Accessible Material

September 2011 Tealbook Tables and Charts

Table of Contents

Document Section	Accessible Material
Book A	
Domestic Economic Developments and Outlook	FOMC20110921tealbooka20110914_1.htm
International Economic Developments and Outlook	FOMC20110921tealbooka20110914 2.htm
Financial Developments	FOMC20110921tealbooka20110914_3.htm
Risks and Uncertainty	FOMC20110921tealbooka20110914 4.htm
Greensheets	FOMC20110921tealbooka20110914_5.htm
Book B	
Monetary Policy Strategies	FOMC20110921tealbookb20110915_1.htm
Monetary Policy Alternatives	FOMC20110921tealbookb20110915 2.htm
Explanatory Notes	FOMC20110921tealbookb20110915 3.htm

Last update: February 3, 2017

September 2011 Tealbook A Tables and Charts[±]

Domestic Economic Developments and Outlook

Key Background Factors underlying the Baseline Staff Projection

Figure: Federal Funds Rate

Line chart, by percent, 2007 to 2013. Data are quarterly average. There are four series, Current Tealbook, Previous Tealbook, Market expected rate, Market modal rate. Current Tealbook begins in 2007:Q1 at about 5.25 and generally decreases to about 0.13 by 2009:Q4. From 2009:Q4 to 2011:Q4 it fluctuates between about 0.07 and 0.18. By 2011:Q4 it is at about 0.13 and it remains constant here until 2013:Q4. Previous Tealbook follows Current Tealbook almost exactly until 2013:Q2 when it begins increasing. By 2012:Q4 it has increased to about 0.7. Market expected rate begins in 2011:Q3 at about 0.13 and generally decreases to about 0.05 by 2012:Q2. It then generally increases to about 0.4 by 2013:Q4. Market modal rate begins in 2011:Q3 at about 0.13 and decreases to about 0.01 by 2012:Q2. It then generally increases to about 0.12 by 2013:Q4.

Figure: Long-Term Interest Rates

Line chart, by percent, 2007 to 2013. Data are quarterly average. There are six series, "Current Tealbook: BBB corporate yield", "Current Tealbook: Conforming mortgage rate", "Current Tealbook: 10-year Treasury yield", "Previous Tealbook: BBB corporate yield", "Previous Tealbook: Conforming mortgage rate", and "Previous Tealbook: 10-year Treasury yield". Current Tealbook: BBB corporate yield begins in 2007 at about 6.1 and generally increases to about 9.4 by late 2008. It then generally decreases to about 5.0 by mid-2011 and then generally increases to about 5.7 by late 2013. Current Tealbook: Conforming mortgage rate begins in 2007 at about 6.2 and fluctuates but generally decreases to about 4.1 by late 2011. It then increases to about 5.5 by late 2013. Current Tealbook: 10-year Treasury yield begins in 2007 at about 4.8 and fluctuates but generally decreases to about 3.9 by early 2010 and then generally decreases to about 2.9 by late 2010. By early 2011 it has generally increases to about 3.6 and by late 2011 it has generally decreased to about 2.1. It then generally decreases to about 3.9 by late 2013. Previous Tealbook: BBB corporate yield begins in 2007 at about 6.1 and generally increases to about 9.4 by late 2008. It then generally decreases to about 5.0 by mid-2011 and then generally increases to about 6.1 by late 2013. Previous Tealbook: Conforming mortgage rate begins in 2007 at about 6.2 and fluctuates but generally decreases to about 4.4 by late 2011. It then increases to about 6.0 by late 2013. Previous Tealbook: 10-year Treasury yield begins in 2007 at about 4.8 and fluctuates but generally decreases to about 3.2 by early 2009. It then generally increases to about 3.9 by early 2010 and then generally decreases to about 4.3 by late 2010. By early 2011 it has generally increased to about 3.6 and by late 2011 it has generally decreased to about 3.0. It then generally increases to about 4.3 by late 2013.

Figure: Equity Prices

Line chart, by ratio scale where 2007:Q1 = 100, 2007 to 2013. Data are quarter-end. There are two series, Current Tealbook: Dow Jones U.S. Total Stock Market Index and Previous Tealbook: Dow Jones U.S. Total Stock Market Index. Current Tealbook: Dow Jones U.S. Total Stock Market Index begins in early 2007 at about 100 and generally increases to about 107 by mid-2007. It then generally decreases to about 56 by 2009 and then generally increases to about 85 by early 2010. By mid-2010 it has generally decreased to about 74 and by early 2011 it has generally increased to about 98. It then generally decreases to about 85 by mid-2011 and then increases to about 110 by late 2013. Previous Tealbook: Dow Jones U.S. Total Stock Market Index begins in early 2007 at about 100 and generally increases to about 107 by mid-2007. It then generally decreases to about 56 by 2009 and then generally increases to about 85 by early 2010. By mid-2010 it has generally decreased to about 74 and by early 2011 it has generally increased to about 98. It then generally decreases to about 93 by mid-2011 and then increases to about 114 by late 2013.

