period)

Measure	2011	2012 H1	2012 H2	2013	2014
Output per hour, nonfarm business	.6	.8	.9	1.3	1.6
Previous Tealbook	.4	-.5	1.3	1.5	1.8
Nonfarm private employment[1]	175	159	145	153	218
Previous Tealbook	175	159	110	122	200
Labor force participation rate[2]	64.0	63.7	63.7	63.7	63.7
Previous Tealbook	64.0	63.7	63.8	63.7	63.7
Civilian unemployment rate[2]	8.7	8.2	8.3	8.0	7.6
Previous Tealbook	8.7	8.2	8.3	8.1	7.8
Memo:					

GDP gap[3]	-4.4	-4.4	-4.6	-4.1	-3.1
Previous Tealbook	-4.5	-4.7	-4.8	-4.6	-3.6

1. Thousands, average monthly changes. Return to table

2. Percent, average for the final quarter in the period. Return to table

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. Return to table

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

Figure: Nonfarm Private Employment

Line chart, average monthly changes, by thousands, 1995 to 2015. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about 210 and generally decreases to about -300 by 2001. It generally increases to about 300 by 2005 and then generally decreases to about -800 by 2009. It then generally increases to about 275 by 2014. Previous Tealbook generally follows the same path as Current Tealbook.

Source: U.S. Department of Labor, BLS.

Figure: Unemployment Rate

Line chart, by percent, 1995 to 2015. There are four series, Current Tealbook, Previous Tealbook, Natural Rate, and Natural rate with EEB adjustment. Current Tealbook begins in 1995 at about 5.5 and generally decreases to about 4 by 2000. It generally increases to about 10 by 2009 and then decreases to about 7.6 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until 2012 when it begins decreasing at a slower rate. It ends in 2014 at about 7.8. Natural rate begins in 1995 at about 5 where it remains relatively constant until 2008. It increases to about 6 by 2010 where it remains relatively constant until 2014. Natural rate with EEB adjustment begins in 1995 at about 5 where it remains relatively constant until 2008. It increases to about 6.5 by 2010 and then decreases to about 6 by 2014.

Note: The EEB adjustment is the staff estimate of the effect of extended and emergency unemployment compensation programs on the natural rate of unemployment.

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

Figure: GDP Gap

Line chart, by percent, 1995 to 2015. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about -2 and generally increases to about 3 by 1999. It generally decreases to about -6 by 2009 and then generally increases to about -3 by 2014. Previous Tealbook generally follows the same path as Current Tealbook and ends in 2014 at about -3.7.

Note: The GDP gap is the percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential. Blue shading represents the projection period, which begins in 2012:Q2.

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

Figure: Manufacturing Capacity Utilization Rate

Line chart, by percent, 1995 to 2015. There is a horizontal line at 79 representing the average rate from 1972 to 2011. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about 84.7 and generally decreases to about 71.5 by 2001. It generally increases to about 79 by 2005 and then generally decreases to about 65 by 2009. It then generally increases to about 80 by 2014. Previous Tealbook generally follows the same path as Current Tealbook and ends in 2014 at about 79.

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: March 2001-November 2001, and December 2007-June 2009. Blue shading represents the projection period, which begins in 2012:Q3 except as noted.

Inflation Projections

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

Measure	2011	2012 H1	2012 H2	2013	2014
PCE chain-weighted price index	2.5	1.6	1.8	1.4	1.4
Previous Tealbook	2.7	1.7	1.1	1.5	1.4
Food and beverages	5.1	1.0	2.4	2.6	.9
Previous Tealbook	5.2	1.0	2.7	2.4	.9
Energy	11.9	-3.3	6.3	-3.4	-2.2
Previous Tealbook	12.8	-3.4	-6.7	-1.2	-1.7
Excluding food and energy	1.7	2.0	1.4	1.6	1.6
Previous Tealbook	1.8	2.1	1.5	1.6	1.6
Prices of core goods imports[1]	4.3	.5	-1.1	1.1	1.4
Previous Tealbook	4.3	1.1	-.5	1.1	1.4

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

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

Figure: Total PCE Prices

Line chart, by 4-quarter percent change, 1995 to 2015. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about 2.45 and generally increases to about 4.5 by 2008. It decreases to about -1 by 2009 and then generally increases to about 2.9 by 2011. It then generally decreases to about 1.3 by 2014. Previous Tealbook generally follows the same path as Current Tealbook.

Note: Blue shading represents the projection period, which begins in 2012:Q2.

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

Figure: PCE Prices excluding Food and Energy

Line chart, by 4-quarter percent change, 1995 to 2015. There are four series, Current Tealbook, Previous Tealbook, Current Market-based and Previous Market-based. Current Tealbook begins in 1995 at about 2.4 and generally decreases to about 1.3 by 1998. It generally increases to about 2.5 by 2007 and then generally decreases to about 1.1 by 2010. It then generally increases to about 1.6 by 2014. Previous Tealbook generally follows the same path as Current Tealbook. Current Market-based begins in 1995 at about 2.2 and generally decreases to about 1 by 1998. It generally increases to about 2.5 by 2008 and then decreases to about 0.75 by 2010. It the generally increases to about 1.5 by 2014. Previous Market-based generally follows the same path as Current Market-based.

Note: Blue shading represents the projection period, which begins in 2012:Q2.

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

Figure: Compensation per Hour

Line chart, by 4-quarter percent change, 1995 to 20115. There is a horizontal line at zero. There are four series, Current Tealbook, Previous Tealbook, Current Employment cost index, and Previous Employment cost index. Current Tealbook begins in 1995 at about 1.3 and generally increases to about 8.75 by 2000. It generally decreases to about 0 by 2009 and then generally increases to about 3 by 2014. Previous Tealbook generally follows the same path as Current Tealbook. Current Employment cost index begins in 1995 at about 2.8 and generally increases to about 4.5 by 2000. It generally decreases to about 1.3 by 2009 and then generally increases to about 2.9 by 2014. Previous Employment cost index generally follows the same path as Current Employment cost index.

Note: Blue shading represents the projection period, which begins in 2012:Q2.

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

Figure: Long-Term Inflation Expectations

Line chart, by percent, 1995 to 2015. There are two series, Thomson Reuters/Michigan next 5 to 10 years and SPF, next 10 years. Thomson Reuters/Michigan next 5 to 10 years begins in 1995 at about 3.2 and generally decreases to about 1.5 by 2002. It generally increases to about 3.4 by 2009 and then generally decreases to about 3 by August 2012. SPF, next 10 years begins in 2006 at about 2 and generally increases to about 2.2 by 2008. It generally decreases to about 2 by 2010 and then generally increases to about 2.2 by 2012.

Note: The Survey of Professional Forecasters (SPF) projection is for the PCE price index.

Source: Thomson Reuters/University of Michigan Surveys of Consumers; Federal Reserve Bank of Philadelphia.

Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research: March 2001-November 2001, and December 2007-June 2009.

The Long-Term Outlook

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

Measure	2012	2013	2014	2015	2016	2017
Real GDP	1.6	2.4	3.2	3.6	3.0	2.9
Previous Tealbook	1.5	2.1	3.2	3.6	3.5	3.1
Civilian unemployment rate[1]	8.3	8.0	7.6	6.7	6.2	5.7
Previous Tealbook	8.3	8.1	7.8	7.2	6.5	5.9
PCE prices, total	1.7	1.4	1.4	1.5	1.8	1.9
Previous Tealbook	1.4	1.5	1.4	1.6	1.7	1.8
Core PCE prices	1.7	1.6	1.6	1.7	1.8	1.9
Previous Tealbook	1.8	1.6	1.6	1.7	1.7	1.8
Federal funds rate[1]	.1	.1	.6	2.1	2.9	3.5
Previous Tealbook	.1	.1	.4	1.5	2.6	3.3
10-year Treasury yield[1]	1.9	3.0	3.7	4.2	4.3	4.4
Previous Tealbook	1.7	2.9	3.5	3.8	4.0	4.2

1. Percent, average for the final quarter of the period. Return to table

Figure: Real GDP

Line chart, by 4-quarter percent change, 2004 to 2020. There is a horizontal line at zero. There are four series, Current Real GDP, Previous Real GDP, Current Potential GDP, and Previous Potential GDP. Current Real GDP begins in 2004 at about 4 and generally decreases to about -4.5 by 2009. It generally increases to about 3.8 by

2015 and then generally decreases to about 2.3 by 2020. Previous Real GDP generally follows the same path as Current Real GDP. Current Potential GDP begins in 2004 at about 2.5 and generally decreases to about 1 by 2009. It then increases to about 2.25 by 2020. Previous Potential GDP generally follows the same path as Current Potential GDP.

Figure: Unemployment Rate

Line chart, by percent, 2004 to 2020. There are four series, Current Tealbook, Previous Tealbook, Natural rate, and Natural rate with EEB adjustment. Current Tealbook begins in 2004 at about 5.8 and generally decreases to about 4.4 by 2007. It increases to about 10 by 2009 and then generally decreases to about 5.15 by 2020. Previous Tealbook generally follows the same path as Current Tealbook. Natural rate begins in 2004 at 5 where it remains constant until 2008. It increases to 6 by 2009 where it remains constant until 2014. It decreases to about 5.15 by 2017 where it remains constant until 2020. Natural rate with EEB adjustment begins in 2004 at 5 where it remains constant until 2008. It increase to about 6.35 by 2009 and then decreases to 6 by 2013. It remains constant at 6 until 2014 and decreases to about 5.15. It remains constant at 5.15 until 2020.

Figure: PCE Prices

Line chart, by 4-quarter percent change, 2004 to 2020. There are four series, Current Total PCE prices, Previous Total PCE prices, Current PCE prices excluding food and energy, and Previous PCE prices excluding food and energy. Current Total PCE prices begins in 2004 at about 2 and generally increases to about 4.25 by 2007. It decreases to about -0.9 by 2009 and then general increases to about 2.8 by 2011. It then generally decreases to about 2 by 2020. Previous Total PCE prices generally follows the same path as Current Total PCE prices. Current PCE prices excluding food and energy begins in 2004 at about 2.9 and generally decreases to about 1.15 by 2010. It then generally increases to about 2 by 2020. Previous PCE prices excluding food and energy generally follows the same path as Current PCE prices excluding food and energy.

Figure: Interest Rates

Line chart, by percent, 2004 to 2020. There are six series, Current BBB corporate yield, Previous BBB corporate yield, Current 10-year Treasury, Previous 10-year Treasury, Current Federal funds rate, and Previous Federal funds rate. Current BBB corporate yield begins in 2004 at about 5.5 and generally increases to about 9.5 by 2008. It generally decreases to about 4.2 by 2012 and then generally increases to about 6.1 by 2020. Previous BBB corporate yield generally follows the same path as Current BBB corporate yield. Current 10-year Treasury begins in 2004 at about 4 and generally decreases to about 2 by 2012. It then generally increases to about 5.8 by 2020. Previous 10-year Treasury generally follows the same path as Current 10-year Treasury. Current Federal funds rate begins in 2004 at about 1 and increases to about 5.15 by 2006. It decreases to about 0.1 by 2008 where it remains constant until 2014. It then generally increases to about 4.15 by 2020. Previous Federal funds rate generally follows the same path as Current Federal funds rate.

Note: In each panel, shading represents the projection period, which begins in 2012:Q3; dashed lines are the previous Tealbook.

Evolution of the Staff Forecast

Figure: Change in Real GDP

Line chart, by percent, Q4 over Q4, January 2010 to December 2012. The x-axis represents Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about 4.75 and generally decreases to about 1.4 by September 14, 2011. It then generally increases to about 1.9 by September 5, 2012. 2012 begins on September 15, 2010 at about 4.5 and generally decreases to about 2 by January 18, 2012. It increases to about 2.3 by April 18, 2012 and then decreases to about 1.5 by September 5, 2012. 2013 begins on September 14, 2011 at about 3.3 and generally decreases to about 2.2 by January 18, 2012. It increases to about 2.8 by April 18, 2012 and then generally decreases to about 2.15 by September 5, 2012. 2014 begins on April 18, 2012 at about 3.25 and generally decreases to about 3.15 by September 5, 2012.

Figure: Unemployment Rate

Line chart, by percent, fourth quarter, January 2010 to December 2012. The x-axis represents Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about 8.2 and generally increases to about 9 by September 15, 2010. It generally decreases to about 8.5 by March 9, 2011 and then increases to about 9.2 by August 3, 2011. It then generally decreases to about 8.75 by September 5, 2012. 2012 begins on September 15, 2010 at about 8 and generally decreases to about 7.5 by March 9, 2011. It generally increases to about 8.7 by September 14, 2011 and then generally decreases to about 8.3 by September 5, 2012. 2013 begins on September 14, 2011 at about 8.4 and generally decreases to about 7.8 by April 18, 2012. It then generally increases to about 8 by September 5, 2012. 2014 begins on April 18, 2012 at about 7.4 and generally increases to about 7.75 by July 25, 2012. It then decreases to about 7.5 by September 5, 2012.

Figure: Change in PCE Prices excluding Food and Energy

Line chart, by percent, Q4 over Q4, January 2010 to December 2012. The x-axis represents Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about 1.1 and generally increases to about 1.9 by September 14, 2011. It then generally decreases to about 1.65 by September 5, 2012. 2012 begins on September 15, 2010 at about 0.8 and generally increases to about 1.5 by April 20, 2011. It then increases to about 1.65 by September 5, 2012. 2013 begins on September 14, 2011 at about 1.25 and generally increases to about 1.7 by April 18, 2012. It then decreases to about 1.6 by September 5, 2012. 2014 begins on April 18, 2012 at about 1.7 and generally decreases to about 1.6 by September 5, 2012.

International Economic Developments and Outlook

Recent Foreign Indicators

Figure: Nominal Exports

Line chart, by ratio scale where January 2008 = 100, 2008 to 2012. There is a horizontal line at 100. There are three series, Foreign, AFE, and EME. Foreign begins in 2008 at about 100 and generally decreases to about 70 by 2009. It then generally increases to about 113 by 2012. AFE begins in 2008 at about 100 and generally decreases to about 69 by 2009. It generally increases to about 109 by 2011 and then decreases to about 101 by 2012. EME begins in 2008 at about 100 and generally decreases to about 71 by 2009. It then generally increases to about 125 by 2012.

Note: EME excludes Venezuela.

Figure: Industrial Production

Line chart, by ratio scale where January 2008 = 100, 2008 to 2012. There is a horizontal line at 100. There are three series, Foreign, AFE, and EME. Foreign begins in 2008 at about 100 and generally decreases to about 86.5 by 2009. It then generally increases to about 102.5 by 2012. AFE begins in 2008 at about 100 and generally decreases to about 85 by 2009. It then generally increases to about 94 by 2012. EME begins in 2008 at about 100 and generally decreases to about 87.5 by 2009. It then generally increases to about 114 by 2012.

Note: AFE excludes Australia and Switzerland. EME excludes Colombia, Hong Kong, Philippines, and Venezuela.

Figure: Retail Sales

Line chart, by 12-month percent change, 2008 to 2012. There is a horizontal line at zero. There are three series, Foreign, AFE, and EME. Foreign begins in 2008 at about 5 and generally decreases to about -2 by 2009. It generally increases to about 7.5 by 2010 and then generally decreases to about 2.5 by 2012. AFE begins in 2008 at about 4.5 and generally decreases to about -4 by 2009. It generally increases to about 5 by 2010 and then generally decreases to about 0.25 by 2012. EME begins in 2008 at about 7.5 and generally decreases to about 2.5 by 2009. It generally increases to about 16 by 2010 and then generally decreases to about 6.5 by 2012.

Note: AFE excludes Australia and Switzerland. EME includes Brazil, China, Indonesia, Korea, Singapore, and Taiwan.

Figure: Employment

Line chart, by 4-quarter percent change, 2008 to 2012. There is a horizontal line at zero. There are three series, Foreign, AFE, and EME. Foreign begins in 2008 at about 2 and generally decreases to about -1.15 by 2009. It generally increases to about 1.75 by 2010 and then decreases to about 0.9 by 2012. AFE begins in 2008 at about 2.9 and generally decreases to about -1.9 by 2009. It generally increases to about 1 by 2011 and then decreases to about 0.15 by 2012. EME begins in 2008 at about 3 and generally decreases to about 0.5 by 2009. It then generally increases to about 2.5 by 2012.

Note: EME excludes Argentina and Mexico.

Figure: Consumer Prices: Advanced Foreign Economies

Line chart, by 12-month percent change, 2008 to 2012. There is a horizontal line at zero. There are two series, Headline and Core. Headline begins in early 2008 at about 2.1 and generally increases to about 3.6 by mid-2008. It generally decreases to about -0.9 by 2009 and then increases to about 2.6 by 2011. It then decreases to about 1.5 by 2012. Core begins in 2008 at about 1.05 and generally decreases to about 0.8 by 2010. It then generally increases to about 1.15 by 2012.

Note: Excludes Australia, Sweden, and Switzerland. Core excludes all food and energy; staff calculation.

Source: Haver Analytics and CEIC.

Figure: Consumer Prices: Emerging Market Economies

Line chart, by 12-month percent change, 2008 to 2012. There is a horizontal line at zero. There are three series, Headline, Excluding food--East Asia, and Excluding food--Latin America. Headline begins in 2008 at about 5.6 and generally decreases to about 0.8 by 2009. It generally increases to about 5 by 2011 and then decreases to about 3 by 2012. Excluding food--East Asia begins in 2008 at about 3 and generally decreases to about -2 by 2009. It generally increases to about 2.6 by 2011 and then decreases to about 1.9 by 2012. Excluding food--Latin America begins in 2008 at about 3.8 and generally increases to about 5.75 by 2009. It generally decreases to about 3.3 by 2012.

The Foreign Outlook

(Percent change, annual rate)

		2012				2013			
	2011	Q1	Q2	Q3	Q4	Q1	Q2	H2	2014
Real GDP									
Total foreign	2.8	3.2	2.3	2.3	2.3	2.5	2.7	3.0	3.3
Previous Tealbook	2.8	3.3	2.3	2.4	2.2	2.5	2.6	2.9	3.2
Advanced foreign economies	1.3	1.6	.7	.7	.6	.8	1.1	1.5	1.9
Previous Tealbook	1.3	1.5	.7	.8	.5	.7	1.0	1.4	2.0
Emerging market economies	4.5	5.0	3.9	4.0	4.1	4.4	4.5	4.6	4.8
Previous Tealbook	4.5	5.2	3.9	4.1	4.2	4.3	4.4	4.5	4.6
Consumer Prices									

Total foreign	3.4	2.6	1.9	1.8	2.6	2.3	2.3	2.2	2.5
Previous Tealbook	3.4	2.6	2.0	2.2	2.3	2.3	2.3	2.3	2.5
Advanced foreign economies	2.2	2.2	.6	.7	1.9	1.4	1.3	1.2	1.7
Previous Tealbook	2.2	2.2	.6	1.4	1.5	1.3	1.2	1.2	1.5
Emerging market economies	4.3	2.9	3.0	2.7	3.2	3.1	3.1	3.0	3.2
Previous Tealbook	4.3	3.0	3.0	2.9	3.0	3.1	3.1	3.1	3.2

Note: Annualized percent change from final quarter of preceding period to final quarter of period indicated.

Figure: Real GDP

Line chart, by percent change, annual rate, 2009 to 2014. There is a horizontal line zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in early 2009 at about -9 and generally increases to about 6 by late 2009. It generally decreases to about 2 by 2011 and then generally increases to about 4 by 2014. Previous Tealbook generally follows the same path as Current Tealbook.

There is a second line chart, by percent change, annual rate, 2009 to 2014. There are four series, Current Emerging market economies, Previous Emerging market economies, Current Advanced foreign economies, and Previous Advance foreign economies. Current Emerging market economies begins in early 2009 at about -9 and generally increases to about 10 by late 2009. It generally decreases to about 3 by 2011 and then increases to about 5 by 2012. Previous Emerging market economies generally follows the same path as Current Emerging market economies. Current Advanced foreign economies begins in 2009 at about -9 and generally increases to about 4 by 2010. It generally decreases to about 0 by 2011 and the generally increases to about 2.5 by 2012. Previous Advanced foreign economies generally follows the same path as Current Advanced foreign economies.

Figure: Consumer Prices

Line chart, by percent change, annual rate, 2009 to 2014. There is a horizontal line at zero. There are two series, Current Total foreign and Previous Total foreign. Current Total foreign begins in 2009 at about -1 and generally increases to about 5 by 2010. It then generally decreases to about 2.25 by 2014. Previous Total foreign generally follows the same path as Current Total foreign.

There is a second line chart, by percent change, annual rate, 2009 to 2014. There is a horizontal line at zero. There are four series, Current Emerging market economies, Previous Emerging market economies, Current Advanced foreign economies, and Previous Advanced foreign economies. Current Emerging market economies begins in 2009 at about -0.5 and generally increases to about 6.15 by 2010. It generally decreases to about 2.8 by 2012 and then increases to about 3.2 by 2014. Previous Emerging market economies generally follows the same path as Current Emerging market economies. Current Advanced foreign economies begins in 2009 at about -1.8 and generally increases to about 3 by 2010. It generally decreases to about 0.5 by 2012 and then generally increases to about 1.3 by 2014. Previous Advanced foreign economies generally follows the same path as Current Advanced foreign economies.

Note: Blue shading represents the projection period, which begins in 2012:Q3.

[Box:] Recent Developments in the Euro Area

Figure: Italian Sovereign Bond Yields

Line chart, June to September. There are 2 vertical lines marking July 26 and August 2. There are two series, 10-year and 2-year. 10-year begins in June at about 5.75 and generally increases to about 6.5 by July. It then generally decreases to about 5.7 by September. 2-year begins in June at about 4.25 and generally increases to about 5 by July. It then generally decreases to about 2.4 by September.

Source: Bloomberg.