Figure: House Prices

Line chart, by ratio scale, 2007:Q1 = 100, 2007 to 2013. Data are quarterly. There are two series, Current Tealbook: CoreLogic index and Previous Tealbook: CoreLogic index. Current Tealbook: CoreLogic index begins in 2007 at about 100 and generally decreases to about 72 by early 2009. It then generally decreases to about 74.5 by mid-2010 and then generally decreases to about 69 by late 2013. Previous Tealbook: CoreLogic index begins in 2007 at about 100 and generally decreases to about 72 by early 2009. It then generally increases to about 74.5 by mid-2010 and then generally decreases to about 68 by late 2013.

Figure: Crude Oil Prices

Line chart, by dollars per barrel, 2007 to 2013. Data are quarterly average. There are two series, Current Tealbook: West Texas Intermediate and Previous Tealbook: West Texas Intermediate. Current Tealbook: West Texas Intermediate begins in early 2007 at about 58 and generally increases to about 125 by 2008. By 2009 it has generally decreased to about 42 and by early 2011 it has generally increased to about 103. It then generally increases to about 88 by late 2011 and then increases to about 92 by late 2013. Previous Tealbook: West Texas Intermediate begins in early 2007 at about 58 and generally increases to about 125 by 2008. By 2009 it has generally decreased to about 42 and by early 2011 it has generally increased to about 103. It then generally decreases to about 95 by mid-2011 and then increases to about 100 by late 2013.

Figure: Broad Real Dollar

Line chart, by scale where 2007:Q1 = 100, 2007 to 2013. 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 89 by 2008. It then generally increases to about 101 by early 2009 and then generally decreases to about 92 by late 2009. By 2010 it has generally increased to about 94 and by mid-2011 it has generally decreased to about 85.2. It then generally increases to about 87.5 by late 2011 and then decreases to about 82 by late 2013. Previous Tealbook begins in 2007 at about 100 and generally decreases to about 89 by 2008. It then generally increases to about 101 by early 2009 and then generally decreases to about 92 by late 2009. By 2010 it has generally increased to about 94 and by late 2013 it has generally decreased to about 80.

Note: Light blue shading represents the projection period, beginning in 2011:Q3.

Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

	2011	2011:Q2		2011:Q3		2011:Q4	
Measure	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	
Real GDP	1.4	1.2	2.9	2.5	2.4	2.0	
Private domestic final purchases	1.1	1.7	1.9	2.1	2.2	1.2	
Personal consumption expenditures	.1	.4	1.6	1.7	1.9	1.1	
Residential investment	3.5	3.8	3.1	-1.3	.5	8	
Nonres. structures	15.2	22.6	-2.0	3.7	2	-1.6	
Equipment and software	5.6	6.7	6.3	6.0	6.3	4.2	
Federal purchases	2.2	1.9	1.9	7	1.4	3.7	
State and local purchases	-2.9	-2.9	-1.8	-2.6	8	-1.2	
	Contribution to change in real GDP (percentage points)						
Inventory investment	.1	2	1.4	.8	6	.2	
Net exports	.6	.3	.0	.3	1.2	.6	

Recent Nonfinancial Developments (1)

Figure: Change in Private Payroll Employment

Line chart, by thousands of employees, 2001 to 2011. There is a horizontal line at zero. There are two series, Change in Private Payroll Employment and 3-month moving average. Change in Private Payroll Employment begins in early 2001 at about -40 and generally decreases to about -360 by late 2001. It then generally increases to about 150 by late 2002 and then generally decreases to about -210 by early 2003. By early 2005 it has generally increased to about 350 and by early 2009 it has generally decreased to about -820. It then generally increases to about 290 by early 2011 and then generally decreases to about 120 by August 2011. 3-month moving average begins in early 2001 at about 90 and generally decreases to about -320 by late 2001. It then generally increases to about 25 by late 2002 and then generally decreases to about -140 by early 2003. By early 2006 it has generally increased to about 300 and by early 2009 it has generally decreased to about -790. It then generally increases to about 240 by early 2011 and then decreases to about 90 by August 2011.

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

Figure: Unemployment Rate

Line chart, by percent, 2001 to 2011. The series begins in 2001 at about 4.2 and generally increases to about 6.4 by 2003. It then generally decreases to about 4.4 by 2007 and then generally increases to about 10.1 by 2009. By August 2011 it has generally decreased to about 9.05.

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, 2001 to 2011. There is a horizontal line at zero. The series begins in early 2001 at about -3 and then generally decreases to about -8.5 by mid-2001. It then generally increases to about 7 by mid-2002 and then generally decreases to about -2.5 by late 2002. By early 2005 it has generally increased to about 9 and by mid-2005 it has generally decreased to about -5. It then generally increases to about 11 by late 2005 and then generally decreases to about -0.5 by late 2006. By early 2007 it has generally increased to about 7.5 and by early 2009 it has generally decreased to about -24. It then generally increases to about 11 by early 2010 and then generally decreases to about 3.5 by July 2011.

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

Figure: Production of Light Motor Vehicles

Line chart, by millions of units, annual rate, 2001 to 2011. The series begins in 2001 at about 10.3 and generally increases to about 13 by 2003. It then generally decreases to about 3.5 by early 2009 and then generally increases to about 8.5 by August 2011.

Source: Ward's Auto Infobank.

[Box:] The Information Content of the Monthly Business Surveys

Figure: New Orders and Manufacturing Industrial Production

Line chart, 1998 to 2012. There are three series, ISM new orders measured by diffusion index, IP measured by percent change, annual rate and range of new orders indexes from the regional survey also measured in percent change, annual rate. There is a horizontal line at zero percent change, annual rate, which is 50 on the diffusion index scale. ISM new orders begins in early 1998 at about 57 and generally decreases to about 48 by late 1998. It then generally increases to about 64 by 1999 and then generally decreases to about 39 by 2001. By 2002 it has generally increased to about 63 and by early 2003 it has generally decreased to about 67 and by late 2011 it has generally decreased to about 50. IP begins in early 1998 at about 10 and generally decreases to about -4 by mid-1998. It then generally increases to about 16 by late 1998 and then generally decreases to about 3 by 1999. By 2000 it has generally increased to about -3 by 2001 it has generally increases to about 9 by 2002. From 2002 to about early 2008 it fluctuates between about -6 and 10. It then generally decreases to about -30 by early 2009 and then generally increases to about 14 by late 2009. By late 2011 it has generally decreased to about 2. Range from new orders indexes from the regional survey begins in early 1998 at a range of about [4, 11] and generally decreases to about [-1, 5] by late 1998. It then generally increases to a range of about [1, 10] by 2000 and then generally decreases to a range of about [-1, -1] by 2001. By 2002 it has generally increased to a range of about [3, 9] and by 2003 it has generally decreased to a range of about [-5, 3]. It then generally increases to a range of about [-1, -15] by 2004 and then generally decreases to a range of about [-17, -8] by 2008. By early 2011 it has generally increased to a range of about [-9.5, 6].

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. Light blue shading represents the projection period, beginning in 2011:Q3. IP is a 3-month moving average.

Source: Federal Reserve and Institute for Supply Management (ISM).

Figure: Business Sentiment and Equipment and Software Spending

Line chart, 1998 to 2012. There are three series, Philadelphia measured by diffusion index, ISM, measured by diffusion index, and E&S measured by percent change, annual rate. There is a horizontal line at zero percent change, annual rate, which is 50 on the diffusion index scale. Philadelphia begins in early 1998 at about 60 and generally decreases to about 40 by late 1998. It then generally increases to about 60.2 by late 1999 and then generally decreases to about 30 by early 2001. By early 2004 it has generally increases to about 70 and by late 2008 it has generally decreased to about 29. It then generally increases to about 61 by early 2010 and then generally decreases to about 47 by late 2010. By early 2011 it has generally increased to about 72 and by mid-2011 it has generally decreased to about 34. ISM begins in early 1998 at about 53 and generally decreases to about 47 by late 1998. It then generally increases to about 59 by 1999 and then generally decreases to about 40 by 2001. By 2002 it has generally increased to about 55 and by early 2003 it has generally decreased to about 46. It then generally increases to about 50.5. E&S begins in early 1998 at about 21 and decreases to about 8 by mid-1998. It then increases to about 20 by late 1998 and then generally decreases to about -0.5 by 1999. By 2000 it has generally increased to about 19.5 and by 2001 it has generally decreased to about -15. By 2006 it fluctuates, but generally increases to about -31 by 2009 and then generally increases to about 22 by 2010. By late 2011 it has generally decreased to about -31 by 2009 and then generally increases to about 22 by 2010. By late 2011 it has generally decreased to about -3.