Figure: Spanish Sovereign Bond Yields

Line chart, June to September. There are 2 vertical lines marking July 26 and August 2. There are two series, 10-year and 2-year. 10-year begins in June at about 6.5 and generally increases to about 7.6 by July. It then generally decreases to about 6.6 by September. 2-year begins in June at about 5 and generally increases to about 6.4 by July. It then generally decreases to about 3 by September.

Source: Bloomberg.

Evolution of Staff's International Forecast

Figure: Total Foreign GDP

Line chart, by percent change Q4 over Q4, January 2010 to December 2012. The x-axis represents Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about 4 and generally decreases to about 3.2 by September 15, 2010. It generally increases to about 3.5 by June 15, 2011 and then generally decreases to about 2.9 by September 5, 2012. 2012 begins on September 15, 2010 at about 3.5 and generally decreases to about 2.6 by December 7, 2011. It generally increases to about 3 by March 7, 2012 and then generally decreases to about 2.5 by September 5, 2012. 2013 begins on September 5, 2011 at about 3.4 and generally decreases to about 3.1 by April 18, 2012. It then decreases to about 2.9 by September 5, 2012. 2014 begins on April 18, 2012 at about 3.6 and generally decreases to about 3.1 by June 13, 2012. It then increases to about 3.25 by September 5, 2012.

Figure: Total Foreign CPI

Line chart, by percent change, Q4 over Q4, January 2010 to December 2012. The x-axis represents Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about 2 and generally increases to about 3 by April 20, 2011. It generally increases to about 3.5 by October 26, 2011 and then decreases to about 3.4 by September 5, 2012. 2012 begins on September 15, 2010 at about 2.2 where it remains relatively constant until January 18, 2012. It generally increases to about 2.65 by March 7, 2012 and then decreases to about 2.25 by September 5, 2012. 2013 begins on September 14, 2011 at about 2.3 and generally decreases to about 2.25 by September 5, 2012. 2014 begins on April 18, 2011 at about 2.35 and generally increases to about 2.5 by September 5, 2012.

Figure: U.S. Current Account Balance

Line chart, by percent of GDP, January 2010 to December 2012. The x-axis represents Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about -3.1 and generally increases to about -2.75 by June 15, 2011. It then generally decreases to about -3 by September 5, 2012. 2012 begins on September 15, 2010 at about -3 and generally increases to about -2 by June 15, 2011. It then generally decreases to about -3 by September 5, 2012. 2013 begins on September 14, 2011 at about -2.25 and generally decreases to about -3.75 by July 25, 2012. It then generally increases to about -3.25 by September 5, 2012. 2014 begins on April 18, 2012 at about -3.2 and generally decreases to about -3.9 by July 25, 2012. It then increases to about -3.3 by September 5, 2012.

Financial Developments

Policy Expectations and Treasury Yields

Figure: Selected Interest Rates

Line chart, by percent, July to September. There are vertical lines representing the August FOMC, July employment report, July retail sales, August FOMC minutes, and Jackson Hole Speech. There are two series, 10-year Treasury yield and 2-year Treasury yield. 10-year Treasury yield begins on July 31 at about 1.48 and generally increase to about 1.86 by August 17. It then generally decreases to about 1.55 by September 4. 2-year Treasury yield begins on July 31 at about 0.25 and generally increases to about 0.3 by August 17. It then generally decreases to about 0.225 by September 4.

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

Source: Bloomberg.

Figure: Implied Federal Funds Rate

Line chart, by percent, 2013 to 2016. There are four series, Mean: September 4, 2012, Mean: July 31, 2012, Mode: August 31, 2012, and Mode: July 31, 2012. Mean: September 4, 2012 begins in 2013 at about 0.13 and generally increases to about 0.63 by 2016. Mean: July 31, 2012 begins in 013 at about 0.14 and generally increases to about 0.62 by 2016. Mode: August 31, 2012 begins in 2013 at about 0.1 and generally decreases to about 0.075 by 2014. It then increases to about .12 by 2016. Mode: July 31, 2012 begins in 2013 at about .1 and generally decreases to about 0.075 by 2014. It then increases to about 0.15 by 2016.

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.

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

Bar chart, by percent, 2013 to 2016. There are two series, Recent: 21 respondents and August FOMC: 21 respondents. Recent: 21 respondents begins in 2014:Q2 at about 5 and increases to 10 by 2014:Q4. It decreases to 5 in 2014:Q4 and remains there in 2015:Q1. It increases to 20 in 2015:Q2 and then increases to about 34 by 2015:Q3. It decreases to 15 in 2015:Q4 and then decreases to 5 in 2016:Q1 where it remains until 2016:Q2. August FOMC: 21 respondents begins in 2013:Q1 at 0 and remains there for 2013:Q2. It increases to 5 for 2013:Q3 and 2013:Q4 and then decreases to 0 for 2014:Q1. It increases to 10 for 2014:Q2 and 2014:Q3 and then increases to 20 for 2014:Q4. It decreases to 5 for 2015:Q1 and 2015:Q2 and then increases to 25 by 2015:Q3. It decreases to 10 for 2015:Q4 and 2016:Q1 and then decreases to 0 for 2016:Q2, 2016:Q3, and 2016:Q4.

Source: Desk's Dealer Survey from September 3, 2012.

Figure: Treasury Yield Curve

Line chart, by percent, 1 to 20. The x-axis represents years ahead. There are two series, Most recent: September 4, 2012 and Last FOMC: July 31, 2012. Most recent: September 4, 2012 begins in 1 at about 0.25 and generally increases to about 2.5 by 20. Last FOMC: July 31, 2012 begins in 1 at about 0.25 and generally increases to about 2.4 by 20.

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.

Figure: Inflation Compensation

Line chart, by percent, 2010 to 2012. Data are daily. There is a vertical line marking the August FOMC. There are two series, 5 to 10 years ahead and Next 5 years. 5 to 10 years ahead begins in 2010 at about 3.2 and generally decreases to about 2.25 by 2011. It then generally increases to about 2.4 by September 4 2012. Next 5 years begins in early 2010 at about 2 and generally decreases to about 1.25 by late 2011. It generally increases to about 2.3 by 2011 and then generally decreases to about 2 by 2012.

Note: Estimates based on smoothed nominal and inflation-indexed Treasury yield curves. Next 5 years is adjusted for the indexation-lag (carry) effect.

Source: Barclays PLC and staff estimates.

Foreign Developments

Figure: Euro-Area 2-Year Government Bond Spreads

Line chart, by percentage points, 2011 to 2012. Data are daily. There is a vertical line marking the August FOMC. There are two series, Spain and Italy. Spain begins in 2011:Q1 at about 2.25 and generally decreases to about 1.2 by 2011:Q2. It generally increases to about 5.9 by 2011:Q4 and then decreases to about 2 by 2012:Q1. It generally increases to about 6.8 by 2012:Q2 and then decreases to about 3.2 by September 4, 2012. Italy begins in 2011:Q1 at about 2 and generally decreases to about 0.75 by 2011:Q2. It generally increases to about 7 by 2011:Q4 and then generally decreases to about 1.5 by 2012:Q1. It generally increases to about 5.2 by 2012:Q2 and then decreases to about 2.5 by September 4, 2012.

Note: Spread over German bunds.

Source: Bloomberg.

Figure: Euro-Area 10-Year Government Bond Spreads

Line chart, by percentage points. Data are daily. There is a vertical line marking the August FOMC. There are four series, Portugal, Spain, Ireland, and Italy. Portugal begins in 2011:Q1 at about 4 and generally increases to about 10.8 by 2011:Q3. It generally increases to about 15.8 by 2012:Q1 and then generally decreases to about 7.8 by September 4, 2012. Spain begins in 2011:Q1 at about 2.2 and generally increases to about 4.1 by 2011:Q1. It then generally increases to about 5.2 by September 4, 2012. Ireland begins in 2011:Q1 at about 6 and generally increases to about 11.4 by 2011:Q3. It then generally increase to about 4.5 by September 4, 2012. Italy begins in 2011:Q1 at about 2 and generally increases to about 5.75 by 2011:Q2. It then generally decrease to about 4.4 by September 4, 2012.

Note: Spread over German bunds.

Source: Bloomberg.

Figure: Stock Price Indexes

Line chart, by ratio scale where January 3, 2011 = 100, 2011 to 2012. There is a vertical line marking the August FOMC. There are four series, DJ Euro, Topix, MSCI Emerging Markets, and DJ Euro Banks. DJ Euro begins in 2011:Q1 at about 100 and generally decreases to about 72 by 2011:Q3. It then generally increases to about 88 by September 4, 2012. Topix begins in 2011:Q1 at about 100 and generally decreases to about 80 by 2011:Q4. It generally increases to about 98 by 2012:Q2 and then generally decreases to about 80 by September 4, 2012. MSCI Emerging Markets begins in 2011:Q1 at about 100 and generally decreases to about 72 by 2011:Q3. It generally increases to about 90 by 2012:Q1 and then generally decreases to about 80 by September 4, 2012. DJ Euro Banks begins in 2011:Q1 at about 100 and generally decreases to about 54 by 2011:Q3. It generally increases to about 70 by 2012:Q1 and then generally decreases to about 60 by September 4, 2012.

Source: Bloomberg.

Figure: Dollar Exchange Rates

Line chart, by ratio scale where January 3, 2011 = 100, 2011 to 2012. Data are daily. There is a vertical line marking the August FOMC. There are three series, Broad, Euro, and Yen. Broad begins in 2011:Q1 at about 100 and generally decreases to about 95 by 2011:Q3. It then generally increases to about 102 by September 4, 2012. Euro begins in 2011:Q1 at about 100 and generally increases to about 111 by 2011:Q2. It then generally decreases to about 94.5 by September 4, 2012. Yen begins in 2011:Q1 at about 100 and generally increases to about 104.5 by 2011:Q2. It generally decreases to about 93 by 2011:Q4 and then generally increases to about 102.5 by

2012:Q1. It then generally decreases to about 96.5 by September 4, 2012.

Source: Federal Reserve Board; Bloomberg.

Figure: 10-Year Nominal Benchmark Yields

Line chart, by percent, 2011 to 2012. Data are daily. There is a vertical line making the August FOMC. There are four series, Germany, United Kingdom, Japan, and Canada. Germany begins in 2011:Q1 at about 2.99 and generally increases to about 3.4 by 2011:Q2. It then generally decreases to about 1.4 by September 4, 2012. United Kingdom begins in 2011:Q1 at about 3.4 and generally increases to about 3.9 by 2011:Q2. It then generally decreases to about 1.6 by September 4, 2012. Japan begins in 2011:Q1 at about 1.1 and generally decreases to about 0.9 by September 4, 2012. Canada begins in 2011:Q1 at about 3.1 and generally decreases to about 1.8 by September 4, 2012.

Source: Bloomberg.

Figure: Foreign Net Purchases of U.S. Treasury Securities

Bar chart, by billions of dollars, annual rate, 2010 to 2012. There are two series, Official and Private. Approximate values are: 2010: Official 425 and Private 300; 2011:H1: Official 310 and Private 75; 2011:H2: Official 20 and Private 400; 2012:Q1: Official 310 and Private 135; 2012:Q2: Official 305 and Private 200; 2012:July: Official 275 and Private 197.

Source: Treasury International Capital data adjusted for staff estimates. July data are embargoed until September 18, 2012.

Financial Institutions and Short-Term Dollar Funding Markets

Figure: Stock Prices

Line chart, by ratio scale where July 31, 2012 = 100, 2010 to 2012. There are two series, S&P 500 and Dow Jones Bank Index. S&P 500 begins in January 2010 at about 83 and generally increases to about 97 by May 2011. It generally decreases to about 80 by September 2011 and then generally increases to about 100 by September 4, 2012. Dow Jones Bank Index begins in January 2010 at about 110 and generally increases to about 135 by May 2010. It generally decrease to about 75 by September 2011 and then increases to about 118 by May 2012. It then generally decreases to about 103 by September 4, 2012.

Source: Bloomberg.

Figure: CDS Spreads of Large Bank Holding Companies

Line chart, by basis points, 2010 to 2012. Data are daily. There is a vertical line marking the August FOMC. There are six series, Citigroup, JPMorgan Chase, Wells Fargo, Goldman Sachs, Bank of America, and Morgan Stanley. Citigroup begins in January 2010 at about 150 and generally decreases to about 125 by March 2011. It generally increases to about 375 by September 2011 and then decreases to about 210 by September 4, 2012. JPMorgan Chase begins in January 2010 at about 50 and generally increases to about 180 by September 2011. It then generally decreases to about 110 by September 4, 2012. Wells Fargo begins in January 2011 at about 90 and generally increases to about 180 by September 2011. It then generally decrease to about 90 by September 4, 2012. Goldman Sachs begins in January 2010 at about 90 and generally increases to about 400 by September 2011. It then generally decreases to about 235 by September 4, 2012. Bank of America begins in January 2010 at about 100 and generally increases to about 490 by November 2011. It then generally decreases to about 200 by September 4, 2012. Morgan Stanley begins in January 2010 at about 100 and generally increases to about 600 by September 2011. It then generally decreases to about 300 by September 4, 2012.

Source: Markit.

Figure: Selected Spreads

Line chart, by basis points, 2010 to 2012. There is a vertical line marking the August FOMC. Data are daily. There are two series, 3-month LIBOR over OIS and USD 3x6 FRA-OIS. 3-month LIBOR over OIS begins in January 2010 at about 10 and generally increases to about 33 by June 2010. It generally decreases to about 10 by September 2010 and then generally increases to about 50 by January 2012. It then generally decreases to about 30 by September 4, 2012. USD 3x6 FRA-OIS begins in January 2010 at about 11 and generally increases to about 69 by May 2010. It generally decreases to about 18 by May 2011 and then generally increases to about 67 by November 2011. It then generally decreases to about 24 by September 4, 2012.

Note: USD 3x6 FRA-OIS spread is calculated from a LIBOR forward rate agreement (FRA) 3 to 6 months in the future and the implied forward overnight index swap (OIS) rate for the same period.

Source: Bloomberg.

Figure: Average Maturity for Unsecured Financial Commercial Paper Outstanding in the U.S. Market

Line chart, by days, 2010 to 2012. Data are weekly. There is a vertical line marking the August FOMC. There are two series, U.S. Parent and European parent. U.S. parent begins in January 2010 at about 41.5 and generally decreases to about 36 by May 2010. It generally increases to about 52 by October 2011 and then generally increases to about 62.5 by May 2012. It then generally decrease to about 57.5 by August 29, 2012. European Parent begins in January 2010 at about 42 and generally increases to about 57 by October 2010. It generally decreases to about 32 by January 2012 and then generally increases to about 52 by August 29, 2012.

Source: Federal Reserve Board staff calculations based on data from the Depository Trust & Clearing Corporation.

Figure: Treasury GCF Repo Rate

Line chart, by basis points, 2011 to 2012. Data are 5-day moving average. There is a vertical line marking the August FOMC. There are two series, Treasury repo rate and Fed funds rate. Treasury repo rate begins in March 2011 at about 16 and generally decreases to about 1 by July 2011. It generally increases to about 27 by June 2012 and then decreases to about 21 by September 4, 2012. Federal funds rate begins in February 2011 at about 17.5 and generally decreases to about 6 by August 2011. It generally increases to about 17 by July 2012 and then decreases to about 14 by September 4, 2012.

Note: Weighted average of interest rates paid on general collateral finance (GCF) repurchase agreements (repos) based on Treasury securities.

Source: Depository Trust & Clearing Corporation.

Figure: Asset-Backed Commercial Paper Overnight Spreads

Line chart, by basis points, 2011 to 2012. Data are 5-day moving average. There is a vertical line marking the August FOMC. There are two series, U.S. sponsor and European sponsor. U.S. sponsor begins in January 2011 at about 5 and generally increases to about 24 by January 2012. It then generally decrease to about 6 by September 4, 2012. European sponsor begins in January 2011 at about 5 and generally increases to about 65 by January 2012. It then generally decreases t about 10 by September 4, 2012.

Note: Spreads computed over the AA nonfinancial unsecured rate.

Source: Depository Trust & Clearing Corporation.

Other Domestic Asset Market Developments

Figure: S&P 500 Stock Price Index

Line chart, by log scale where July 31, 2012 = 100, 2010 to 2012. Data are daily. There is a vertical line representing the August FOMC. The series begins in January 2010 at about 82 and generally increases to about 96 by January 2011. It generally decreases to about 80 by September 2011 and then generally increases to about 102 by September 4, 2012.

Source: Bloomberg.

Figure: Equity Risk Premium

Line chart, by percent, 1992 to 2012. Data are monthly. There is a vertical line representing the August FOMC. There are two series, Expected 10-year real equity return and Expected real yield on 10-year Treasury. Expected 10-year real equity return begins in 1992 at about 7.9 and generally decreases to about 2.1 by 2000. It generally increases to about 12 by 2008 and then generally decreases to about 8.5 by September 4, 2012. Expected real yield on 10-year Treasury begins in 1992 at about 4.2 and generally decreases to about 1.7 by 2003. It then generally decreases to about -0.5 by 2012.

Note: Expected real yield on 10-year Treasury is off-the-run 10-year Treasury yield less Philadelphia Fed 10-year expected inflation. There is a plus sign at the end of each series that denotes the latest observation using daily interest rates and stock prices and latest earnings data.

Source: Thomson Financial.

Figure: Implied Volatility on S&P 500 (VIX)

Line chart, by percent, log scale, 2007 to 2012. Data are daily. There is a vertical line marking the August FOMC. The series begins in 2007 at about 7 and generally increases to about 80 by 2008. It then generally decreases to about 18 by September 4, 2012.

Note: Option-implied one-month-ahead volatility on the S&P 500 index.

Source: Chicago Board Options Exchange.

Figure: Revision to S&P 500 Earnings per Share

Line chart, by percent, 1997 to 2012. Data are monthly. There is a horizontal line at zero. The series begins in 1997 at about 0 and generally decreases to about -6 by 2001. It generally increases to about 2 by 2004 and then generally decreases to about -14 by 2009. It generally increases to about 3 by 2010 and then generally decrease to about -1 by Mid-August 2012.

Note: Weighted average of the percent change in the consensus forecasts of current-year and following-year earnings per share. EPS revision is -17.22 percent in February 2009.

Source: Thomson Financial.

Figure: Corporate Bond Spreads

Line chart, by basis points, 2007 to 2012. Data are daily. There is a vertical line marking the August FOMC. There are two series, 10-year high-yield and 10-year BBB. 10-year high-yield begins in 2007 at about 260 and generally increases to about 1625 by 2009. It then generally decreases to about 500 by September 4, 2012. 10-year BBB scale begins in 2007 at about 125 and generally increases to about 650 by 2009. It then generally decreases to about 275 by September 4, 2012.

Note: Measured relative to a smoother nominal off-the-run Treasury yield curve.

Source: Merrill Lynch and staff estimates.

Figure: Spread on 30-Day A2/P2 Commercial Paper

Line chart, by basis points, 2009 to 2012. Data are 5-day moving average. There is a vertical line marking the August FOMC. The series begins in April 2009 at about 90 and generally decreases to about 17.5 by March 2010. It then generally increases to about 30 by September 4, 2012.

Note: The A2/P2 spread is the A2/P2 nonfinancial rate minus the AA nonfinancial rate. There is a plus sign at the end of the series that denotes the latest available single-day observation.

Source: Depository Trust & Clearing Corporation.

Business Finance

Figure: Financial Ratios for Nonfinancial Corporations

Line chart, by ratio, 1992 to 2012. There are two series, Debt over total assets and Liquid assets over total assets. Debt over total assets begins in 1992 at about 0.33 and generally decreases to about 0.245 by 2004. It generally increases to about 0.29 by 2008 and then generally decreases to about 0.265 by 2012:Q2 preliminary. Liquid assets over total assets begins in 1992 at about 0.053 and generally increases to about 0.0105 by 2004. It generally decreases to about 0.089 by 2008 and then increases to about 0.0107 by 2012:Q2 preliminary.

Note: Data are annual through 1999 and quarterly thereafter.

Source: Compustat.

Figure: Bond Ratings Changes of Nonfinancial Firms

Bar chart, by percent of outstandings, 1991 to 2012. There is a horizontal line at zero. Data are by annual rate. There are two series, Upgrades and Downgrades. Upgrades begins in 1991 at about 10 and generally increases to about 20 by 1995. It generally decreases to about 2.5 by 2002 and then generally increases to about 10 by 2007. It generally increases to about 15 by 2012:Q1 and then decreases to about 5 by July-August 2012. Downgrades begins in 1992 at about -33 and generally decreases to about -43 by 1993. It generally increases to about -7 by 1997 and then generally decreases to about -38 by 2002. It generally increases to about -7 by July-August 2012.

Source: Calculated using data from Moody's Investors Service.

Figure: Selected Components of Net Debt Financing, Nonfinancial Firms

Bar chart, by billions of dollars, 2008 to 2012. Data are monthly rate. There is a horizontal line at zero. There are three series, Bonds, C&I loans, and Commercial paper. There is also a series represented by a line chart, called Total. Approximate values are: 2008: Bonds 17, C&I loans 25, Commercial paper 26, Total 24; 2009: Bonds 30 C&I loans -25, Commercial paper -30, Total 0; 2010: Bonds 31, C&I loans -5, Commercial paper 33, Total 29; 2011:H1: Bonds 31, C&I loans 42, Commercial Paper 45, Total 45; 2011:H2: Bonds 28, C&I loans 40, Commercial paper 42, Total 42; 2012:Q1: Bonds 40, C&I loans 45, Commercial paper 0, Total 45; 2012:Q2: Bonds 35, C&I loans 47, Commercial paper 50, Total 50; July 2012: Bonds 47, C&I loans 48, Commercial paper -2, Total 47; August 2012 estimate: Bonds 45; C&I loans 60, Commercial paper -1, Total 59.

Note: C&I loans and Commercial paper are on a period-end basis, seasonally adjusted.

Source: Depository Trust & Clearing Corporation; Thomson Financial; Federal Reserve Board.

Figure: U.S. CLO Issuance

Bar chart, by billions of dollars, 2000 to 2012. Data are annual rate. There are two series, Issuance and Pipeline. Approximate values are: 2000: Issuance 0, Pipeline 0; 2001: Issuance 4, Pipeline 0; 2002: Issuance 6, Pipeline 0; 2003: Issuance 13, Pipeline 0; 2004: Issuance 30, Pipeline 0; 2005: Issuance 58, Pipeline 0; 2006: Issuance 87, Pipeline 0; 2007: Issuance 90, Pipeline 0; 2008: Issuance 20, Pipeline 0; 2009: Issuance 1, Pipeline 0; 2010: Issuance 5, Pipeline 0; 2011: Issuance 12, Pipeline 0; 2012:H1: Issuance 35, Pipeline 40.

Source: Thomson Reuters LPC LoanConnector.

Figure: Selected Components of Net Equity Issuance, Nonfinancial Firms

Bar chart, by billions of dollars, 2008 to 2012. Data are monthly rate. There is a horizontal line at zero. There are four series, Public issuance, Private issuance, Repurchases, and Cash mergers. There is a fifth series, Total, represented by line chart. Approximate values are: 2008: Public issuance 25, Private issuance 24, Repurchases -30, Cash mergers -48, Total -21; 2009: Public issuance 20, Private issuance 15, Repurchases -15, Cash mergers -24, Total -1; 2010: Public Issuance 15, Private issuance 10, Repurchases -25, Cash mergers -30, Total -24; 2011:H1: Public Issuance 17, Private issuance 10, Repurchases -27, Cash mergers -43, Total -27; 2011:H2: Public Issuance 16, Private issuance 10, Repurchases -32, Cash mergers -52, Total -45, 2012:Q1: Public issuance 18, Private issuance 10, Repurchases -27, Cash mergers -42, Total -25; 2012:Q2 preliminary: Public issuance 18, Private issuance 10, Repurchases -27, Cash mergers -51, Total -46.

Source: Thomson Financial, Investment Benchmark Report; Money Tree Report by PricewaterhouseCoopers, National Venture Capital Association, and Venture Economics.

Figure: CMBS Issuance

Bar chart, by billions of dollars, 2008 to 2012. Data are annual rate. There is a horizontal line at zero. Approximate values are: 2008: 12, 2009: 1, 2010: 10, 2011:H1: 32, 2011:H2: 29, 2012:Q1: 17, 2012:Q2: 43, July 2012: 40, August 2012: 43.

Source: Commercial Mortgage Alert.

Household Finance

Figure: Mortgage Rate and MBS Yield

Line chart, by percent, 2007 to 2012. There is a vertical line marking the August FOMC. There are two series, 30-year conforming fixed mortgage rate and MBS yield. 30-year conforming fixed mortgage rate begins in 2007 at about 6.4 and generally increases to about 6.55 by 2008. It then generally decreases to about 3.49 by September 4, 2012. MBS yield begins in 2007 at about 5.6 and generally increases to about 6.1 by 2008. It then generally decreases to about 2.4 by September 4, 2012.

Note: For mortgage-backed securities (MBS) yield, the data are daily and consist of the Fannie Mae 30-year current-coupon rate; for mortgage rate, the data are weekly before 2010 and daily thereafter.

Source: For MBS yield, Barclays; for mortgage rate, Freddie Mac (before 2010) and Loansifter (from 2010).

Figure: Refinance Loan Originations

Line chart, by billions of dollars, 2002 to 2012. Data are monthly. The series begins in 2002 at about 105 and generally increases to about 350 by 2003. It generally decreases to about 30 by 2008 and then generally increases to about 140 by August 2012.

Note: Seasonally adjusted by FRB staff.

Source: Staff estimates.

Figure: Prices of Existing Homes

Line chart, by index peak normalized to 100, 2005 to 2012. Data are monthly. The series begins in 2005 at about 86 and generally increases to about 100 by 2006. It generally decreases to about 71 by 2009 and then decreases to about 67 by 2011. It then generally increases to about 70 by July 2012.

Source: CoreLogic.

Figure: Delinquencies on Prime Mortgages, Transition Rate

Line chart, by percent of loans, 2003 to 2012. There are two series, 3-month moving average and Monthly rate. 3-month moving average begins in 2003 at about 1.08 and generally decreases to about 0.82 by 2005. It generally increases to about 1.44 by 2008 and then generally decreases to about 0.97 by June 2012. Monthly rate begins in 2003 at about 1.06 and generally decreases to about 0.8 by 2006. It generally increases to about 1.74 by 2008 and then generally decreases to about 1 by June 2012.

Note: Percent of previously current mortgages that transition to being at least 30 days delinquent each month.

Source: LPS Applied Analytics.

Figure: Consumer Credit

Line chart, by percent change, annual rate, 2004 to 2012. Data are 3-month moving average. There is a horizontal line at zero. There are two series, Nonrevolving and Revolving. Nonrevolving begins in 2004 at about 5.75 and generally decreases to about -3.8 by 2008. It generally increases to about 12 by 2011 and then generally decreases to about 8 by June 2012. Revolving begins in 2004 at about 2.8 and generally increases to about 6 by 2007. It generally decreases to about -14 by 2010 and then generally increases to about -1 by June 2012.

Source: Federal Reserve Board.

Figure: Gross Consumer ABS Issuance

Bar chart, by billions of dollars, 2007 to 2012. Data are monthly rate. There are three series, Student loan, Credit card, and Auto. Approximate values are: 2007: Student loan 19, Credit card 14.5, Auto 6.3; 2008: Student loan 10.5, Credit card 8, Auto 3; 2009: Student loan 10.5, Credit card 9, Auto 4; 2010: Student loan 6.5, Credit card 5, Auto 4; 2011: Student loan 7, Credit card, 6, Auto 4.5; 2012:Q1: Student loan 9.5, Credit card 8, Auto 7; 2012:Q2: Student loan 13, Credit card 10, Auto 7; 2012:J: Student loan 13.7, Credit card 11, Auto 8; 2012:A: Student loan 10.6, Credit card 10, Auto 4.

Source: Inside MBS & ABS; Merrill Lynch; Bloomberg; Federal Reserve Board.

Commercial Banking and Money

Figure: Changes in Bank Credit

Line chart, by percent, 2005 to 2012. Data are 3-month change, annual rate. There is a horizontal line at zero. There are two series, Total bank credit and C&I loans. Total bank credit begins in 2005 at about 10 and generally decreases to about -12 by 2009. It then generally increases to about 4 by August 2012. C&I loans begins in 2005 at about 12.5 and generally increases to about 27 by 2007. It generally decreases to about -28 by 2009 and then generally increases to about 15 by August 2012.

Note: The data have been adjusted to remove the estimated effects of certain changes to accounting standards and nonbank structure activity of $5 billion or more.

Source: Federal Reserve Board.

Figure: Return on Assets and Return on Equity

Line chart, by percent, 1997 to 2012. Data are quarterly, s.a.a.r. There is a horizontal line at zero. There are two series, ROA and ROE. ROA begins in 1997 at about 1.15 where it remains relatively constant until 2007. It generally decreases to about -1.75 by 2008 and then generally increases to about 0.7 by 2012:Q2. ROE begins in 1997 at about 15 where it remains relatively constant until 2007. It generally decreases to about -22.5 by 2008 and then generally increases to about 10 by 2012:Q2.

Source: Federal Reserve Board, FR-Y9C, Consolidated Financial Statements for Bank Holding Companies.

Figure: Provisions and Charge-Offs

Bar chart, by billions of dollars, 2005 to 2012. There is a horizontal line at zero. There are two series, Provisions for loan and lease losses and Net charge-offs. There are 2 other series, ALLL and Provisions - charge-offs, that are represented by line chart. Provisions for loan and lease losses begins in 2005 at about 15 where it remains relatively constant until mid-2007. It generally increases to about 80 by 2008 and then generally decreases to about 20 by 2010. It then decreases to about 15 by 2012. Net charge-offs begins in 2005 at about -10 where it remains relatively constant until late 2007. It decreases to about -60 by 2009 and then increases to about -20 by 2012. ALL begins in 2005 at about 75 and generally increases to about 275 by 2010. It then generally decreases to about 175 by 2012. Provisions - charge-offs begins in 2005 at about 0 where it remains relatively constant until 2007. It generally increases to about 40 by 2008 and then decreases to about -20 by 2010. It then increases to about -10 by 2012.

Note: ALLL allowance for loan and lease losses.

Source: Federal Reserve Board, FR Y-9C, Consolidated Financial Statements for Bank Holding Companies.

Figure: Regulatory Capital Ratios, All BHCs

Line chart, by percent, 1998 to 2012. Data are quarterly, s.a. There are three series, Total (Tier 1 + Tier 2), Tier 1 ratio, and Leverage ratio. Total (Tier 1 + Tier 2) begins in 1998 at about 12.4 and generally decreases to about 11.6 by 2008. It then generally increases to about 15.8 by 2012. Tier 1 ratio begins in 1997 at about 9 and generally increases to about 9.6 by 2004. It generally decreases to about 8 by 2008 and then generally increases to about 13 by 2012. Leverage ratio begins in 1998 at about 7.2 and generally decreases to about 5.8 by 2008. It then generally increases to about 8 by 2012.

Source: Federal Reserve Board, FR Y-9C, Consolidated Financial Statements for Bank Holding Companies.

Growth of M2 and Its Components

Percent, s.a.a.r.

	M2	Liquid deposits	Small time deposits	Retail MMFs	Curr.
2011	9.7	15.4	-18.5	-2.1	8.8
2012:H1	6.9	10.4	-16.5	-7.2	9.4
2012:Q2	4.9	7.8	-19.3	-4.7	8.0
June	5.7	8.3	-16.9	-.9	6.8
July	9.2	13.3	-19.4	-4.5	7.1
Aug.(e)	3.0	5.0	-18.8	-5.6	8.2

Note: Retail MMFs are retail money market funds.

e Estimate. Return to table

Source: Federal Reserve Board.

Figure: Level of Liquid Deposits

Line chart, by trillions of dollars, 2008 to 2012. Data are weekly. There is a vertical line marking the August FOMC. The series begins in 2008 at about 4.5 and generally increases to about 7.7 by August 20, 2012.

Note: Seasonally adjusted.

Source: Federal Reserve Board.

Note: The shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research: March 2001-November 2001, and December 2007-June 2009.

[Box:] Bank Funding Consultations

Figure: Noninterest-Bearing Transaction Deposits in Excess of $250,000

Bar chart, by billions of dollars, 2010 to 2012. Approximate values are: 2010:Q4: 1000, 2011:Q1: 1025, 2011:Q2: 1125, 2011:Q3: 1350, 2011:Q4: 1500, 2012:Q1: 1475, 2012:Q2: 1500.

Source: Commercial bank Call Reports.

[Box:] Balance Sheet Developments over the Intermeeting Period

Federal Reserve Balance Sheet

Billions of dollars

	Change since last FOMC	Current (08/31/12)

Total assets	**-32**	**2,816**
Selected assets:		
Liquidity programs for financial firms	-7	24
Primary, secondary, and seasonal credit	+0	+0
Foreign central bank liquidity swaps	-8	23
Term Asset-Backed Securities Loan Facility (TALF)	-1	2
Net portfolio holdings of Maiden Lane LLCs	-6	4
Maiden Lane	-0	2
Maiden Lane II	-0	+0
Maiden Lane III	-6	2
Securities held outright*	-16	2,573
U.S. Treasury securities	-2	1,642
Agency debt securities	-4	87
Agency mortgage-backed securities	-10	844
Total liabilities	**-32**	**2,761**
Selected liabilities:		
Federal Reserve notes in circulation	14	1,086
Reverse repurchase agreements	3	94
Foreign official and international accounts	3	94
Others	0	0
Reserve balances of depository institutions**	17	1,515
Term deposits held by depository institutions	-3	0
U.S. Treasury, General Account	-60	30
U.S. Treasury, Supplementary Financing Account	0	0
Other deposits	-0	19
Total capital	**-0**	**55**

Note: +0 (-0) denotes positive (negative) value rounded to zero. Return to table

* Par value. Return to table

** Includes overdrafts. Return to table

Risks and Uncertainty

Alternative Scenarios

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

Measure and scenario	2012		2013	2014	2015	2016-17
	H1	H2				

Real GDP						
Extended Tealbook baseline	1.8	1.5	2.4	3.2	3.6	3.0
Fiscal cliff	1.8	1.5	1.1	2.4	4.1	3.8
European crisis with severe spillovers	1.8	-1.2	-3.1	2.0	4.4	4.0
Faster European recovery	1.8	1.6	3.1	3.9	3.7	2.7
Faster domestic recovery	1.8	2.4	4.4	3.2	2.8	2.4
Higher oil prices	1.8	1.3	1.8	3.0	3.6	3.3
Damaged labor market	1.8	1.3	2.2	2.4	2.7	2.0
Protracted headwinds	1.8	1.5	1.9	2.1	2.4	2.6
Unemployment rate[1]						
Extended Tealbook baseline	8.2	8.3	8.0	7.6	6.7	5.7
Fiscal cliff	8.2	8.3	8.5	8.6	7.7	5.8
European crisis with severe spillovers	8.2	8.6	10.4	10.8	9.6	7.7
Faster European recovery	8.2	8.3	7.8	7.0	6.0	5.2
Faster domestic recovery	8.2	8.2	7.0	6.3	5.8	5.6
Higher oil prices	8.2	8.3	8.3	8.0	7.1	5.9
Damaged labor market	8.2	8.3	8.2	8.0	7.5	7.4
Protracted headwinds	8.2	8.3	8.2	8.2	7.9	7.4
Total PCE prices						
Extended Tealbook baseline	1.6	1.8	1.4	1.4	1.5	1.8
Fiscal cliff	1.6	1.8	1.4	1.2	1.1	1.4
European crisis with severe spillovers	1.6	.3	-.8	.7	1.7	2.1
Faster European recovery	1.6	2.0	2.2	2.0	1.8	1.9
Faster domestic recovery	1.6	1.8	1.4	1.6	1.9	2.2
Higher oil prices	1.6	3.5	1.8	1.5	1.6	1.9
Damaged labor market	1.6	1.9	1.6	1.9	2.2	2.4
Protracted headwinds	1.6	1.8	1.2	.8	.7	.8
Core PCE prices						
Extended Tealbook baseline	2.0	1.4	1.6	1.6	1.7	1.9
Fiscal cliff	2.0	1.4	1.6	1.4	1.3	1.5
European crisis with severe spillovers	2.0	.9	.3	.9	1.5	2.0
Faster European recovery	2.0	1.5	2.0	2.1	2.0	2.1
Faster domestic recovery	2.0	1.4	1.6	1.8	2.1	2.3
Higher oil prices	2.0	1.4	1.8	1.8	1.8	1.9
Damaged labor market	2.0	1.5	1.8	2.1	2.4	2.5
Protracted headwinds	2.0	1.4	1.4	1.0	.9	.9

Federal funds rate[1]						
Extended Tealbook baseline	.2	.1	.1	.6	2.1	3.5
Fiscal cliff	.2	.1	.1	.1	.7	3.3
European crisis with severe spillovers	.2	.1	.1	.1	.1	1.6
Faster European recovery	.2	.1	.1	1.1	2.7	4.3
Faster domestic recovery	.2	.2	1.9	3.0	3.5	4.0
Higher oil prices	.2	.1	.1	.4	1.5	3.1
Damaged labor market	.2	.1	.6	1.9	3.4	4.5
Protracted headwinds	.2	.1	.1	.1	.1	.1

1. Percent, average for the final quarter of the period. Return to table

Forecast Confidence Intervals and Alternative Scenarios

Confidence Intervals Based on FRB/US Stochastic Simulations

Figure: Real GDP

Line chart, by 4-quarter percent change, 2008 to 2017. There is a horizontal line at zero. There are ten series, Extended Tealbook baseline, Fiscal cliff, European crisis with severe spillovers, Faster European recovery, Faster domestic recovery, Higher oil prices, Damaged labor market, Protracted headwinds, 70 percent interval and 90 percent interval. Extended Tealbook baseline begins in 2008 at about 2 and decreases to about -4.6 by 2009. It increases to about 2.9 by 2010 and then generally increases to about 3.5 by 2015. It then generally decreases to about 3 by 2017. Fiscal cliff begins in 2012 at about 2.25 and generally decreases to about 1 by 2013. It increases to about 4.15 by 2015 and then decreases to about 3.6 by 2017. European crisis with severe spillovers begins in 2012 at about 2.25 and decreases to about -3.5 by 2013. It generally increases to about 4.1 by 2017. Faster European recovery begins in 2012 at about 2.25 and generally increases to about 4 by 2014. It then generally decreases to about 2.6 by 2017. Faster domestic recovery begins in 2012 at about 2.25 and generally increases to about 4.6 by 2013. It then generally decreases to about 2.25 by 2017. Higher oil prices begins in 2012 At about 2.25 and generally decreases to about 1.25 by 2013. It then generally increases to about 3.25 by 2017. Damaged labor market begins in 2012 at about 2.25 and generally increases to about 2.8 by 2015. It then generally decreases to about 2 by 2017. Protracted headwinds begins in 2012 at about 2.2.5 and generally increases to about 2.9 by 2017. The other two series, 90 percent interval and 70 percent interval closely track each other with 90 percent interval being about 1.1 percent both greater and less than 70 percent interval. 70 percent interval begins in 2012 at about 0.8 and 2.5 and generally increases to about 1.4 and 5.3 by 2015. It ends in 2017 at about 1 and 5.

Figure: Unemployment Rate

Line chart, by percent, 2008 to 2017. There is a horizontal line at zero. There are ten series, Extended Tealbook baseline, Fiscal cliff, European crisis with severe spillovers, Faster European recovery, Faster domestic recovery, Higher oil prices, Damaged labor market, Protracted headwinds, 70 percent interval and 90 percent interval. Extended Tealbook baseline begins in 2008 at about 5 and generally increases to about 10 by 2009. It then generally decreases to about 7.75 by 2017. Fiscal cliff begins in 2012 at about 8.25 and generally increases to about 8.6 by 2014. It then generally decreases to about 5.75 by 2017. European crisis with severe spillovers begins in 2012 at about 8.25 and generally increases to about 11 by 2014. It then generally decreases to about 7.75 by 2017. Faster European recovery begins in 2012 at about 8.25 and generally decreases to about 5.25 by 2017. Faster domestic recovery begins in 2012 at about 8.25 and generally decreases to about 5.6 by 2017. Higher oil prices begins in 2012 at about 8.25 and generally decreases to about 6 by 2017. Damaged labor market begins in 2012 at about 8.25 and generally decreases to about 7.4 by 2017. Protracted headwinds begins in 2012 at about

8.25 and generally decreases to about 7.45 by 2017. The other two series, 90 percent interval and 70 percent interval closely track each other with 90 percent interval being about 0.6 both greater and less than 70 percent interval. 70 percent interval begins in 2012 at about 8 and 8.15 and increases to about 6.5 and 8.6 by 2014. It ends in 2017 at about 4.7 and 6.8.

Figure: PCE Prices excluding Food and Energy

Line chart, by 4-quarter percent change, 2008 to 2012. There is a horizontal line at zero. There are ten series, Extended Tealbook baseline, Fiscal cliff, European crisis with severe spillovers, Faster European recovery, Faster domestic recovery, Higher oil prices, Damaged labor market, Protracted headwinds, 70 percent interval and 90 percent interval. Extended Tealbook baseline begins in 2008 at about 2.3 and generally decreases to about 1.15 by 2010. It increases to about 2 by 2012 and then decreases to about 1.6 by 2013. It ends in 2017 at about 1.8. Fiscal cliff begins in 2012 at about 1.7 and generally decreases to about 1.5 by 2017. European crisis with severe spillovers begins in 2012 at about 1.7 and decreases to about 0.4 by 2013. It then generally increases to about 2.05 by 2017. Faster European recovery begins in 2012 at about 1.7 and generally increases to about 2.2 by 2014. It then generally decreases to about 20.5 by 2017. Faster domestic recovery begins in 2012 at about 1.7 and generally increases to about 2.25 by 2017. Higher oil prices begins in 2012 at about 1.7 and generally increases to about 1.9 by 20187. Damaged labor market begins in 2012 at about 1.7 and generally increases to about 2.5 by 2017. Protracted headwinds begins in 2012 at about 1.7 and generally decreases to about 0.7 by 2017. The other two series, 90 percent interval and 70 percent interval closely track each other with 90 percent interval being about 0.6 percent greater and less than the 70 percent interval. 70 percent interval begins in 2012 at about 1.5 and 2 and generally increases to about 0.75 and 2.5 by 2014. It ends in 2017 at about 1 and 2.8.

Figure: Federal Funds Rate

Line chart, by percent, 2008 to 2012. There is a horizontal line at zero. There are ten series, Extended Tealbook baseline, Fiscal cliff, European crisis with severe spillovers, Faster European recovery, Faster domestic recovery, Higher oil prices, Damaged labor market, Protracted headwinds, 70 percent interval and 90 percent interval. Extended Tealbook baseline begins in 2008 at about 3.1 and generally decreases to about 0.1 by 2009. It remains relatively constant here 2014. It then increases to about 3.5 by 2017. Fiscal cliff begins in 2012 at about 0.1 where it remains relatively constant until 2015. It then increases to about 3.1 by 2017. European crisis with severe spillovers begins in 2012 at about 0.1 where it remains relatively constant until 2016. It then increases to about 1.5 by 2017. Faster European recovery begins in 2012 at about 0.1 where it remains relatively constant until 2014. It then increases to about 4.2 by 2017. Faster domestic recovery begins in 2012 at about 0.1 where it remains until 2013. It then increases to about 4 by 2017. Higher oil prices begins in 2012 at about 0.1 where it remains relatively constant until 2014. It then increases to about 3 by 2017. Damaged labor market begins in 2012 at about 0.1 where it remains relatively constant until 2013. It then increases to about 4.5 by 2017. Protracted headwinds begins in 2012 at about 0.1 where it remains relatively constant until 2017. The other two series, 90 percent interval and 70 percent interval closely track each other with 90 percent interval being about 1.25 percent greater and less than the 70 percent interval. 70 percent interval begins in 2012 at about 0.1 and 0.5 and then increases to about 0.5 and 3 by 2015. It ends in 2017 at about 1.75 and 5.5.

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

Measure	2012	2013	2014	2015	2016	2017
Real GDP (percent change, Q4 to Q4)						
Projection	1.6	2.4	3.2	3.6	3.0	2.9
Confidence interval						
Tealbook forecast errors	.8-2.5	.6-4.3	1.2-5.3	...	...	...
FRB/US stochastic simulations	1.0-2.4	1.0-4.1	1.2-4.7	1.5-5.4	1.2-5.2	1.0-5.0

Civilian unemployment rate (percent, Q4)						
Projection	8.3	8.0	7.6	6.7	6.2	5.7
Confidence interval						
Tealbook forecast errors	7.9-8.6	7.2-8.8	6.3-9.0	…	…	…
FRB/US stochastic simulations	8.1-8.5	7.3-8.7	6.6-8.7	5.8-8.0	5.2-7.3	4.7-6.8
PCE prices, total (percent change, Q4 to Q4)						
Projection	1.7	1.4	1.4	1.5	1.8	1.9
Confidence interval						
Tealbook forecast errors	1.2-2.2	.3-2.5	.1-2.6	…	…	…
FRB/US stochastic simulations	1.2-2.2	.4-2.4	.2-2.5	.3-2.7	.5-2.9	.7-3.1
PCE prices excluding food and energy (percent change, Q4 to Q4)						
Projection	1.7	1.6	1.6	1.7	1.8	1.9
Confidence interval						
Tealbook forecast errors	1.4-2.0	.9-2.3	.6-2.7	…	…	…
FRB/US stochastic simulations	1.4-2.0	.9-2.3	.7-2.5	.8-2.6	.9-2.7	1.0-2.8
Federal funds rate (percent, Q4)						
Projection	.1	.1	.6	2.1	2.9	3.5
Confidence interval						
FRB/US stochastic simulations	.1-.4	.1-1.6	.1-2.9	.4-4.0	1.1-4.9	1.8-5.6

Note: Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1969-2009 set of model equation residuals.

Intervals derived from Tealbook forecast errors are based on projections made from 1979-2009, except for PCE prices excluding food and energy, where the sample is 1981-2009.

… Not applicable. The Tealbook forecast horizon has typically extended about 2 years. Return to table

Alternative Projections

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

Measure and projection	2012 Previous Tealbook	2012 Current Tealbook	2013 Previous Tealbook	2013 Current Tealbook	2014 Previous Tealbook	2014 Current Tealbook
Real GDP						
Staff	1.5	1.6	2.1	2.4	3.2	3.2
FRB/US	1.4	1.5	2.2	1.7	3.6	2.9
EDO	2.3	1.9	3.3	3.1	3.1	3.1
Blue Chip	2.0	1.8	2.5	2.4	…	…
Unemployment rate[1]						

Staff	8.3	8.3	8.1	8.0	7.8	7.6
FRB/US	8.4	8.4	8.8	8.8	8.2	8.5
EDO	8.0	8.2	7.6	7.8	7.3	7.4
Blue Chip	8.1	8.1	7.7	7.7	...	...
Total PCE prices						
Staff	1.4	1.7	1.5	1.4	1.4	1.4
FRB/US	1.2	1.7	1.1	1.2	1.0	1.0
EDO	1.6	1.6	1.6	1.6	1.6	1.6
Blue Chip[2]	1.8	1.9	2.2	2.2	...	...
Core PCE prices						
Staff	1.8	1.7	1.6	1.6	1.6	1.6
FRB/US	1.6	1.7	1.2	1.5	1.2	1.2
EDO	1.8	1.7	1.6	1.6	1.6	1.6
Blue Chip	...	...	...	...	...	...
Federal funds rate[1]						
Staff	.1	.1	.1	.1	.4	.6
FRB/US	.0	.2	.1	.2	1.3	.9
EDO	.6	.4	1.5	1.2	2.1	1.9
Blue Chip[3]	.1	.1	.3	.2	...	...

Note: Blue Chip forecast completed on August 10, 2012.

1. Percent, average for Q4. Return to table

2. Consumer price index. Return to table

3. Treasury bill rate. Return to table

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

Tealbook Forecast Compared with Blue Chip

(Blue Chip survey released August 10, 2012)

Figure: Real GDP

Line chart, by percent change, annual rate, 2008 to 2013. There is a horizontal line at zero. There are three series, Staff forecast, Blue chip consensus, and Blue Chip top 10 and bottom 10 averages. Staff forecast begins in 2008 at about -1.9 and generally decreases to about -9 by late 2008. It generally increases to about 4 by 2009 and then decrease to about 0 by 2011. It generally increases to about 5 by late 2011 and then decreases to about 2.9 by 2013. Blue Chip consensus generally follows the same path as Staff forecast. Blue chip top 10 and bottom 10 averages begins in 2012 at about 1 and 2.4 and generally increases to about 0.5 and 3 by early 2013. It ends in late 2013 at about 2 and 4.

Figure: Real PCE

Line chart, by percent change, annual rate, 2008 to 2013. There is a horizontal line at zero. There are three series, Staff forecast, Blue chip consensus, and Blue Chip top 10 and bottom 10 averages. Staff forecast begins in 2008 at about -1 and decreases to about -5 by late 2008. It generally increases to about 4 by 2010 and then decreases to about 3 by 2013. Blue Chip consensus generally follows the same path as Staff forecast. Blue Chip top 10 and bottom 10 averages begins in 2012 at about 1 and 2.8 and increases to about -0.1 and 2.9 by early 2013. It ends in late 2013 at about 1.9 and 3.5.

Figure: Unemployment Rate

Line chart, by percent, 2008 to 2013. There are three series, Staff forecast, Blue chip consensus, and Blue Chip top 10 and bottom 10 averages. Staff forecast begins in 2008 at about 5 and generally increases to about 10 by 2009. It then generally decreases to about 8 by 2013. Blue Chip consensus generally follows the same path as Staff forecast until 2012 when it begins decreasing at a faster rate. It ends in 2013 at about 7.7. Blue chip top 10 and bottom 10 averages begins in 2012 at about 7.9 and 8 and generally increases to about 7.6 and 8.1 by early 2013. It ends in late 2013 at about 7.25 and 8.05.

Figure: Consumer Price Index

Line chart, by percent change, annual rate, 2008 to 2013. There is a horizontal line at zero. There are three series, Staff forecast, Blue chip consensus, and Blue Chip top 10 and bottom 10 averages. Staff forecast begins in 2008 at about 4.1 and generally decreases to about -9.5 by late 2008. It generally increases to about 4.8 by 2011 and then generally decreases to about 1.8 by 2013. Blue Chip consensus generally follows the same path as Staff forecast until 2012 when it begins increasing. It increases to about 2.1 by 2013. Blue Chip top 10 and bottom 10 averages begins in 2012 at about .8 and 2.5 and generally increases to about 1 and 3 by early 2013. It ends in late 2013 at about 1.5 and 3.

Figure: Treasury Bill Rate

Line chart, by percent, 2008 to 2013. There is a horizontal line at zero. There are three series, Staff forecast, Blue chip consensus, and Blue Chip top 10 and bottom 10 averages. Staff forecast begins in 2008 at about 2 and generally decrease to about 0.1 by 2009 where it remains relatively constant until 2013. Blue Chip consensus generally follows the same path as Staff Forecast. Blue Chip top 10 and bottom 10 averages begins in 2012 at about 0.1 and 0.15 and increases to about 0 and 0.2 by early 2013. It ends in late 2013 at about 0.05 and 0.5

Figure: 10-Year Treasury Yield

Line chart, by percent, 2008 to 2013. There are three series, Staff forecast, Blue chip consensus, and Blue Chip top 10 and bottom 10 averages. Staff forecast begins in 2008 at about 3.6 and generally decreases to about 2.7 by 2009. It increases to about 3.6 by 2010 and then decreases to about 1.6 by 2012. It then increases to about 2.9 by 2013. Blue Chip consensus generally follows the same path as Staff forecast until 2012 when it begins increasing at a slower rate. It end in 2013 at about 2.5. Blue Chip top 10 and bottom 10 averages begins in 2012 at about 1.5 and 1.8 and increases to about 1.6 and 2.2 by early 2013. It ends in late 2013 at about 1.8 and 3.35.

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

Assessment of Key Macroeconomic Risks (1)

Probability of Inflation Events

(4 quarters ahead--2013:Q3)

Probability that the 4-quarter change in total PCE prices will be ...	Staff	FRB/US	EDO	BVAR
Greater than 3 percent				
Current Tealbook	.07	.06	.11	.14
Previous Tealbook	.05	.03	.10	.04

Less than 1 percent				
Current Tealbook	.27	.31	.32	.10
Previous Tealbook	.33	.49	.31	.23

Probability of Unemployment Events

(4 quarters ahead--2013:Q3)

Probability that the unemployment rate will ...	Staff	FRB/US	EDO	BVAR
Increase by 1 percentage point				
Current Tealbook	.02	.16	.16	.02
Previous Tealbook	.04	.17	.17	.02
Decrease by 1 percentage point				
Current Tealbook	.06	.00	.32	.14
Previous Tealbook	.02	.00	.32	.19

Probability of Near-Term Recession

Probability that real GDP declines in each of 2012:Q4 and 2013:Q1	Staff	FRB/US	EDO	BVAR	Factor Model
Current Tealbook	.03	.07	.05	.03	.20
Previous Tealbook	.07	.10	.05	.07	.21

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. The current quarter is taken as data from the staff estimate for the second Tealbook in each quarter, otherwise the preceding quarter is taken as the latest historical observation.

Assessment of Key Macroeconomic Risks (2)

Figure: Probability that Total PCE Inflation is above 3 Percent (4 quarters ahead)

Line chart, by probability, 1998 to 2012. There are two series, FRB/US and BVAR. FRB/US begins in 1998 at about 0 and generally fluctuates between 0 and .25 until about 2006. It increases to about .85 by 2008 and then decreases to about 0.08 by 2012. BVAR begins in 1998 at about 0 and increases to about 0.33 by 2001. It decrease to about 0.01 by 2002 and then increases to about .75 by 2008. It decreases to about .19 by 2010 and then increases to about .39 by 2011. It ends in 2012 at about 0.15.

Figure: Probability that Total PCE Inflation Is Below 1 Percent (4 quarters ahead)

Line chart, by probability, 1998 to 2012. There are two series, FRB/US and BVAR. FRB/US begins in 1998 at about 0 and generally increases to about 0.85 by 2004. It decreases to about 0.22 by 2006 and then increases to about 1 by 2009. It ends in 2012 at about 0.3. BVAR begins in 1998 at about 0.2 and generally increases to about 1 by 2002. It decreases to about 0.08 by 2006 and then increases to about 1 by 2009. It ends in 2012 at about 0.1.

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

Line chart, by probability, 1998 to 2012. There are two series, FRB/US and BVAR. FRB/US begins in 1998 at about 0 and generally increases to about 0.7 by 2001. It generally decreases to about 0 by 2002 where it remains relatively constant until 2007. It increases to about 0.81 by 2009 and then decreases to about .15 by 2010. It ends in 2012 at about 0.18. BVAR begins in 1998 at about 0 and generally increases to about 0.6 by 2001. It decreases to about 0 by 2002 where it remains relatively constant until 2007. It increases to about 1 by 2008 and then decreases to about 0.02 by 2012.

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

Line chart, by probability, 1998 to 2012. There are two series, FRB/US and BVAR. FRB/US begins in 1998 at about 0 and generally increases to about 0.84 by 2003. It decreases to about 0 by 2006 and then increases to about 0.81 by 2010. It ends in 2012 at about 0. BVAR begins in 1998 at about 0.13 and decreases to about 0 by 2001. It increases to about .21 by 2004 and then decreases to about 0 by 2007. It increases to about 0.59 by 2011 and then decreases to about .175 by 2012.

Figure: Probability that Real GDP Declines in each of the Next Two Quarters

Line chart, by probability, 1998 to 2012. There are two series, FRB/US and BVAR. FRB/US begins in 1998 at about 0 where it remains relatively constant until about 2007. It increases to about 0.79 by 2009 and then decreases to about 0.09 by 2012. BVAR begins in 1998 at about 0 where it remains relatively constant until it increases to about 0.41 by 2001. It decreases to about 0 by 2002 where it remains relatively constant until 2007. It increases to about 0.99 by 2009 and then decreases to about 0.025 by 2012.

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

Greensheets

Changes in GDP, Prices, and Unemployment

(Percent, annual rate except as noted)

Interval		Nominal GDP 07/25/12	Nominal GDP 09/05/12	Real GDP 07/25/12	Real GDP 09/05/12	PCE price index 07/25/12	PCE price index 09/05/12	Core PCE price index 07/25/12	Core PCE price index 09/05/12	Unemployment rate[1] 07/25/12	Unemployment rate[1] 09/05/12
Quarterly											
2011:	Q1	3.1	2.2	.4	.1	3.9	3.2	1.6	1.3	9.0	9.0
	Q2	4.0	5.2	1.3	2.5	3.3	3.6	2.3	2.3	9.1	9.1
	Q3	4.4	4.3	1.8	1.3	2.3	2.3	2.1	1.9	9.1	9.1
	Q4	3.8	4.2	3.0	4.1	1.2	1.1	1.3	1.3	8.7	8.7
2012:	Q1	3.9	4.2	1.9	2.0	2.6	2.5	2.3	2.2	8.2	8.2
	Q2	1.8	3.3	1.0	1.7	.8	.7	1.8	1.8	8.2	8.2
	Q3	3.8	4.3	1.5	1.3	.8	1.9	1.6	1.3	8.3	8.3
	Q4	3.7	3.1	1.8	1.7	1.5	1.7	1.5	1.5	8.3	8.3
2013:	Q1	3.2	3.4	1.6	2.0	1.6	1.2	1.6	1.6	8.2	8.2
	Q2	3.6	3.8	2.0	2.3	1.6	1.5	1.6	1.6	8.2	8.2
	Q3	3.7	4.1	2.2	2.6	1.5	1.4	1.6	1.6	8.1	8.1
	Q4	4.0	4.3	2.5	2.8	1.4	1.3	1.6	1.6	8.1	8.0

Two-quarter[2]											
2011:	Q2	3.5	3.7	.8	1.3	3.6	3.4	1.9	1.8	-.5	-.5
	Q4	4.1	4.3	2.4	2.7	1.8	1.7	1.7	1.6	-.4	-.4
2012:	Q2	2.8	3.7	1.4	1.8	1.7	1.6	2.1	2.0	-.5	-.5
	Q4	3.7	3.7	1.6	1.5	1.1	1.8	1.5	1.4	.1	.1
2013:	Q2	3.4	3.6	1.8	2.1	1.6	1.4	1.6	1.6	-.1	-.1
	Q4	3.9	4.2	2.4	2.7	1.4	1.4	1.6	1.6	-.1	-.2
Four-quarter[3]											
2010:Q4		4.7	4.3	3.1	2.4	1.3	1.5	1.0	1.2	-.3	-.3
2011:Q4		3.8	4.0	1.6	2.0	2.7	2.5	1.8	1.7	-.9	-.9
2012:Q4		3.3	3.7	1.5	1.6	1.4	1.7	1.8	1.7	-.4	-.4
2013:Q4		3.6	3.9	2.1	2.4	1.5	1.4	1.6	1.6	-.2	-.3
2014:Q4		4.7	4.7	3.2	3.2	1.4	1.4	1.6	1.6	-.3	-.4
Annual											
2010		4.2	3.8	3.0	2.4	1.8	1.9	1.4	1.5	9.6	9.6
2011		3.9	4.0	1.7	1.8	2.5	2.4	1.4	1.4	8.9	8.9
2012		3.5	4.0	1.8	2.1	1.7	1.8	1.9	1.8	8.2	8.2
2013		3.5	3.7	1.8	2.0	1.4	1.5	1.6	1.6	8.2	8.1
2014		4.3	4.5	2.8	3.0	1.4	1.4	1.6	1.6	8.0	7.8

1. Level, except for two-quarter and four-quarter intervals. Return to table

2. Percent change from two quarters earlier; for unemployment rate, change is in percentage points. Return to table

3. Percent change from four quarters earlier; for unemployment rate, change is in percentage points. Return to table

Changes in Real Gross Domestic Product and Related Items

(Percent, annual rate except as noted)

Item	2011			2012				2013		
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Real GDP	2.5	1.3	4.1	2.0	1.7	1.3	1.7	2.0	2.3	2.6
Previous Tealbook	1.3	1.8	3.0	1.9	1.0	1.5	1.8	1.6	2.0	2.2
Final sales	2.4	2.3	1.5	2.4	1.9	1.4	1.4	.8	2.4	2.7
Previous Tealbook	1.6	3.2	1.1	1.8	.9	1.2	1.5	1.4	1.8	2.0
Priv. dom. final purch.	2.5	3.6	3.2	3.5	2.0	2.1	2.2	1.3	3.3	3.5
Previous Tealbook	1.9	3.3	2.7	3.0	1.8	2.2	2.5	2.2	2.7	2.8

Personal cons. expend.	1.0	1.7	2.0	2.4	1.7	2.3	2.2	1.1	2.8	2.8
Previous Tealbook	.7	1.7	2.1	2.5	1.1	2.1	2.4	2.0	2.2	2.3
Durables	-2.3	5.4	13.9	11.5	.0	7.5	6.6	2.0	9.1	8.7
Nondurables	-.3	-.4	1.8	1.6	.5	.9	1.9	1.0	1.8	1.9
Services	1.9	1.8	.3	1.3	2.4	2.0	1.6	1.0	2.2	2.2
Residential investment	4.1	1.4	12.1	20.5	8.4	9.7	5.5	10.5	12.0	12.4
Previous Tealbook	4.2	1.3	11.6	20.0	8.9	12.3	3.3	6.8	11.6	10.8
Business fixed invest.	14.5	19.0	9.5	7.5	3.1	-1.0	1.5	.6	4.5	6.1
Previous Tealbook	10.3	15.7	5.2	3.1	5.1	.6	3.1	1.9	3.5	4.5
Equipment & software	7.8	18.3	8.8	5.4	4.1	.7	2.0	.2	5.4	7.5
Previous Tealbook	6.2	16.2	7.5	3.5	6.8	1.5	3.9	2.2	4.5	5.9
Nonres. structures	35.2	20.7	11.5	12.9	.5	-5.0	.5	1.4	2.3	2.6
Previous Tealbook	22.6	14.4	-.9	1.9	.5	-1.8	.7	1.0	.8	.8
Net exports[2]	-400	-398	-418	-416	-405	-405	-411	-412	-414	-414
Previous Tealbook[2]	-416	-403	-411	-407	-405	-417	-429	-434	-442	-444
Exports	4.1	6.1	1.4	4.4	6.0	3.3	3.4	4.3	4.7	4.3
Imports	.1	4.7	4.9	3.1	2.9	2.8	3.9	3.7	4.2	3.4
Gov't. cons. & invest.	-.8	-2.9	-2.2	-3.0	-.7	-1.7	-1.1	-1.5	-1.5	-1.4
Previous Tealbook	-.9	-.1	-4.2	-4.0	-3.0	-1.4	-1.4	-1.2	-1.2	-1.4
Federal	2.8	-4.3	-4.4	-4.2	-.1	-3.2	-2.5	-3.9	-4.3	-4.1
Defense	8.3	2.6	-10.6	-7.1	-.1	-3.5	-2.4	-4.6	-5.1	-4.8
Nondefense	-7.5	-17.4	10.2	1.8	-.3	-2.4	-2.7	-2.7	-2.7	-2.8
State & local	-3.2	-2.0	-.7	-2.2	-1.0	-.7	-.2	.1	.3	.3
Change in bus. inventories[2]	28	-4	71	57	53	47	54	94	90	87
Previous Tealbook[2]	39	-2	52	54	59	69	79	84	93	100
Nonfarm[2]	36	-1	74	62	55	68	76	91	87	84

Farm[2]	-6	-3	-2	-3	-2	-21	-21	3	3	3

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

2. Billions of chained (2005) dollars. Return to table

Changes in Real Gross Domestic Product and Related Items

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

Item	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Real GDP	2.8	2.4	2.2	-3.3	-.1	2.4	2.0	1.6	2.4	3.2
Previous Tealbook	2.8	2.4	2.2	-3.3	-.5	3.1	1.6	1.5	2.1	3.2
Final sales	2.7	2.8	2.4	-2.6	-.5	1.7	1.7	1.8	2.1	3.1
Previous Tealbook	2.7	2.8	2.4	-2.6	-.8	2.4	1.5	1.4	1.8	3.0
Priv. dom. final purch.	3.2	2.4	1.2	-4.5	-2.8	3.2	2.9	2.5	2.9	4.0
Previous Tealbook	3.2	2.4	1.2	-4.5	-2.5	3.6	2.5	2.4	2.6	3.8
Personal cons. expend.	2.8	3.2	1.7	-2.5	-.3	2.9	1.9	2.2	2.4	3.4
Previous Tealbook	2.8	3.2	1.7	-2.5	-.2	3.0	1.6	2.0	2.2	3.3
Durables	2.8	7.0	4.6	-13.0	3.0	9.5	5.9	6.3	7.2	8.1
Nondurables	3.1	2.9	.8	-3.1	.4	3.0	1.4	1.2	1.7	2.7
Services	2.7	2.6	1.4	-.5	-1.1	1.9	1.5	1.8	2.0	2.9
Residential investment	5.3	-15.7	-20.7	-24.4	-13.3	-5.7	3.9	10.9	11.9	12.4
Previous Tealbook	5.3	-15.7	-20.7	-24.4	-12.9	-6.3	3.5	11.0	10.0	11.2
Business fixed invest.	4.5	7.8	7.9	-9.4	-15.7	7.7	10.2	2.7	4.2	5.7
Previous Tealbook	4.5	7.8	7.9	-9.4	-14.4	11.1	8.2	2.9	3.6	5.3
Equipment & software	6.2	6.0	3.9	-13.6	-7.8	11.9	11.4	3.0	5.1	7.2
Previous Tealbook	6.2	6.0	3.9	-13.6	-5.8	16.6	9.6	3.9	4.6	6.7
Nonres. structures	-.1	13.0	17.3	-1.2	-29.4	-1.8	6.9	2.0	2.2	2.2
Previous Tealbook	-.1	13.0	17.3	-1.2	-29.3	-1.8	4.4	.3	.8	1.6

Net exports[1]	-723	-729	-649	-495	-355	-420	-408	-409	-416	-430
Previous Tealbook[1]	-723	-729	-649	-495	-359	-422	-414	-414	-443	-462
Exports	6.7	10.2	10.1	-2.5	.3	8.8	4.3	4.3	4.5	5.7
Imports	5.2	4.1	.8	-5.9	-6.1	10.9	3.5	3.2	4.2	4.8
Gov't. cons. & invest.	.7	1.5	1.9	2.7	4.0	-1.3	-3.3	-1.6	-1.5	-1.1
Previous Tealbook	.7	1.5	1.9	2.7	1.1	.1	-2.8	-2.4	-1.4	-.8
Federal	1.2	2.2	3.1	8.8	5.1	2.3	-4.2	-2.5	-4.2	-4.3
Defense	.4	4.4	2.6	9.8	4.1	1.0	-4.0	-3.3	-4.9	-5.0
Nondefense	2.6	-2.3	4.2	6.8	7.2	5.2	-4.6	-.9	-2.7	-2.9
State & local	.4	1.2	1.2	-.9	3.3	-3.6	-2.7	-1.0	.3	.9
Change in bus. inventories[1]	50	59	28	-36	-139	51	31	53	92	107
Previous Tealbook[1]	50	59	28	-36	-145	59	35	65	99	140
Nonfarm[1]	50	63	29	-38	-138	58	36	65	89	106
Farm[1]	0	-4	-1	1	-1	-6	-4	-12	3	1

1. Billions of chained (2005) dollars. Return to table

Contributions to Changes in Real Gross Domestic Product

(Percentage points, annual rate except as noted)

Item	2011			2012				2013		
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Real GDP	2.5	1.3	4.1	2.0	1.7	1.3	1.7	2.0	2.3	2.6
Previous Tealbook	1.3	1.8	3.0	1.9	1.0	1.5	1.8	1.6	2.0	2.2
Final sales	2.5	2.3	1.6	2.4	1.9	1.4	1.4	.8	2.4	2.7
Previous Tealbook	1.6	3.2	1.2	1.8	.9	1.2	1.5	1.4	1.8	2.0
Priv. dom. final purch.	2.1	2.9	2.7	2.9	1.7	1.8	1.9	1.1	2.7	2.9
Previous Tealbook	1.6	2.8	2.3	2.5	1.5	1.9	2.1	1.8	2.2	2.4
Personal cons. expend.	.7	1.2	1.5	1.7	1.2	1.7	1.6	.8	2.0	2.0
Previous										

Tealbook	.5	1.2	1.5	1.7	.8	1.5	1.7	1.4	1.6	1.6
Durables	-.2	.4	1.0	.9	.0	.6	.5	.2	.7	.7
Nondurables	-.1	-.1	.3	.3	.1	.1	.3	.2	.3	.3
Services	.9	.9	.2	.6	1.1	1.0	.8	.5	1.0	1.1
Residential investment	.1	.0	.3	.4	.2	.2	.1	.2	.3	.3
Previous Tealbook	.1	.0	.3	.4	.2	.3	.1	.2	.3	.3
Business fixed invest.	1.3	1.7	.9	.7	.3	-.1	.2	.1	.5	.6
Previous Tealbook	1.0	1.5	.5	.3	.5	.1	.3	.2	.4	.5
Equipment & software	.5	1.2	.6	.4	.3	.0	.1	.0	.4	.5
Previous Tealbook	.4	1.1	.6	.3	.5	.1	.3	.2	.3	.4
Nonres. structures	.8	.5	.3	.4	.0	-.1	.0	.0	.1	.1
Previous Tealbook	.5	.4	.0	.1	.0	-.1	.0	.0	.0	.0
Net exports	.5	.0	-.6	.1	.3	.0	-.2	.0	-.1	.0
Previous Tealbook	.2	.4	-.3	.1	.0	-.4	-.4	-.2	-.2	-.1
Exports	.6	.8	.2	.6	.8	.5	.5	.6	.6	.6
Imports	.0	-.8	-.9	-.5	-.5	-.5	-.7	-.6	-.7	-.6
Gov't. cons. & invest.	-.2	-.6	-.4	-.6	-.1	-.3	-.2	-.3	-.3	-.3
Previous Tealbook	-.2	.0	-.8	-.8	-.6	-.3	-.3	-.2	-.2	-.3
Federal	.2	-.4	-.4	-.3	.0	-.2	-.2	-.3	-.3	-.3
Defense	.5	.2	-.6	-.4	.0	-.2	-.1	-.2	-.3	-.2
Nondefense	-.2	-.5	.3	.1	.0	-.1	-.1	-.1	-.1	-.1
State & local	-.4	-.2	-.1	-.3	-.1	-.1	.0	.0	.0	.0
Change in bus. inventories	.0	-1.1	2.5	-.4	-.2	-.1	.2	1.2	-.1	-.1
Previous Tealbook	-.3	-1.4	1.8	.1	.0	.3	.3	.2	.3	.2
Nonfarm	.0	-1.2	2.5	-.4	-.2	.4	.2	.5	-.1	-.1
Farm	.0	.1	.1	.0	.0	-.5	.0	.7	.0	.0

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

Changes in Prices and Costs

(Percent, annual rate except as noted)

Item	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3
GDP chain-wt. price index	2.6	3.0	.4	2.0	1.6	2.9	1.4	1.4	1.5	1.5
Previous Tealbook	2.5	2.6	.9	2.0	.8	2.2	1.9	1.6	1.5	1.4
PCE chain-wt. price index	3.6	2.3	1.1	2.5	.7	1.9	1.7	1.2	1.5	1.4
Previous Tealbook	3.3	2.3	1.2	2.6	.8	.8	1.5	1.6	1.6	1.5
Energy	20.5	4.7	-5.0	8.1	-13.5	10.3	2.5	-6.5	-2.4	-2.5
Previous Tealbook	15.0	3.3	-3.2	7.9	-13.6	-12.1	-.9	-.7	-1.1	-1.6
Food	6.0	5.1	3.3	1.3	.7	1.4	3.4	3.6	3.4	2.5
Previous Tealbook	6.4	4.7	3.3	1.3	.7	2.1	3.3	3.4	3.2	2.2
Ex. food & energy	2.3	1.9	1.3	2.2	1.8	1.3	1.5	1.6	1.6	1.6
Previous Tealbook	2.3	2.1	1.3	2.3	1.8	1.6	1.5	1.6	1.6	1.6
Ex. food & energy, market based	2.3	2.1	1.5	2.2	1.7	1.4	1.4	1.5	1.5	1.5
Previous Tealbook	2.4	2.3	1.4	2.1	1.7	1.5	1.4	1.5	1.5	1.5
CPI	4.4	3.1	1.3	2.5	.8	2.5	2.1	1.2	1.6	1.4
Previous Tealbook	4.4	3.1	1.3	2.5	.8	.7	1.6	1.7	1.7	1.5
Ex. food & energy	2.4	2.5	1.9	2.1	2.6	1.8	1.8	1.7	1.7	1.7
Previous Tealbook	2.4	2.5	1.9	2.1	2.6	2.1	1.5	1.7	1.7	1.7
ECI, hourly compensation[2]	3.2	1.4	2.1	1.7	2.1	2.3	2.4	2.5	2.6	2.6
Previous Tealbook[2]	3.2	1.4	2.1	1.7	2.3	2.5	2.5	2.6	2.5	2.6
Nonfarm business sector										
Output per hour	1.2	.6	2.8	-.5	2.2	1.0	.8	.9	1.8	1.3
Previous										

Item										
Tealbook	-.3	1.8	1.2	-.8	-.1	1.2	1.5	.9	1.7	1.7
Compensation per hour	-.2	.0	-.7	5.8	3.7	2.3	2.3	2.5	2.6	2.7
Previous Tealbook	-.5	5.7	-.4	.5	2.1	2.2	2.6	2.6	2.6	2.7
Unit labor costs	-1.3	-.6	-3.3	6.4	1.5	1.3	1.5	1.6	.8	1.5
Previous Tealbook	-.1	3.9	-1.5	1.3	2.3	1.0	1.2	1.7	.9	1.0
Core goods imports chain-wt. price index[3]	7.2	2.3	-.6	-.2	1.2	-2.6	.4	.9	1.0	1.2
Previous Tealbook[3]	7.2	2.4	-.4	.4	1.7	-1.1	.1	.8	1.2	1.3

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

2. Private-industry workers. Return to table

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

Changes in Prices and Costs

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

Item	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GDP chain-wt. price index	3.5	2.9	2.6	2.1	.5	1.8	2.0	2.0	1.5	1.5
Previous Tealbook	3.5	2.9	2.6	2.1	.7	1.6	2.1	1.7	1.5	1.5
PCE chain-wt. price index	3.2	1.9	3.5	1.7	1.4	1.5	2.5	1.7	1.4	1.4
Previous Tealbook	3.2	1.9	3.5	1.7	1.5	1.3	2.7	1.4	1.5	1.4
Energy	21.5	-3.7	19.3	-8.8	2.7	6.5	11.9	1.4	-3.4	-2.2
Previous Tealbook	21.5	-3.7	19.3	-8.8	2.6	6.2	12.8	-5.1	-1.2	-1.7
Food	1.5	1.7	4.7	7.0	-1.7	1.3	5.1	1.7	2.6	.9
Previous Tealbook	1.5	1.7	4.7	7.0	-1.7	1.3	5.2	1.8	2.4	.9
Ex. food & energy	2.3	2.3	2.4	2.0	1.6	1.2	1.7	1.7	1.6	1.6
Previous Tealbook	2.3	2.3	2.4	2.0	1.7	1.0	1.8	1.8	1.6	1.6
Ex. food & energy, market based	2.0	2.2	2.1	2.2	1.7	.7	1.9	1.7	1.5	1.5
Previous Tealbook	2.0	2.2	2.1	2.2	1.7	.7	1.8	1.7	1.5	1.5

CPI	3.7	2.0	4.0	1.6	1.5	1.2	3.3	2.0	1.4	1.3
Previous Tealbook	3.7	2.0	4.0	1.6	1.5	1.2	3.3	1.4	1.6	1.4
Ex. food & energy	2.1	2.7	2.3	2.0	1.7	.6	2.2	2.1	1.7	1.7
Previous Tealbook	2.1	2.7	2.3	2.0	1.7	.6	2.2	2.0	1.7	1.7
ECI, hourly compensation[1]	2.9	3.2	3.0	2.4	1.2	2.1	2.2	2.1	2.6	2.9
Previous Tealbook[1]	2.9	3.2	3.0	2.4	1.2	2.1	2.2	2.3	2.6	2.8
Nonfarm business sector										
Output per hour	1.6	.8	2.5	-1.1	5.6	1.8	.6	.8	1.3	1.6
Previous Tealbook	1.6	.8	2.5	-1.1	5.3	2.3	.4	.4	1.5	1.8
Compensation per hour	3.5	4.5	3.6	2.5	1.5	1.6	2.0	3.5	2.7	3.0
Previous Tealbook	3.5	4.5	3.6	2.5	1.8	1.4	2.5	1.9	2.6	2.9
Unit labor costs	1.9	3.6	1.1	3.7	-3.9	-.2	1.4	2.6	1.4	1.4
Previous Tealbook	1.9	3.6	1.1	3.7	-3.3	-.9	2.1	1.4	1.1	1.0
Core goods imports chain-wt. price index[2]	2.2	2.5	2.9	3.7	-1.7	2.7	4.3	-.3	1.1	1.4
Previous Tealbook[2]	2.2	2.5	2.9	3.7	-1.7	2.6	4.3	.3	1.1	1.4

1. Private-industry workers. Return to table

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

Other Macroeconomic Indicators

Item	2011			2012				2013		
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q
Employment and production											
Nonfarm payroll employment[2]	.6	.3	.5	.7	.3	.3	.4	.4	.4	.5	
Unemployment rate[3]	9.1	9.1	8.7	8.2	8.2	8.3	8.3	8.2	8.2	8.1	
Previous Tealbook[3]	9.1	9.1	8.7	8.2	8.2	8.3	8.3	8.2	8.2	8.1	
NAIRU[3]	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Previous Tealbook[3]	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	

GDP gap[4]	-4.9	-5.0	-4.4	-4.4	-4.4	-4.5	-4.6	-4.6	-4.5	-4.3
Previous Tealbook[4]	-4.8	-4.8	-4.5	-4.5	-4.7	-4.8	-4.8	-4.9	-4.9	-4.8
Industrial production[5]	1.2	5.6	5.1	5.8	2.5	1.2	4.8	4.1	2.9	3.0
Previous Tealbook[5]	1.2	5.6	5.1	5.8	2.2	3.4	2.5	2.5	2.4	2.5
Manufacturing industr. prod.[5]	.2	5.1	5.6	9.7	1.0	1.9	2.8	2.6	2.7	3.1
Previous Tealbook[5]	.2	5.1	5.6	9.8	1.4	1.2	2.2	1.8	2.4	2.7
Capacity utilization rate - mfg.[3]	74.4	75.2	76.1	77.6	77.5	77.6	77.8	78.0	78.2	78.4
Previous Tealbook[3]	74.4	75.2	76.1	77.6	77.6	77.5	77.7	77.7	77.8	77.9
Housing starts[6]	.6	.6	.7	.7	.7	.8	.8	.9	.9	1.0
Light motor vehicle sales[6]	12.2	12.6	13.4	14.2	14.1	14.3	14.4	14.6	14.9	15.1
Income and saving										
Nominal GDP[5]	5.2	4.3	4.2	4.2	3.3	4.3	3.1	3.4	3.8	4.1
Real disposable pers. income[5]	-1.5	-1.3	-.2	3.7	3.1	1.9	2.8	-1.3	2.9	3.6
Previous Tealbook[5]	-.5	.7	.2	.7	2.6	3.3	3.5	-1.9	2.7	2.9
Personal saving rate[3]	4.6	3.9	3.4	3.6	4.0	3.9	4.1	3.5	3.5	3.6
Previous Tealbook[3]	4.8	4.6	4.2	3.7	4.1	4.3	4.6	3.6	3.7	3.8
Corporate profits[7]	19.3	6.7	29.6	-10.4	2.2	.3	-3.9	-6.0	-1.9	-2.4
Profit share of GNP[3]	11.8	11.9	12.5	12.1	12.1	12.0	11.7	11.5	11.3	11.1
Net federal saving[8]	-1,308	-1,232	-1,183	-1,059	-1,095	-1,035	-1,057	-801	-781	-765
Net state & local saving[8]	-75	-118	-117	-128	-113	-110	-108	-103	-84	-78
Gross national saving rate[3]	11.8	11.8	12.4	12.4	12.5	12.7	12.3	12.6	12.6	12.6
Net national saving rate[3]	-1.0	-1.0	-.3	-.3	.0	.2	-.2	.1	.1	.2

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

2. Change, millions. Return to table

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

4. Percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential. Annual values are for the fourth quarter of the year indicated. Return to table

5. Percent change, annual rate. Return to table

6. Level, millions; annual values are annual averages. Return to table

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

8. Billions of dollars; annual values are annual averages. Return to table

Other Macroeconomic Indicators

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

Item	2005	2006	2007	2008	2009	2010	2011	2012	2013
Employment and production									
Nonfarm payroll employment[1]	2.4	2.1	1.2	-2.8	-5.6	.8	1.8	1.8	1.8
Unemployment rate[2]	5.0	4.5	4.8	6.9	9.9	9.6	8.7	8.3	8.0
Previous Tealbook[2]	5.0	4.5	4.8	6.9	9.9	9.6	8.7	8.3	8.1
NAIRU[2]	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0	6.0
Previous Tealbook[2]	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0	6.0
GDP gap[3]	.6	.8	.8	-4.5	-5.7	-4.7	-4.4	-4.6	-4.1
Previous Tealbook[3]	.6	.8	.9	-4.5	-6.1	-4.4	-4.5	-4.8	-4.6
Industrial production[4]	2.3	2.1	2.5	-9.0	-5.7	6.3	4.1	3.5	3.3
Previous Tealbook[4]	2.3	2.1	2.5	-9.0	-5.7	6.3	4.1	3.5	2.5
Manufacturing industr. prod.[4]	3.4	1.8	2.8	-11.8	-6.5	6.5	4.2	3.8	3.0
Previous Tealbook[4]	3.4	1.8	2.8	-11.8	-6.5	6.5	4.2	3.6	2.5
Capacity utilization rate - mfg.[2]	78.4	78.2	78.2	69.7	67.0	73.1	76.1	77.8	78.7
Previous Tealbook[2]	78.4	78.2	78.2	69.7	67.0	73.1	76.1	77.7	78.2
Housing starts[5]	2.1	1.8	1.4	.9	.6	.6	.6	.8	.9
Light motor vehicle sales[5]	16.9	16.5	16.1	13.1	10.4	11.5	12.7	14.2	15.0
Income and saving									
Nominal GDP[4]	6.4	5.3	4.9	-1.2	.4	4.3	4.0	3.7	3.9
Real disposable pers. income[4]	.6	4.6	1.6	1.0	-3.0	3.5	.3	2.9	2.2
Previous Tealbook[4]	.6	4.6	1.6	1.0	-2.4	3.5	.4	2.5	1.7
Personal saving rate[2]	1.6	2.8	2.5	6.2	3.8	4.8	3.4	4.1	3.7
Previous Tealbook[2]	1.6	2.8	2.5	6.2	4.3	5.2	4.2	4.6	4.0

Corporate profits[6]	19.6	3.7	-8.1	-33.5	57.0	17.3	9.2	-3.1	-2.9
Profit share of GNP[2]	11.8	11.6	10.1	6.8	10.7	12.0	12.5	11.7	11.0
Net federal saving[7]	-283	-204	-245	-613	-1229	-1308	-1237	-1061	-775
Net state & local saving[7]	26	51	12	-72	-113	-90	-102	-115	-84
Gross national saving rate[2]	15.6	16.5	13.9	12.6	11.0	12.1	12.4	12.3	12.7
Net national saving rate[2]	3.6	4.4	1.7	-.6	-2.3	-.6	-.3	-.2	.3

1. Change, millions. Return to table

2. Percent; values are for the fourth quarter of the year indicated. Return to table

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. Return to table

4. Percent change. Return to table

5. Level, millions; values are annual averages. Return to table

6. Percent change, with inventory valuation and capital consumption adjustments. Return to table

7. Billions of dollars; values are annual averages. Return to table

Staff Projections of Federal Sector Accounts and Related Items

(Billions of dollars except as noted)

	Fiscal year				2011				2012		
Item	**2011[a]**	**2012**	**2013**	**2014**	**Q1[a]**	**Q2[a]**	**Q3[a]**	**Q4[a]**	**Q1[a]**	**Q2[a]**	**Q**
Unified budget					Not seasonally ac						
Receipts[1]	2302	2440	2680	2927	488	714	568	555	509	760	
Outlays[1]	3599	3547	3517	3564	949	855	895	877	966	885	
Surplus/deficit[1]	-1297	-1106	-837	-638	-460	-141	-326	-322	-457	-125	
Previous Tealbook	*-1297*	*-1132*	*-831*	*-683*	*-460*	*-141*	*-326*	*-322*	*-457*	*-125*	
On-budget	-1364	-1154	-835	-640	-451	-202	-311	-346	-458	-187	
Off-budget	67	48	-2	2	-10	61	-15	24	1	62	
Means of financing											
Borrowing	1110	1210	879	718	260	93	389	326	398	198	
Cash decrease	252	-7	-5	0	225	-19	79	-28	42	-48	
Other[2]	-65	-96	-37	-80	-24	67	-142	23	17	-25	
Cash operating balance, end of period	58	65	70	70	118	137	58	86	43	91	

NIPA federal sector										Seasonally adjusted a	
Receipts	2501	2644	2930	3147	2510	2523	2511	2534	2665	2681	
Expenditures	3767	3736	3781	3872	3737	3831	3743	3717	3724	3775	
Consumption expenditures	1064	1053	1040	1014	1054	1071	1069	1052	1056	1055	
Defense	713	701	689	668	697	717	731	704	703	701	
Nondefense	352	352	351	346	357	354	338	348	352	354	
Other spending	2702	2683	2741	2858	2683	2760	2674	2665	2668	2720	
Current account surplus	-1265	-1093	-851	-725	-1227	-1308	-1232	-1183	-1059	-1094	-
Gross investment	163	155	150	141	161	163	159	159	152	156	
Gross saving less gross investment[3]	-1293	-1107	-855	-716	-1254	-1335	-1252	-1203	-1071	-1109	-
Fiscal indicators[4]											
High-employment (HEB) surplus/deficit	-1018	-863	-587	-491	-974	-1062	-981	-947	-830	-870	
Change in HEB, percent of potential GDP	-.4	-1.2	-1.8	-.7	-.6	.5	-.6	-.2	-.8	.2	
Fiscal impetus (FI), percent of GDP	-0.5	-0.6	-1.2	-0.5	-0.8	0.3	-0.6	-0.7	-0.7	-0.7	
Previous Tealbook	*-0.4*	*-0.8*	*-1.2*	*-0.5*	*-0.7*	*0.2*	*-0.1*	*-0.9*	*-0.9*	*-1.1*	

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. Return to table

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

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

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

a Actual. Return to table

Change in Debt of the Domestic Nonfinancial Sectors

(Percent)

Period[1]		Total	Households: Total	Households: Home mortgages	Households: Consumer credit	Business	State and local governments	Federal government	Memo: Nominal GDP
Year									
2007		8.4	6.6	6.8	5.9	13.6	5.4	4.9	4.9
2008		5.9	-.1	-.5	.8	6.1	.7	24.2	-1.2
2009		3.1	-1.7	-1.4	-4.5	-2.3	3.9	22.7	.4
2010		4.1	-2.2	-2.9	-1.3	.8	2.2	20.2	4.3
2011		3.6	-1.5	-2.3	4.0	4.5	-1.9	11.4	4.0
2012		4.8	.3	-1.3	5.4	5.3	-.1	11.3	3.7
2013		4.1	1.9	.6	6.6	4.3	.6	7.2	3.9
2014		3.9	2.4	.9	7.4	4.5	.9	5.8	4.7
Quarter									
2010:	1	3.7	-2.8	-4.4	-3.1	.1	2.4	20.6	3.9
	2	3.7	-2.2	-2.6	-3.5	-2.0	-.5	22.5	4.1
	3	4.0	-2.2	-3.0	-.6	2.7	2.1	16.0	4.6
	4	4.6	-1.5	-1.7	2.2	2.3	4.8	16.4	4.5
2011:	1	2.4	-1.6	-2.2	3.5	4.1	-3.3	7.9	2.2
	2	2.4	-3.0	-3.1	3.3	5.0	-3.5	8.6	5.2
	3	4.5	-1.1	-2.3	2.3	3.8	.0	14.1	4.3
	4	4.8	-.2	-1.7	6.7	4.8	-1.0	13.1	4.2
2012:	1	4.8	-.4	-2.9	5.9	5.3	-1.8	12.4	4.2
	2	5.1	.0	-1.4	5.0	5.7	1.0	11.6	3.3
	3	4.2	.4	-.8	4.5	5.0	-.1	8.8	4.3
	4	4.9	1.3	.0	5.6	4.6	.3	10.7	3.1
2013:	1	4.3	1.7	.6	5.3	4.3	.6	8.2	3.4
	2	4.1	1.9	.6	6.5	4.2	.6	7.3	3.8
	3	3.2	2.0	.6	6.9	4.2	.6	4.0	4.1
	4	4.5	2.1	.6	7.1	4.2	.6	8.4	4.3

Note: Quarterly data are at seasonally adjusted annual rates.

1. Data after 2012:Q1 are staff projections. Changes are measured from end of the preceding period to end of period indicated except for annual nominal GDP growth, which is calculated from Q4 to Q4. Return to table

Flow of Funds Projections: Highlights

(Billions of dollars at seasonally adjusted annual rates except as noted)

Category	2011	2012	2013	2014	2011		2012				
					Q3	Q4	Q1	Q2	Q3	Q4	Q
Domestic nonfinancial sectors											
Net funds raised											
Total	854.7	1456.8	1293.1	1280.0	1068.7	1391.5	1479.7	1498.1	1259.4	1589.8	1
Net equity issuance	-472.7	-387.2	-340.0	-360.0	-617.5	-438.2	-344.9	-463.9	-380.0	-360.0	-
Net debt issuance	1327.3	1844.0	1633.1	1640.0	1686.3	1829.7	1824.6	1962.0	1639.4	1949.8	1
Borrowing indicators											
Debt (percent of GDP)[1]	248.9	249.4	251.3	250.2	247.5	247.8	248.2	249.3	249.5	250.4	
Borrowing (percent of GDP)	8.8	11.8	10.0	9.7	11.1	11.9	11.8	12.6	10.4	12.3	
Households											
Net borrowing[2]	-191.0	42.8	250.6	311.7	-136.4	-26.6	-51.7	5.0	54.5	163.4	
Home mortgages	-232.6	-124.9	58.3	83.2	-230.0	-168.0	-285.3	-136.5	-77.7	0.0	
Consumer credit	96.6	134.8	174.0	207.3	56.5	164.8	149.0	126.6	116.6	147.0	
Debt/DPI (percent)[3]	112.8	108.4	106.1	103.3	111.9	111.5	109.8	108.7	107.7	106.8	
Business											
Financing gap[4]	-171.2	-79.7	157.8	286.6	-209.4	-140.0	-72.5	-93.6	-107.1	-45.5	
Net equity issuance	-472.7	-387.2	-340.0	-360.0	-617.5	-438.2	-344.9	-463.9	-380.0	-360.0	-
Credit market borrowing	509.0	621.3	531.7	577.5	439.0	564.3	629.9	677.7	610.8	566.7	
State and local governments											
Net borrowing	-58.6	-3.7	17.8	25.8	1.0	-29.1	-53.5	31.0	-2.2	9.8	
Current surplus[5]	182.9	138.3	163.8	209.9	168.8	174.4	160.1	126.8	131.0	135.1	
Federal government											
Net borrowing	1067.9	1182.1	833.0	724.9	1382.6	1321.2	1300.0	1248.4	976.3	1209.9	
Net											

borrowing (n.s.a.)	1067.9	1182.1	833.0	724.9	389.1	326.0	398.3	198.2	287.5	298.2
Unified deficit (n.s.a.)	1249.6	1115.4	738.3	644.9	326.3	321.7	457.3	125.3	202.1	330.8
Depository institutions										
Funds supplied	195.0	390.8	499.9	613.9	499.1	575.1	286.2	351.6	463.5	462.0

Note: Data after 2012:Q1 are staff projections.

1. Average debt levels in the period (computed as the average of period-end debt positions) divided by nominal GDP. Return to table

2. Includes change in liabilities not shown in home mortgages and consumer credit. Return to table

3. Average debt levels in the period (computed as the average of period-end debt positions) divided by disposable personal income. Return to table

4. For corporations, excess of capital expenditures over U.S. internal funds. Return to table

5. NIPA state and local government saving plus consumption of fixed capital and net capital transfers. Return to table

n.s.a. Not seasonally adjusted. Return to table

Foreign Real GDP and Consumer Prices: Selected Countries

(Quarterly percent changes at an annual rate)

Measure and country					Projected					
	2011				2012				2013	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Real GDP[1]										
Total foreign	3.5	2.3	3.9	1.6	3.2	2.3	2.3	2.3	2.5	2.7
Previous Tealbook	*3.6*	*2.3*	*3.9*	*1.5*	*3.3*	*2.3*	*2.4*	*2.2*	*2.5*	*2.6*
Advanced foreign economies	1.7	-.2	3.2	.4	1.6	.7	.7	.6	.8	1.1
Canada	3.6	-1.0	4.5	1.9	1.8	1.8	1.8	1.7	1.7	1.9
Japan	-7.7	-1.9	7.4	.3	5.5	1.4	-.5	.5	.9	1.1
United Kingdom	1.9	-.4	2.4	-1.4	-1.3	-1.8	2.5	.1	1.1	1.4
Euro area	2.9	.7	.4	-1.3	.1	-.7	-1.1	-1.2	-.7	-.2
Germany	5.0	1.8	1.5	-.6	2.0	1.1	-.2	-.4	-.1	.4
Emerging market economies	5.6	4.9	4.6	2.8	5.0	3.9	4.0	4.1	4.4	4.5
Asia	7.6	5.1	5.0	2.5	5.8	4.7	4.9	4.9	5.3	5.5
Korea	5.3	3.4	3.4	1.3	3.5	1.5	2.6	3.0	3.3	3.5

China	9.1	10.0	9.5	7.8	6.6	7.4	7.4	7.5	7.8	7.9
Latin America	3.3	4.9	4.0	3.0	4.3	3.2	3.1	3.3	3.4	3.4
Mexico	2.1	5.5	4.9	3.0	4.9	3.5	3.2	3.4	3.4	3.4
Brazil	3.3	2.3	-.6	.5	.5	1.6	2.5	3.1	3.3	3.4
Consumer prices[2]										
Total foreign	4.1	3.5	3.1	2.7	2.6	1.9	1.8	2.6	2.3	2.3
Previous Tealbook	*4.2*	*3.5*	*3.0*	*2.8*	*2.6*	*2.0*	*2.2*	*2.3*	*2.3*	*2.3*
Advanced foreign economies	3.0	2.3	1.2	2.4	2.2	.6	.7	1.9	1.4	1.3
Canada	3.3	3.4	1.0	2.9	2.1	.1	-.5	2.4	1.7	1.6
Japan	.0	-.7	.1	-.7	2.3	-.9	-1.0	.6	.1	-.1
United Kingdom	6.8	4.0	3.8	4.1	2.0	1.1	2.7	3.6	2.0	1.5
Euro Area	3.5	2.8	1.7	3.7	2.5	1.9	2.2	2.0	1.7	1.7
Germany	3.3	2.5	1.9	2.8	2.4	1.4	2.6	2.5	2.2	2.1
Emerging market economies	5.1	4.5	4.5	3.0	2.9	3.0	2.7	3.2	3.1	3.1
Asia	5.5	5.2	4.9	2.1	2.3	3.2	1.6	3.0	2.8	2.9
Korea	5.5	3.4	4.4	2.6	1.6	1.2	1.7	2.4	2.7	2.8
China	5.1	6.1	5.7	1.4	2.0	2.5	1.2	2.7	2.7	2.8
Latin America	3.7	2.9	3.9	5.2	4.6	2.6	5.1	3.5	3.8	3.6
Mexico	3.2	2.4	3.5	4.9	4.5	2.5	5.2	3.4	3.6	3.4
Brazil	7.8	6.8	6.2	6.0	4.0	3.8	6.0	4.9	5.2	5.4

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

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

Foreign Real GDP and Consumer Prices: Selected Countries

(Percent change, Q4 to Q4)

Measure and country	2006	2007	2008	2009	2010	2011	Projected 2012	2013	2014
Real GDP[1]									
Total foreign	4.2	4.3	-.9	.9	4.5	2.8	2.5	2.8	3.3
Previous Tealbook	*4.2*	*4.3*	*-.9*	*.9*	*4.4*	*2.8*	*2.5*	*2.7*	*3.2*

Advanced foreign economies	2.6	2.6	-1.9	-1.4	2.9	1.3	.9	1.2	1.9
Canada	1.9	2.5	-.7	-1.4	3.3	2.2	1.8	2.0	2.6
Japan	2.1	1.7	-4.8	-.6	3.4	-.6	1.7	1.2	.7
United Kingdom	2.0	3.8	-4.6	-.9	1.5	.6	-.1	1.6	2.3
Euro area	3.8	2.3	-2.2	-2.3	2.2	.7	-.7	.0	1.2
Germany	4.9	2.4	-1.9	-2.2	4.2	1.9	.6	.6	1.8
Emerging market economies	6.3	6.7	.4	3.6	6.2	4.5	4.3	4.5	4.8
Asia	7.8	8.8	.8	8.0	7.7	5.0	5.1	5.5	5.8
Korea	4.6	5.8	-3.2	6.3	5.0	3.4	2.6	3.6	4.2
China	12.8	13.7	7.7	11.3	9.7	9.1	7.2	7.9	8.1
Latin America	4.8	4.4	-.2	-.7	4.6	3.8	3.5	3.5	3.7
Mexico	4.1	3.5	-1.1	-2.1	4.3	3.9	3.7	3.4	3.6
Brazil	4.9	6.6	.9	5.3	5.3	1.4	1.9	3.5	4.0
Consumer prices[2]									
Total foreign	2.2	3.7	3.3	1.3	3.2	3.4	2.2	2.3	2.5
Previous Tealbook	*2.2*	*3.7*	*3.3*	*1.3*	*3.2*	*3.4*	*2.3*	*2.3*	*2.5*
Advanced foreign economies	1.4	2.2	2.0	.2	1.7	2.2	1.3	1.3	1.7
Canada	1.4	2.5	1.8	.8	2.2	2.7	1.0	1.7	2.0
Japan	.3	.5	1.1	-2.0	-.3	-.3	.2	-.1	1.7
United Kingdom	2.7	2.1	3.9	2.2	3.4	4.7	2.3	1.7	1.6
Euro Area	1.8	2.9	2.3	.4	2.0	2.9	2.2	1.5	1.5
Germany	1.3	3.1	1.7	.3	1.6	2.6	2.2	1.9	1.7
Emerging market economies	2.9	5.1	4.6	2.1	4.3	4.3	2.9	3.1	3.2
Asia	2.4	5.5	3.6	1.3	4.3	4.4	2.5	2.9	3.1
Korea	2.1	3.4	4.5	2.4	3.2	4.0	1.7	2.8	3.0
China	2.1	6.7	2.5	.6	4.6	4.6	2.1	2.8	3.0
Latin America	4.1	4.2	6.7	3.9	4.4	3.9	4.0	3.5	3.6
Mexico	4.1	3.8	6.2	4.0	4.3	3.5	3.9	3.3	3.3
Brazil	3.1	4.3	6.3	4.3	5.6	6.7	4.6	5.4	5.6

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

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

U.S. Current Account

Quarterly Data

		Projected	
	2011	2012	2013

	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	Billions of dollars, s.a.a.r.										
U.S. current account balance	**-480.0**	**-476.5**	**-432.6**	**-474.6**	**-549.3**	**-493.3**	**-455.5**	**-491.7**	**-514.4**	**-496.7**	**-50**
Previous Tealbook	*-480.0*	*-476.5*	*-432.6*	*-474.6*	*-549.3*	*-523.4*	*-505.9*	*-527.2*	*-557.4*	*-554.9*	*-57*
Current account as percent of GDP	-3.2	-3.2	-2.9	-3.1	-3.5	-3.2	-2.9	-3.1	-3.2	-3.1	
Previous Tealbook	*-3.2*	*-3.2*	*-2.9*	*-3.1*	*-3.6*	*-3.4*	*-3.2*	*-3.3*	*-3.5*	*-3.4*	
Net goods & services	-548.9	-566.2	-539.3	-585.1	-604.0	-566.3	-528.0	-563.9	-582.3	-558.3	-55
Investment income, net	217.9	232.8	241.9	247.4	197.8	220.0	214.6	216.5	210.6	200.5	19
Direct, net	314.9	318.2	323.4	330.2	283.9	294.3	276.4	270.5	267.2	260.7	25
Portfolio, net	-97.1	-85.4	-81.4	-82.8	-86.0	-74.3	-61.8	-53.9	-56.6	-60.2	-6
Other income and transfers, net	-148.9	-143.1	-135.3	-136.9	-143.1	-147.1	-142.2	-144.3	-142.8	-138.9	-14

Annual Data

							Projected		
	2006	2007	2008	2009	2010	2011	2012	2013	2014
	Billions of dollars								
U.S. current account balance	**-800.6**	**-710.3**	**-677.1**	**-381.9**	**-442.0**	**-465.9**	**-497.4**	**-516.9**	**-572.1**
Previous Tealbook	*-800.6*	*-710.3*	*-677.1*	*-381.9*	*-442.0*	*-465.9*	*-526.4*	*-575.4*	*-646.6*
Current account as percent of GDP	-6.0	-5.1	-4.7	-2.7	-3.0	-3.1	-3.2	-3.2	-3.4
Previous Tealbook	*-6.0*	*-5.1*	*-4.7*	*-2.7*	*-3.0*	*-3.1*	*-3.4*	*-3.6*	*-3.8*
Net goods & services	-753.3	-696.7	-698.3	-379.2	-494.7	-559.9	-565.5	-570.4	-586.6
Investment income, net	54.7	111.1	157.8	127.6	191.0	235.0	212.2	195.5	156.5
Direct, net	174.0	244.6	284.3	253.0	297.9	321.7	281.2	262.1	268.9
Portfolio, net	-119.4	-133.5	-126.5	-125.4	-106.9	-86.7	-69.0	-66.6	-112.5
Other income and transfers, net	-102.0	-124.7	-136.6	-130.3	-138.2	-141.1	-144.2	-142.0	-142.0

† Note: Data values for figures are rounded and may not sum to totals. Return to text

Last update: January 5, 2018

Board of Governors of the Federal Reserve System

The Federal Reserve, the central bank of the United States, provides the nation with a safe, flexible, and stable monetary and financial system.

Accessible Material

September 2012 Tealbook B Tables and Charts†

Monetary Policy Strategies

Policy Rules and the Staff Projection

Near-Term Prescriptions of Selected Policy Rules

	Constrained Policy		Unconstrained Policy	
	2012Q4	2013Q1	2012Q4	2013Q1
Taylor (1993) rule	**1.53**	**1.30**	**1.53**	**1.30**
Previous Tealbook	*1.55*	*1.23*	*1.55*	*1.23*
Taylor (1999) rule	**0.13**	**0.13**	**-0.76**	**-0.98**
Previous Tealbook	*0.13*	*0.13*	*-0.84*	*-1.21*
Inertial Taylor (1999) rule	**0.13**	**0.13**	**0.01**	**-0.14**
Previous Tealbook Outlook	*0.13*	*0.13*	*-0.01*	*-0.19*
Outcome-based rule	**0.13**	**0.13**	**-0.02**	**-0.23**
Previous Tealbook Outlook	*0.13*	*0.13*	*-0.02*	*-0.31*
First-difference rule	**0.13**	**0.13**	**0.03**	**0.04**
Previous Tealbook Outlook	*0.13*	*0.13*	*-0.09*	*-0.21*
Nominal income targeting rule	**0.13**	**0.13**	**-0.41**	**-0.86**
Previous Tealbook Outlook	*0.13*	*0.13*	*-0.52*	*-1.06*

ual Real Federal Funds Rate

	Current Tealbook	*Previous Tealbook*
Tealbook-consistent FRB/US r estimate	-2.39	*-2.79*
Actual real federal funds rate	-1.67	*-1.73*

Key Elements of the Staff Projection

Figure: GDP Gap

Line chart, by percent, 2012 to 2020. There are two series, "Current Tealbook" and "Previous Tealbook." The current Tealbook series begins at about -4.5 in 2012:Q1 and increases to end at about 0 in 2020:Q4. The previous Tealbook series begins at about -4.75 in 2012:Q1 and increases to end at about 0 in 2020:Q4.

Figure: PCE Prices ex. Food and Energy

Line chart, by four-quarter percent change, 2012 to 2020. There are two series, "Current Tealbook" and "Previous Tealbook." The current Tealbook series begins at about 1.9 in 2012:Q1 and increases to end at about 2.0 in 2020:Q4. The previous Tealbook series begins at about 1.9 n 2012:Q1 and increases to end at about 2.0 in 2020:Q4.

Note: For rules which 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 quarter.

Policy Rule Simulations

Figure: Nominal Federal Funds Rate

Line chart, by percent, 2012 to 2020. There are six series, "Taylor (1993) rule," "Taylor (1999) rule," "Inertial Taylor (1999) rule," "Nominal income targeting rule," "First-difference rule," and "Tealbook baseline." All six series begins at about 0 in 2012:Q1. The Taylor (1993) rule series generally increases to about 1.5 in 2012:Q4. It generally increases to end about 4.25 at 2020:Q4. The other five series remain constant following each other until increasing to end at about 4.25 for the Taylor (1999) rule and Tealbook baseline in 2020:Q4. The inertial Taylor (1999) rule and nominal income targeting rule ends at about 4.75 in 2020:Q4 and the First-difference rule at about 4 in 2020:Q4.

Figure: Real Federal Funds Rate

Line chart, by percent, 2012 to 2020. There are six series, "Taylor (1993) rule," "Taylor (1999) rule," "Inertial Taylor (1999) rule," "Nominal income targeting rule," "First-difference rule," and "Tealbook baseline." All six series begins at about -1.75 in 2012:Q1. The Taylor (1993) rule series generally increases to about 0 in 2012:Q4. It generally increases to end about 2.25 at 2020:Q4 along with the Taylor (1999) rule, the Inertial Taylor (1999) rule, and the First-difference rule. The other two series remain constant following each other until increasing to end at about 2.5 for and Tealbook baseline in 2020:Q4.

Figure: Unemployment Rate

Line chart, by percent, 2012 to 2020. There are six series, "Taylor (1993) rule," "Taylor (1999) rule," "Inertial Taylor (1999) rule," "Nominal income targeting rule," "First-difference rule," and "Tealbook baseline." All six series begins at about 8.25 in 2012:Q1. They follow each other to generally decrease to end at about 5.25 for the nominal income targeting rule in 2020:Q4. The other four series ends at about 5.5 in 2020:Q4.

Figure: PCE Inflation

Line chart, by percent, 2012 to 2020. Data are four-quarter averages. There is a horizontal line at 2. There are six series, "Taylor (1993) rule," "Taylor (1999) rule," "Inertial Taylor (1999) rule," "Nominal income targeting rule," "First-difference rule," and "Tealbook baseline." Taylor (1993) rule begins in 2012 at about 2.4 and generally decrease to about 1.4 by 2013. It then generally increases to end at about 1.99 by 2020. Taylor (1999) rule begins in 2012 at about 2.4 and generally decreases to about 1.5 by 2013. It then generally increases to about 2.1 by 2020. Inertial Taylor (1999) rule begins in 2012 at about 2.4 and generally decreases to about 1.7 by 2013. It then generally increases to about 2.4 by 2020. Nominal income targeting rule begins in 2012 at about 2.4 and generally decreases to about 1.7 by 2013. It then generally increases to about 2.1 by 2020. First-difference rule begins in 2012 at about 2.4 and generally decreases to about 1.4 by 2013. It then generally increases to end at about 1.8 by 2020. Tealbook baseline begins in 2012 at about 2.4 and generally decreases to about 1.5 by 2013. It generally increases to end at about 2.0 in 2020.

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

Figure: Nominal Federal Funds Rate

Line chart, by percent 2012 to 2020. There are four series, "Current Tealbook: Constrained," "Previous Tealbook: Constrained," "Current Tealbook: Unconstrained," and "Tealbook baseline." Current Tealbook: Constrained begins in 2012 at about 0.1 and remains relatively constant here until 2014. It generally increases to end at about 4.1 in 2020. Previous Tealbook: Constrained generally follows the same exact path as Current Tealbook: Constrained, except it ends at about 5 in 2020. Current Tealbook: Unconstrained begins in 2012 at about 0.1 and generally decreases to about -2 by 2013. It then generally increases to end at about 4.3 by 2020. Tealbook baseline begins in 2012 at about 0.1 where it remains relatively constant until about 2013. It then generally increases to end about 4.25 by 2020.

Figure: Real Federal Funds Rate

Line chart, by percent 2012 to 2020. There are four series, "Current Tealbook: Constrained," "Previous Tealbook: Constrained," "Current Tealbook: Unconstrained," and "Tealbook baseline." Current Tealbook: Constrained begins in 2012 at about -1.95 and generally decreases to about -2 by 2016. It then generally increases to end at about 2.9 by 2020. Previous Tealbook: Constrained generally follows the same path as Current Tealbook: Constrained. Current Tealbook: Unconstrained begins in 2012 at about -1.5 and generally decreases to about -4.5 by 2013. It then generally increases to end at about 2.5 by 2020. Tealbook baseline begins in 2012 at about -1.95 and generally increases to end at about 2.5 by 2020.

Figure: Unemployment Rate

Line chart, by percent, 2012 to 2020. There are four series, "Current Tealbook: Constrained," "Previous Tealbook: Constrained," "Current Tealbook: Unconstrained," and "Tealbook baseline." All four series begin at about 8.25 in 2012. They follow about the same path and generally decrease to end together at about 5.5 in 2020.

Figure: PCE Inflation

Line chart, by percent, 2012 to 2020. Data are four-quarter averages. There is a horizontal line at 2. There are four series, "Current Tealbook: Constrained," "Previous Tealbook: Constrained," "Current Tealbook: Unconstrained," and "Tealbook baseline." All four series begin at about 2.3 in 2012. Current Tealbook: Constrained decreases to about 1.3 in 2013. It then generally increases to end at about 2.1 in 2020. Previous Tealbook: Constrained remains constant and generally decreases to end at about 2.0 in 2020. Current Tealbook: Unconstrained decreases to about 1.3 in 2013. It then generally increases to end at about 2.0 in 2020. Tealbook baseline decreases to about 1.0 in 2013. It then generally increases to end at about 2.0 in 2020.

Optimal Control Policy: Commitment vs. Discretion

Figure: Nominal Federal Funds Rate

Line chart, by percent 2012 to 2020. There are four series, "Optimal policy: Commitment, constrained," "Optimal policy: Discretion, constrained," "Optimal policy: Discretion, constrained, (Previous Tealbook)," and "Optimal policy: Discretion, unconstrained." Optimal policy: Commitment, constrained begins in 2012 at about 0.1 and remains relatively constant here until 2014. It generally increases to end at about 4.9 in 2020. Optimal policy: Discretion, constrained generally follows the same exact path as Optimal policy: Commitment, constrained, except it ends at about 4.5 in 2020. Optimal policy: Discretion, unconstrained begins in 2012 at about 0.1 and generally decreases to about -2 by 2013. It then generally increases to end at about 4.4 by 2020. Optimal policy: Discretion, constrained, (Previous Tealbook) begins in 2012 at about 0.1 where it remains relatively constant until about 2013. It then generally increases to end about 4.5 by 2020.

Figure: Real Federal Funds Rate

Line chart, by percent 2012 to 2020. There are four series, "Optimal policy: Commitment, constrained," "Optimal policy: Discretion, constrained," "Optimal policy: Discretion, constrained, (Previous Tealbook)," and "Optimal policy: Discretion, unconstrained." Optimal policy: Commitment, constrained begins in 2012 at about -1.95 and generally decreases to about -2 by 2016. It then generally increases to end at about 2.9 by 2020. Optimal policy: Discretion, constrained generally follows the same path as Optimal policy: Commitment, constrained. Optimal policy: Discretion, unconstrained begins in 2012 at about -1.5 and generally decreases to about -4 by 2013. It then generally increases to end at about 2.5 by 2020. Optimal policy: Discretion, constrained, (Previous Tealbook) begins in 2012 at about -1.95 and generally increases to end at about 2.5 by 2020.

Figure: Unemployment Rate

Line chart, by percent, 2012 to 2020. There are four series, "Optimal policy: Commitment, constrained," "Optimal policy: Discretion, constrained," "Optimal policy: Discretion, constrained, (Previous Tealbook)," and "Optimal policy: Discretion, unconstrained." All four series begin at about 8.25 in 2012. They follow about the same path and generally decrease to end together at about 5.5 in 2020.

Figure: PCE Inflation

Line chart, by percent, 2012 to 2020. Data are four-quarter averages. There is a horizontal line at 2. There are four series, "Optimal policy: Commitment, constrained," "Optimal policy: Discretion, constrained," "Optimal policy: Discretion, constrained, (Previous Tealbook)," and "Optimal policy: Discretion, unconstrained." All four series begin at about 2.4 in 2012. Optimal policy: Commitment, constrained decreases to about 1.3 in 2013. It then generally increases to end at about 2.0 in 2020. Optimal policy: Discretion, constrained remains constant and generally decreases to end at about 2.0 in 2020. Optimal policy: Discretion, unconstrained decreases to about 1.3 in 2013. It then generally increases to end at about 2.0 in 2020. Optimal policy: Discretion, constrained, (Previous Tealbook) decreases to about 1.0 in 2013. It then generally increases to end at about 2.0 in 2020.

Outcomes under Alternative Policies

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

Measure and scenario	2012 H1	2012 H2	2013	2014	2015	2016
Real GDP						
Extended Tealbook baseline	1.8	1.5	2.4	3.2	3.6	3.0

Taylor (1993)	1.8	1.1	1.8	2.9	3.7	3.4
Taylor (1999)	1.8	1.5	2.4	3.2	3.5	3.0
Inertial Taylor (1999)	1.8	1.6	2.7	3.4	3.7	3.0
First-difference	1.8	1.4	2.1	2.9	3.5	3.1
Nominal income targeting	1.8	1.7	3.0	3.7	3.9	3.0
Constrained optimal control	1.8	1.8	3.2	3.9	4.1	2.9
Unemployment rate[1]						
Extended Tealbook baseline	8.2	8.3	8.0	7.6	6.7	6.2
Taylor (1993)	8.2	8.3	8.4	8.1	7.3	6.5
Taylor (1999)	8.2	8.3	8.0	7.6	6.8	6.2
Inertial Taylor (1999)	8.2	8.3	7.9	7.4	6.4	5.8
First-difference	8.2	8.3	8.2	7.9	7.1	6.5
Nominal income targeting	8.2	8.3	7.8	7.1	6.0	5.4
Constrained optimal control	8.2	8.2	7.7	6.9	5.7	5.1
Total PCE prices						
Extended Tealbook baseline	1.6	1.8	1.4	1.4	1.5	1.8
Taylor (1993)	1.6	1.6	1.2	1.2	1.3	1.6
Taylor (1999)	1.6	1.8	1.4	1.4	1.6	1.8
Inertial Taylor (1999)	1.6	2.1	1.8	1.8	2.0	2.2
First-difference	1.6	1.6	1.1	1.1	1.3	1.5
Nominal income targeting	1.6	2.2	1.8	1.8	2.0	2.2
Constrained optimal control	1.6	2.2	1.8	1.9	2.0	2.2
Core PCE prices						
Extended Tealbook baseline	2.0	1.4	1.6	1.6	1.7	1.8
Taylor (1993)	2.0	1.3	1.5	1.5	1.5	1.6
Taylor (1999)	2.0	1.5	1.6	1.7	1.8	1.9
Inertial Taylor (1999)	2.0	1.8	2.0	2.1	2.2	2.3
First-difference	2.0	1.2	1.4	1.4	1.4	1.5
Nominal income targeting	2.0	1.8	2.0	2.1	2.1	2.2
Constrained optimal control	2.0	1.9	2.1	2.1	2.2	2.3
Federal funds rate[1]						
Extended Tealbook baseline	0.2	0.1	0.1	0.6	2.1	2.9
Taylor (1993)	0.2	1.4	1.1	1.5	2.3	3.0
Taylor (1999)	0.2	0.1	0.1	0.7	2.1	2.9
Inertial Taylor (1999)	0.2	0.1	0.2	0.7	1.7	2.7
First-difference	0.2	0.1	0.2	1.1	2.2	3.1

Nominal income targeting	0.2	0.1	0.1	0.3	1.3	2.4
Constrained optimal control	0.2	0.1	0.1	0.1	0.4	1.9

1. Percent, average for the final quarter of the period. Return to table

Monetary Policy Alternatives

Table 1: Overview of Policy Alternatives for the September 13 FOMC Statement

<table>
<tr><th rowspan="2">Selected Elements</th><th rowspan="2">August Statement</th><th colspan="5">September Alternatives</th></tr>
<tr><th>A</th><th>B</th><th>B′</th><th>B″</th><th>C</th></tr>
<tr><td colspan="7">Economic Outlook</td></tr>
<tr><td rowspan="2">Growth and employment</td><td rowspan="2">growth to remain moderate over coming quarters and then to pick up very gradually; unemployment rate will decline only slowly</td><td colspan="2">expects that, without further policy accommodation, growth…

…likely would not be…</td><td>concerned that, without further policy accommodation, growth…

…might not be…</td><td>expects that, without further policy accommodation, growth…

…likely would not be…</td><td rowspan="2">growth to remain moderate over coming quarters and then to pick up gradually; unemployment rate will decline slowly</td></tr>
<tr><td colspan="4">strong enough to generate sustained improvement in labor market conditions</td></tr>
<tr><td>Inflation</td><td>will run at or below rate judged most consistent with dual mandate</td><td colspan="4">likely would run at or below 2 percent</td><td>will run near 2 percent</td></tr>
<tr><td colspan="7">Balance Sheet Policies</td></tr>
<tr><td>MEP</td><td>continue through the end of the year… as announced in June</td><td colspan="2">ended</td><td colspan="3">unchanged
(continue MEP)</td></tr>
<tr><td rowspan="2">Securities Reinvestment</td><td>principal payments of agency debt and MBS into agency MBS</td><td colspan="5">maintained</td></tr>
<tr><td>Directive: suspend Treasury rollovers during MEP</td><td colspan="2">reinstituted</td><td colspan="3">unchanged
(no Treasury rollovers)</td></tr>
<tr><td></td><td></td><td>begin new program: [$750] billion of longer-term Treasury securities and</td><td>begin new program: [$45] bil/month longer-term Treasury securities and [$30] bil/month agency MBS; purchase until</td><td>[$30] billion/month agency MBS, so</td><td colspan="2"></td></tr>
</table>

Asset Purchases	none	[$500] billion of agency MBS by early 2014; combined pace of about [$75] billion/month	observe substantial ongoing improvement in labor market, with inflation close to 2 percent and inflation expectations stable; program will continue at least through mid-2013	holdings of longer-term securities will increase [$75] billion/month	unchanged (none)	
Balance Sheet Guidance						
Guidance	will closely monitor incoming information;	will regularly review size and composition of balance sheet;	will regularly review pace and composition of purchases in light of actual and projected progress, efficacy and costs	will closely monitor incoming information in coming months;	will closely monitor incoming information;	will regularly review size and composition of securities holdings;
	will provide additional accommodation as needed	remains prepared to make adjustments as appropriate	n.a.	if do not observe substantial ongoing improvement in labor market, will undertake additional purchases; will take account of efficacy and costs	if do not observe substantial ongoing improvement in labor market in coming months, will engage in further purchases; will take account of efficacy and costs	is prepared to adjust holdings as necessary
Forward Rate Guidance						
Rationale	to support stronger recovery and help ensure inflation is at rate most consistent with dual mandate…	to support continued progress toward goals…			to support more rapid improvement in labor market conditions and help ensure inflation (unchanged)…	to support *the*… ***OR*** to support *sustainable* recovery and help ensure inflation (unchanged) …
Guidance	…at least through late 2014	…for a considerable time after conclusion of asset-purchase program… at least through mid-2015		…for a considerable time after recovery strengthens… at least through mid-2015	…for a considerable time after recovery strengthens… at least as long as quantitative conditions for unemployment rate and projected inflation are met, with inflation expectations well anchored (no date)	…at least through late [2013 | 2014] ***OR*** give conditions for timing of first rate increase (no date)

[Note: In the September FOMC Statement Alternatives, emphasis (strike-through) indicates strike-through text in the original document, and strong emphasis (bold) indicates bold red underlined text in the original document.]

September FOMC Statement--Alternative A

1. Information received since the Federal Open Market Committee met in ~~June~~ **August** suggests that economic activity ~~decelerated somewhat over the first half of this year~~ **has continued to expand at a moderate pace in recent months**. ~~Growth in~~ **Although** employment has ~~been slow in recent months~~ **increased somewhat**, ~~and~~ the unemployment rate remains elevated. Household spending has ~~been rising at a somewhat slower pace than earlier in the year~~ **continued to advance, but growth in** business fixed investment ~~has continued to advance~~ **appears to have slowed**. ~~Despite some further signs of improvement,~~ The housing sector ~~remains~~ **has shown some further signs of improvement, albeit from a** depressed **level**. Inflation has ~~declined since earlier this year, mainly reflecting lower prices of crude oil and gasoline~~ **been subdued, although the prices of some key commodities have increased recently**. ~~and~~ Longer-term inflation expectations have remained stable.
2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects **that, without further policy accommodation,** economic growth ~~to remain moderate over coming quarters and then to pick up very gradually~~ **likely would not be strong enough to generate sustained improvement in labor market conditions**. ~~Consequently, the Committee anticipates that the unemployment rate will decline only slowly toward levels that it judges to be consistent with its dual mandate.~~ Furthermore, strains in global financial markets continue to pose significant downside risks to the economic outlook. The Committee **also** anticipates that inflation over the medium term ~~will~~ **likely would** run at or below ~~the rate that it judges most consistent with its dual mandate~~ **its 2 percent objective**.
3. To support a stronger economic recovery and to help ensure that inflation, over time, is ~~at the rate most consistent with its dual mandate~~ **close to 2 percent**, the Committee ~~expects to maintain a highly accommodative stance for monetary policy~~ **decided today to begin a new asset-purchase program**. **Specifically, the Committee now intends to purchase [$750 billion] of longer-term Treasury securities and [$500 billion] of agency mortgage-backed securities by early 2014, a combined pace of about [$75] billion per month. These increases in its securities holdings should put downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.** The Committee will ~~closely monitor incoming information on~~ **regularly review the size and composition of its balance sheet in light of** economic and financial developments and ~~will provide additional accommodation as needed~~ **remains prepared to make adjustments as appropriate** to promote a stronger economic recovery and sustained improvement in labor market conditions in a context of price stability.
4. **This new asset-purchase program replaces the previously announced maturity extension program. In particular, the Committee is ending its sales of shorter-term Treasury securities and reinstituting its policy of rolling over maturing Treasury securities at auction.** The Committee ~~also decided to continue through the end of the year its program to extend the average maturity of its holdings of securities as announced in June, and it~~ is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities.
5. **To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the conclusion of this asset-purchase program.** In particular, the Committee **also** decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that ~~economic conditions--including low rates of resource utilization and a subdued outlook for inflation over the medium run--are likely to warrant~~ exceptionally low levels for the federal funds rate **are likely to be warranted** at least through ~~late 2014~~ **mid-2015**.

Note: If policymakers decide that it is appropriate to reduce the remuneration rate on reserve balances, the Board of Governors would issue an accompanying statement that might read:

In a related action, the Board of Governors voted today to reduce the interest rate paid on required and

excess reserve balances from 25 basis points to 15 basis points effective with the reserve maintenance period that begins on September 20, 2012.

September FOMC Statement--Alternative B

1. Information received since the Federal Open Market Committee met in ~~June~~ **August** suggests that economic activity ~~decelerated somewhat over the first half of this year~~ **has continued to expand at a moderate pace in recent months**. ~~Growth in~~ **Although** employment has ~~been slow in recent months~~ **increased somewhat**, ~~and~~ the unemployment rate remains elevated. Household spending has ~~been rising at a somewhat slower pace than earlier in the year~~ **continued to advance, but growth in** business fixed investment ~~has continued to advance~~ **appears to have slowed**. ~~Despite some further signs of improvement,~~ The housing sector ~~remains~~ **has shown some further signs of improvement, albeit from a** depressed **level**. Inflation has ~~declined since earlier this year, mainly reflecting lower prices of crude oil and gasoline~~ **been subdued, although the prices of some key commodities have increased recently**. ~~and~~ Longer-term inflation expectations have remained stable.

2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects **that, without further policy accommodation,** economic growth ~~to remain moderate over coming quarters and then to pick up very gradually~~ **likely would not be strong enough to generate sustained improvement in labor market conditions**. ~~Consequently, the Committee anticipates that the unemployment rate will decline only slowly toward levels that it judges to be consistent with its dual mandate.~~ Furthermore, strains in global financial markets continue to pose significant downside risks to the economic outlook. The Committee **also** anticipates that inflation over the medium term ~~will~~ **likely would** run at or below ~~the rate that it judges most consistent with its dual mandate~~ **its 2 percent objective**.

3. To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee ~~expects to maintain a highly accommodative stance for monetary policy~~ **decided today to begin a new asset-purchase program. Specifically, the Committee now intends to increase its holdings of longer-term Treasury securities at a pace of about [$45] billion per month and increase its holdings of agency mortgage-backed securities at a pace of about [$30] billion per month. This new asset-purchase program replaces the previously announced maturity extension program. In particular, the Committee is ending its sales of shorter-term Treasury securities and reinstituting its policy of rolling over maturing Treasury securities at auction.** The Committee ~~also decided to continue through the end of the year its program to extend the average maturity of its holdings of securities as announced in June, and it~~ is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities. ~~The Committee will closely monitor incoming information on economic and financial developments and will provide additional accommodation as needed to promote a stronger economic recovery and sustained improvement in labor market conditions in a context of price stability.~~

4. **The Committee will continue this new asset-purchase program until it has observed substantial ongoing improvement in labor market conditions, provided that the Committee projects that inflation over the medium term will be close to its 2 percent objective and longer-term inflation expectations remain stable. Given its current assessment of the economic outlook, the Committee anticipates that this program will continue at least through mid-2013. These increases in its securities holdings should put downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative. The Committee will regularly review the pace and composition of its securities purchases in light of actual and projected progress toward its objectives and its ongoing assessments of the efficacy and costs of the purchases.**

5. **To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the conclusion of this asset-purchase program.** In particular, the Committee **also** decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and, currently anticipates

that ~~economic conditions--including low rates of resource utilization and a subdued outlook for inflation over the medium run--are likely to warrant~~ exceptionally low levels for the federal funds rate **are likely to be warranted** at least through ~~late 2014~~ **mid-2015**.

September FOMC Statement--Alternative B′

1. Information received since the Federal Open Market Committee met in ~~June~~ **August** suggests that economic activity ~~decelerated somewhat over the first half of this year~~ **has continued to expand at a moderate pace in recent months**. ~~Growth in~~ **Although** employment has ~~been slow in recent months~~ **increased somewhat**, ~~and~~ the unemployment rate remains elevated. Household spending has ~~been rising at a somewhat slower pace than earlier in the year~~ **continued to advance, but growth in** business fixed investment ~~has continued to advance~~ **appears to have slowed**. ~~Despite some further signs of improvement,~~ The housing sector ~~remains~~ **has shown some further signs of improvement, albeit from a** depressed **level**. Inflation has ~~declined since earlier this year, mainly reflecting lower prices of crude oil and gasoline~~ **been subdued, although the prices of some key commodities have increased recently**. ~~and~~ Longer-term inflation expectations have remained stable.
2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee ~~expects~~ **is concerned that, without further policy accommodation,** economic growth ~~to remain moderate over coming quarters and then to pick up very gradually~~ **might not be strong enough to generate sustained improvement in labor market conditions**. ~~Consequently, the Committee anticipates that the unemployment rate will decline only slowly toward levels that it judges to be consistent with its dual mandate.~~ Furthermore, strains in global financial markets continue to pose significant downside risks to the economic outlook. The Committee **also** anticipates that inflation over the medium term ~~will~~ **likely would** run at or below ~~the rate that it judges most consistent with its dual mandate~~ **its 2 percent objective**.
3. To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee ~~expects to maintain a highly accommodative stance for monetary policy~~ **agreed today to increase policy accommodation by purchasing additional agency mortgage-backed securities at a pace of [$30] billion per month.** The Committee also ~~decided to~~ **will** continue through the end of the year its program to extend the average maturity of its holdings of securities as announced in June, and it is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities. **These actions, which together will increase the Committee's holdings of longer-term securities by about $75 billion each month, should put downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.**
4. The Committee will closely monitor incoming information on economic and financial developments ~~and will provide additional accommodation as needed to promote~~ **in coming months**. **If it does not observe** ~~a stronger economic recovery and sustained~~ **substantial ongoing** improvement in labor market conditions ~~in a context of price stability~~**, the Committee will continue its purchases of agency mortgage-backed securities and undertake additional asset purchases until such improvement is achieved**. **In determining the pace and composition of its asset purchases, the Committee will take appropriate account of the likely efficacy and costs of additional purchases.**
5. **To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the economic recovery strengthens.** In particular, the Committee **also** decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that ~~economic conditions--including low rates of resource utilization and a subdued outlook for inflation over the medium run--are likely to warrant~~ exceptionally low levels for the federal funds rate **are likely to be warranted** at least through ~~late 2014~~ **mid-2015**.

September FOMC Statement--Alternative B″

1. Information received since the Federal Open Market Committee met in ~~June~~ **August** suggests that economic activity ~~decelerated somewhat over the first half of this year~~ **has continued to expand at a moderate pace in recent months**. ~~Growth in~~ **Although** employment has ~~been slow in recent months~~ **increased somewhat**, ~~and~~ the unemployment rate remains elevated. Household spending has ~~been rising at a somewhat slower pace than earlier in the year~~ **continued to advance, but growth in** business fixed investment ~~has continued to advance~~ **appears to have slowed**. ~~Despite some further signs of improvement,~~ The housing sector ~~remains~~ **has shown some further signs of improvement, albeit from a** depressed **level**. Inflation has ~~declined since earlier this year, mainly reflecting lower prices of crude oil and gasoline~~ **been subdued, although the prices of some key commodities have increased recently**. ~~and~~ Longer-term inflation expectations have remained stable.

2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects **that, without further policy accommodation,** economic growth ~~to remain moderate over coming quarters and then to pick up very gradually~~ **likely would not be strong enough to generate sustained improvement in labor market conditions**. ~~Consequently, the Committee anticipates that the unemployment rate will decline only slowly toward levels that it judges to be consistent with its dual mandate.~~ Furthermore, strains in global financial markets continue to pose significant downside risks to the economic outlook. The Committee **also** anticipates that inflation over the medium term ~~will~~ **likely would** run at or below ~~the rate that it judges most consistent with its dual mandate~~ **its 2 percent objective**.

3. To support ~~a stronger economic recovery~~ **more rapid improvement in labor market conditions** and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee ~~expects~~ **intends** to maintain a highly accommodative stance for monetary policy **for a considerable time after the economic recovery strengthens**. In particular, the Committee decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and ~~currently~~ anticipates that ~~economic conditions--including low rates of resource utilization and a subdued outlook for inflation over the medium run--are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014~~ **this exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate exceeds 6 1/2 percent, provided that inflation [at a one- to two-year horizon is projected to be no more than a half percentage point above the Committee's 2 percent objective | is projected to be close to the Committee's 2 percent objective in the medium term] and longer-term inflation expectations continue to be well anchored**.

4. **The threshold value for unemployment given in the previous paragraph should not be interpreted as representing the Committee's longer-term objective for maximum employment. In particular, because monetary policy actions affect the economy only with a lag, the process of removing policy accommodation must begin before the unemployment rate has returned to its longer-run normal level.**

5. The Committee also decided to continue through the end of the year its program to extend the average maturity of its holdings of securities as announced in June, and it is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities.

6. The Committee will closely monitor incoming information on economic and financial developments and will provide additional accommodation as needed to promote a stronger economic recovery ~~and sustained improvement in labor market conditions~~ in a context of price stability. **In particular, if the Committee does not observe substantial ongoing improvement in labor market conditions over coming months, it will engage in further asset purchases until such improvement is achieved. In determining the pace and composition of any new asset-purchase program, the Committee will take appropriate account of the likely efficacy and costs of additional purchases.**

September FOMC Statement--Alternative C

1. Information received since the Federal Open Market Committee met in ~~June~~ **August** suggests that

economic activity ~~decelerated somewhat over the first half of this year~~ **has continued to expand at a moderate pace in recent months**. Growth in employment has ~~been slow in recent months, and the unemployment rate remains elevated~~ **picked up**. ~~Business fixed investment~~ **Private domestic demand** has continued to advance, ~~Household spending has been rising at a somewhat slower pace than earlier in the year. Despite some further signs of improvement,~~ **and** the housing sector ~~remains depressed~~ **has shown some further signs of improvement**. Inflation has declined since earlier this year, ~~mainly reflecting lower prices of crude oil and gasoline,~~ and longer-term inflation expectations have remained stable**, but prices of some key commodities recently have increased significantly**.

2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects economic growth to remain moderate over coming quarters and then to pick up ~~very~~ gradually. Consequently, the Committee anticipates that the unemployment rate will decline ~~only~~ slowly toward levels that it judges to be consistent with its dual mandate. Furthermore, strains in global financial markets continue to pose significant downside risks to the economic outlook. The Committee anticipates that inflation over the medium term will run ~~at or below~~ **near** the ~~rate that it judges most consistent with its dual mandate~~ **Committee's 2 percent objective**.

3. To support ~~a stronger~~ **the** economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee expects to maintain a highly accommodative stance for monetary policy. In particular, the Committee decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that economic conditions--including low rates of resource utilization and a subdued outlook for inflation over the medium run--are likely to warrant exceptionally low levels for the federal funds rate at least through late **[2013 |** 2014 **]**.

OR

3′. To support a ~~stronger~~ **sustainable** economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee expects to maintain a highly accommodative stance for monetary policy. In particular, the Committee decided today to keep the target range for the federal funds rate at 0 to 1/4 percent ~~and currently anticipates that economic conditions--including low rates of resource utilization and a subdued outlook for inflation over the medium run--are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014~~. **As rates of resource utilization rise toward levels consistent with maximum employment, the Committee eventually will need to make monetary policy less accommodative in order to ensure that the economy expands at a sustainable pace and to prevent inflation from persistently exceeding its longer-run objective. In determining the appropriate time to increase its target for the federal funds rate, the Committee will consider a range of factors, including actual and projected labor market conditions, the medium-term outlook for inflation, and the risks to the achievement of the Committee's objectives.**

4. The Committee also decided to continue through the end of the year its program to extend the average maturity of its holdings of securities as announced in June, and it is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities. The Committee will ~~closely monitor incoming information on economic and financial developments and will provide additional accommodation as needed~~ **regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as necessary** to promote ~~a stronger economic recovery and sustained improvement in labor market conditions in a context of~~ **maximum employment and** price stability.

Long-Run Projections of the Balance Sheet and Monetary Base

Figure: Total Assets

Line chart, by billions of dollars, 2006 to 2020. Data are monthly. There are five series, "Alt A," "Alt B," "Alt B′," "Alt C," and "July Alt B." All five series begin at about 900 in 2006. They all follow the same path to generally increase to about 2500 in 2012. The Alt A series generally increases to about 4000 in 2014. It then generally decreases to end at about 2000 in 2020. The Alt B series generally increases to about 3500 in 2013. It then generally decreases to end at about 2000 in 2020. The Alt B′ series generally increases to about 3000 in 2013. It then generally decreases to end at about 2000 in 2020. The Alt C series generally decreases to about 1500 in 2018. It then generally increases to end at about 2000 in 2020. The July Alt B series generally decreases to about 1500 in 2018. It then generally increases to end at about 2000 in 2020.

Growth Rates for the Monetary Base

Date	Alternative B	Alternative B′	Alternative A	Alternative C	July Alt B
	Percent, annual rate				
Monthly					
Apr-12	-12.2	-12.2	-12.2	-12.2	-12.2
May-12	-8.7	-8.7	-8.7	-8.7	-8.7
Jun-12	-5.1	-5.1	-5.1	-5.1	-4.6
Jul-12	7.7	7.7	7.7	7.7	6.2
Aug-12	18.7	18.7	19.0	18.7	12.2
Sep-12	6.0	6.0	6.4	5.7	-4.3
Oct-12	8.5	-1.1	7.6	-2.0	-11.9
Nov-12	33.4	16.0	31.4	12.4	8.8
Dec-12	32.5	17.3	30.9	8.7	1.2
Quarterly					
2011 Q3	21.0	21.0	21.0	21.0	21.0
2011 Q4	-5.9	-5.9	-5.9	-5.9	-5.9
2012 Q1	5.5	5.5	5.5	5.5	5.5
2012 Q2	-3.9	-3.9	-3.9	-3.9	-3.9
2012 Q3	5.3	5.3	5.4	5.2	2.3
2012 Q4	17.6	8.6	16.7	6.4	-1.5
2013 Q1	30.6	22.8	29.5	1.5	-2.2
2013 Q2	25.3	25.3	24.3	-8.8	-2.4
Annual - Q4 to Q4					
2010	0.9	0.9	0.9	0.9	0.9
2011	32.9	32.9	32.9	32.9	32.9
2012	6.2	3.9	6.0	3.3	0.6
2013	32.6	23.6	32.6	0.0	0.6
2014	0.5	-0.7	7.8	-2.4	-1.8
2015	-5.1	-3.2	-4.9	-7.2	-4.4
2016	-14.7	-14.5	-14.2	-16.7	-16.6
2017	-16.7	-16.7	-16.1	-18.2	-18.0
2018	-24.2	-23.9	-23.6	-5.0	-7.3

Note: Not seasonally adjusted.

Growth Rates for M2

(Percent, seasonally adjusted annual rate)

	Tealbook Forecast *
Monthly Growth Rates	
Jan-12	16.4
Feb-12	3.7
Mar-12	4.2
Apr-12	5.8
May-12	4.3
Jun-12	5.7
Jul-12	9.2
Aug-12	3.7
Sep-12	4.2
Oct-12	3.9
Nov-12	4.0
Dec-12	4.0
Quarterly Growth Rates	
2012 Q1	8.7
2012 Q2	4.9
2012 Q3	6.2
2012 Q4	4.0
2013 Q1	2.1
2013 Q2	2.5
2013 Q3	3.6
2013 Q4	3.9
2014 Q1	3.3
2014 Q2	2.7
2014 Q3	-0.4
2014 Q4	-2.2
Annual Growth Rates	
2012	6.1
2013	3.1
2014	0.8

* This forecast is consistent with nominal GDP and interest rates in the Tealbook forecast. Actual data through August 27, 2012; projections thereafter. Return to table

[Note: In the September 2012 Directive Alternatives, emphasis (strike-through) indicates strike-through text in the original document, and strong emphasis (bold) indicates bold red underlined text in the original document.]

September 2012 Directive--Alternative A

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to ~~continue the maturity extension program it announced in June to purchase Treasury securities with remaining maturities of 6 years to 30 years with a total face value of about $267 billion by the end of December 2012, and to sell or redeem Treasury securities with remaining maturities of approximately 3 years or less with a total face value of about $267 billion. For the duration of this program,~~ **begin a new asset-purchase program. This program replaces the previously announced maturity extension program. Specifically, the Desk is directed to purchase $750 billion of longer-term Treasury securities and $500 billion of agency mortgage-backed securities by early 2014, a combined pace of about $75 billion per month.** The ~~Committee directs the~~ Desk ~~to suspend its current~~ **is also directed to reinstitute the** policy of rolling over maturing Treasury securities into new issues. The Committee directs the Desk to maintain its existing policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities. These actions should ~~maintain~~ **increase** the total face value of domestic securities ~~at~~ **to** approximately ~~$2.6~~ **$3.9** trillion. The Committee directs the Desk to engage in dollar roll **and coupon swap** transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

September 2012 Directive--Alternative B

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to ~~continue the maturity extension program it announced in June to purchase Treasury securities with remaining maturities of 6 years to 30 years with a total face value of about $267 billion by the end of December 2012, and to sell or redeem Treasury securities with remaining maturities of approximately 3 years or less with a total face value of about $267 billion. For the duration of this program,~~ **begin a new asset-purchase program. This program replaces the previously announced maturity extension program. Specifically, the Desk is directed to purchase longer-term Treasury securities at a pace of about $45 billion per month and to purchase agency mortgage-backed securities at a pace of about $30 billion per month.** The ~~Committee directs the~~ Desk ~~to suspend its current~~ **is also directed to reinstitute the** policy of rolling over maturing Treasury securities into new issues. The Committee directs the Desk to maintain its existing policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities. ~~These actions should maintain the total face value of domestic securities at approximately $2.6 trillion.~~ The Committee directs the Desk to engage in dollar roll **and coupon swap** transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

September 2012 Directive--Alternative B′

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to continue the maturity extension program it announced in June to purchase Treasury securities with remaining maturities of 6 years to 30 years with a total face value of about $267 billion by the end of December 2012, and to sell or redeem Treasury securities with remaining maturities of approximately 3 years or less with a total face value of about $267 billion. For the duration of this program, the Committee directs the Desk to suspend its ~~current~~ policy of rolling over maturing Treasury securities into new issues. The Committee directs the Desk to maintain its existing policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities. **The Desk is also directed to begin purchasing agency mortgage-backed securities at a pace of about $30 billion per month.** ~~These actions should maintain the total face value of domestic securities at approximately $2.6 trillion.~~ The Committee directs the Desk to engage in dollar roll **and coupon swap** transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

September 2012 Directive--Alternative B″

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to continue the maturity extension program it announced in June to purchase Treasury securities with remaining maturities of 6 years to 30 years with a total face value of about $267 billion by the end of December 2012, and to sell or redeem Treasury securities with remaining maturities of approximately 3 years or less with a total face value of about $267 billion. For the duration of this program, the Committee directs the Desk to suspend its ~~current~~ policy of rolling over maturing Treasury securities into new issues. The Committee directs the Desk to maintain its existing policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities. These actions should maintain the total face value of domestic securities at approximately $2.6 trillion. The Committee directs the Desk to engage in dollar roll transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

September 2012 Directive--Alternative C

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to continue the maturity extension program it announced in June to purchase Treasury securities with remaining maturities of 6 years to 30 years with a total face value of about $267 billion by the end of December 2012, and to sell or redeem Treasury securities with remaining maturities of approximately 3 years or less with a total face value of about $267 billion. For the duration of this program, the Committee directs the Desk to suspend its ~~current~~ policy of rolling over maturing Treasury securities into new issues. The Committee directs the Desk to maintain its existing policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities. These actions should maintain the total face value of domestic securities at approximately $2.6 trillion. The Committee directs the Desk to engage in dollar roll transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

Explanatory Notes

A. Policy Rules Used in "Monetary Policy Strategies"

The table below gives the expressions for the selected policy rules used in "Monetary Policy Strategies." In the table, R_t denotes the nominal federal funds rate for quarter t, while the right-hand-side variables include the staff's projection of trailing four-quarter core PCE inflation for the current quarter and three quarters ahead (π_t and $\pi_{t+3|t}$), the output gap estimate for the current period as well as its one-quarter-ahead forecast (gap_t and $gap_{t+1|t}$), and the forecast of the three-quarter-ahead annual change in the output gap ($\Delta^4 gap_{t+3|t}$). The value of policymakers' long-run inflation objective, denoted π , is 2 percent. The nominal income targeting rule responds to the nominal income gap, which is defined as the difference between nominal income yn_t (100 times the log of the level of nominal GDP) and a target value yn^t (100 times the log of potential nominal GDP). Target nominal GDP in 2007:Q4 is set equal to potential real GDP in that quarter multiplied by the GDP deflator in that quarter; subsequently, target nominal GDP grows 2 percentage points per year faster than potential GDP.

Rule	Specification
Taylor (1993) rule	$R_t = 2.25 + \pi_t + 0.5(\pi_t - \pi \quad) + 0.5gap_t$
Taylor (1999) rule	$R_t = 2.25 + \pi_t + 0.5(\pi_t - \pi \quad) + gap_t$
Inertial Taylor (1999) rule	$R_t = 0.85R_{t-1} + 0.15\left(2.25 + \pi_t + 0.5(\pi_t - \pi \quad) + gap_t\right)$
Outcome-based rule	$R_t = 1.2R_{t-1} - 0.39R_{t-2} + 0.19[0.79 + 1.73\pi_t + 3.66gap_t - 2.72gap_{t-1}]$
First-difference rule	$R_t = R_{t-1} + 0.5(\pi_{t+3\vert t} - \pi \quad) + 0.5\Delta^4 gap_{t+3\vert t}$
Nominal income targeting rule	$R_t = 0.75R_{t-1} + 0.25(2.25 + \pi \quad + yn_t - yn^t \quad)$

D. Long-Run Projections of the Balance Sheet and Monetary Base

10-Year Treasury Term Premium Effect

Date	Alternative B	Alternative B′	Alternative A	Alternative C	*July Alternative B*
	Basis Points Quarterly Averages				
2012 Q4	-102	-93	-111	-64	-66
2013 Q1	-99	-89	-108	-60	-63
2013 Q2	-95	-86	-104	-56	-59
2013 Q3	-91	-81	-100	-52	-55
2013 Q4	-86	-76	-96	-48	-51
2014 Q1	-81	-71	-90	-44	-47

2014 Q2	-75	-66	-85	-40	-43
2014 Q3	-70	-61	-79	-37	-40
2014 Q4	-64	-57	-73	-33	-36
2015 Q1	-59	-52	-67	-30	-33
2015 Q2	-54	-48	-62	-27	-29
2015 Q3	-50	-43	-57	-24	-26
2015 Q4	-45	-39	-52	-22	-24
2016 Q1	-41	-35	-47	-19	-21
2016 Q2	-37	-32	-42	-17	-19
2016 Q3	-33	-29	-38	-15	-17
2016 Q4	-30	-25	-34	-13	-15
2017 Q1	-26	-23	-30	-12	-13
2017 Q2	-23	-20	-27	-10	-11
2017 Q3	-20	-17	-24	-9	-10
2017 Q4	-18	-15	-21	-8	-9
2018 Q1	-16	-13	-18	-7	-8
2018 Q2	-14	-12	-16	-6	-7
2018 Q3	-12	-10	-14	-6	-7
2018 Q4	-10	-9	-12	-5	-6
2019 Q1	-9	-8	-11	-5	-6
2019 Q2	-8	-7	-9	-5	-6
2019 Q3	-7	-6	-8	-5	-5
2019 Q4	-6	-6	-7	-5	-5
2020 Q1	-6	-5	-6	-4	-5
2020 Q2	-5	-5	-6	-4	-4
2020 Q3	-5	-5	-5	-4	-4
2020 Q4	-4	-4	-5	-3	-4

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

Billions of dollars

	Jul 31, 2012	2012	2014	2016	2018	2020
Total assets	2,849	3,030	3,878	3,101	2,009	1,977
Selected assets						
Liquidity programs for financial firms	31	25	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	31	25	0	0	0	0

Term Asset-Backed Securities Loan Facility (TALF)	5	2	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	9	1	0	0	0	0
Securities held outright	2,589	2,753	3,600	2,876	1,831	1,834
U.S. Treasury securities	1,645	1,777	2,237	1,917	1,367	1,834
Agency debt securities	91	77	39	16	2	0
Agency mortgage-backed securities	853	899	1,324	943	461	0
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	214	248	277	225	178	142
Total liabilities	2,795	2,969	3,797	2,993	1,866	1,788
Selected liabilities						
Federal Reserve notes in circulation	1,072	1,104	1,245	1,379	1,516	1,662
Reverse repurchase agreements	70	70	70	70	70	70
Deposits with Federal Reserve Banks	1,637	1,778	2,454	1,519	257	34
Reserve balances held by depository institutions	1,523	1,729	2,405	1,510	248	25
U.S. Treasury, General Account	90	44	44	5	5	5
Other Deposits	23	4	4	4	4	4
Interest of Federal Reserve Notes due to U.S. Treasury	4	0	0	0	0	0
Total capital	55	62	82	108	143	189

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 B′

Billions of dollars

	Jul 31, 2012	2012	2014	2016	2018	2020
Total assets	2,849	2,911	3,503	2,858	1,863	1,972
Selected assets						
Liquidity programs for financial firms	31	25	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	31	25	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	5	2	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	9	1	0	0	0	0
Securities held outright	2,589	2,632	3,236	2,641	1,689	1,832
U.S. Treasury securities	1,645	1,656	1,973	1,753	1,261	1,832
Agency debt securities	91	77	39	16	2	0

Agency mortgage-backed securities	853	899	1,225	871	426	0
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	214	250	265	217	174	140
Total liabilities	2,795	2,849	3,421	2,750	1,720	1,782
Selected liabilities						
Federal Reserve notes in circulation	1,072	1,104	1,245	1,379	1,516	1,662
Reverse repurchase agreements	70	70	70	70	70	70
Deposits with Federal Reserve Banks	1,637	1,663	2,086	1,283	116	34
Reserve balances held by depository institutions	1,523	1,614	2,038	1,273	107	25
U.S. Treasury, General Account	90	44	44	5	5	5
Other Deposits	23	4	4	4	4	4
Interest of Federal Reserve Notes due to U.S. Treasury	4	0	0	0	0	0
Total capital	55	62	82	108	143	189

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

	Jul 31, 2012	2012	2014	2016	2018	2020
Total assets	2,849	3,020	4,143	3,338	2,188	1,973
Selected assets						
Liquidity programs for financial firms	31	25	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	31	25	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	5	2	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	9	1	0	0	0	0
Securities held outright	2,589	2,743	3,849	3,101	2,001	1,825
U.S. Treasury securities	1,645	1,771	2,387	2,067	1,500	1,825
Agency debt securities	91	77	39	16	2	0
Agency mortgage-backed securities	853	895	1,424	1,018	498	0
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	214	248	292	237	187	148
Total liabilities	2,795	2,958	4,061	3,230	2,045	1,784
Selected liabilities						
Federal Reserve notes in circulation	1,072	1,104	1,245	1,379	1,516	1,662

Reverse repurchase agreements	70	70	70	70	70	70
Deposits with Federal Reserve Banks	1,637	1,768	2,714	1,753	437	34
Reserve balances held by depository institutions	1,523	1,719	2,666	1,743	427	25
U.S. Treasury, General Account	90	44	44	5	5	5
Other Deposits	23	4	4	4	4	4
Interest of Federal Reserve Notes due to U.S. Treasury	4	0	0	0	-6	-3
Total capital	55	62	82	108	143	189

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

	Jul 31, 2012	2012	2014	2016	2018	2020
Total assets	2,849	2,869	2,744	2,136	1,774	1,966
Selected assets						
Liquidity programs for financial firms	31	25	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	31	25	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	5	2	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	9	1	0	0	0	0
Securities held outright	2,589	2,600	2,530	1,962	1,633	1,846
U.S. Treasury securities	1,645	1,656	1,655	1,436	1,451	1,846
Agency debt securities	91	77	39	16	2	0
Agency mortgage-backed securities	853	868	836	510	179	0
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	214	239	212	174	142	120
Total liabilities	2,795	2,807	2,662	2,028	1,631	1,777
Selected liabilities						
Federal Reserve notes in circulation	1,072	1,104	1,245	1,379	1,516	1,662
Reverse repurchase agreements	70	70	70	70	70	70
Deposits with Federal Reserve Banks	1,637	1,620	1,334	568	34	34
Reserve balances held by depository institutions	1,523	1,571	1,325	559	25	25
U.S. Treasury, General Account	90	44	5	5	5	5
Other Deposits	23	4	4	4	4	4
Interest of Federal Reserve Notes due to U.S. Treasury	4	0	0	0	0	0

Total capital	55	62	82	108	143	189

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

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

† Note: Data values for figures are rounded and may not sum to totals. Return to text

Last update: January 5, 2018