Note: 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. Light blue shading represents the projection period, beginning in 2011:Q4. The sentiment measures are the headline indexes from the respective surveys.

Source: Federal Reserve, ISM, and the Bureau of Economic Analysis.

Recent Nonfinancial Developments (2)

Figure: Real PCE Goods excluding Motor Vehicles

Line chart, by billions of chained (2005) dollars, 2001 to 2011. The series begins in 2001 at about 2250 and generally increases to about 2950 by 2007. It then generally decreases to about 2775 by 2009 and then generally increases to about 3025 by May 2011.

Note: Figures for June, July, and August are staff estimates based on available source data.

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

Figure: Sales of Light Motor Vehicles

Line chart, by millions of units, annual rate, 2001 to 2011. The series begins in early 2001 at about 17.5 and generally decreases to about 16 by mid-2001. Within a month or so it increases to about 21.7 and then decreases to about 15.6 by late 2001. From late 2001 to early 2005 it fluctuates between about 15.2 and 18.1. It then generally increases to about 20.5 by mid-2005 and then decreases to about 14.5 by late 2005. By early 2006 it has generally increased to about 18 and by early 2009 it has generally decreased to about 9.0. It then generally increases to about 14 by mid-2009 and within a month or so decreases to about 8.95. By early 2011 it has generally increased to about 13.5 and by August 2011 it has generally decreased to about 12.

Source: Ward's Auto Infobank.

Figure: Single-Family Housing Starts

Line chart, thousands of units, annual rate, 2001 to 2011. There are two series, Starts and Adjusted permits. Starts begins in 2001 at about 1280 and generally increases to about 1810 by 2006. It then generally decreases to about 350 by 2009 and then generally increases to about 580 by early 2010. By July 2011 it has generally decreased to about 440. Adjusted permits begins in 2001 at about 1280 and generally increases to about 1840 by 2005. It then generally decreases to about 350 by 2009 and then generally increases to about 575 by early 2010. By July 2011 it has generally decreased to about 435.

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, 2001 to 2011. There are two series, New and Existing. New begins in 2001 at about 950 and generally increases to about 1400 by 2005. It then generally decreases to about 300 by July 2011. Existing begins in 2001 at about 4550 and generally increases to about 6350 by 2005. It then generally decreases to about 4000 by late 2008 and then generally increases to about 5700 by late 2009. By mid-2010 it has generally decreased to about 3400 and by early 2011 it has generally increased to about 4750. It then generally decreases to about 4100 by July 2011.

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, 2001 to 2011. There are two series, Orders and Shipments. Orders begins in 2001 at about 61.5 and generally decreases to about 46.5 by early 2002. It then generally increases to about 68.5 by early 2008 and then generally decreases to about 47 by 2009. By July 2011 it has generally increased to about 66. Shipments begins in 2001 at about 62.3 and generally decreases to about 49 by early 2003. It then generally increases to about 66 by 2008 and then generally decreases to about 51.7 by 2009. By July 2011 it has generally increased to about 64.7.

Source: U.S. Census Bureau.

Figure: Nonresidential Construction Put in Place

Line chart, by billions of chained (2005) dollars, 2001 to 2011. The series begins in 2001 at about 275 and generally decreases to about 218 by late 2002. It then generally increases to about 410 by late 2007. From late 2007 to late 2008 it fluctuates between about 400 and 415. It then generally decreases to about 245 by early 2011 and then generally increases to about 265 by July 2011.

Source: U.S. Census Bureau.

Recent Nonfinancial Developments (3)

Figure: Inventory Ratios ex. Motor Vehicles

Line chart, by months, 2001 to 2011. There are two series, Staff flow-of-goods system and Census book-value data. Staff flow-of-goods system begins in 2001 at about 1.69 and generally decreases to about 1.48 by late 2007. It then generally increases to about 1.65 by early 2009 and then generally decreases to about 1.5 by August 2011. Census book-value data begins in 2001 at about 1.39 and generally decreases to about 1.18 by 2005. It then generally increases to about 1.26 by 2006 and then generally decreases to about 1.18 by 2008. By early 2009 it has generally increased to about 1.41 and by July 2011 it has generally decreased to about 1.22.

Note: Flow-of-goods system covers total industry ex. motor vehicles and parts, and inventories are relative to consumption. Census data cover manufacturing and trade ex. 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, 2001 to 2011. There are two series, "Unified" in which the data are monthly and "NIPA" in which the data are quarterly. Unified begins in 2001 at about 385 and generally increases to about 555 by 2004. From 2004 to early 2007 it fluctuates between about 460 and 575. It then generally increases to about 690 by late 2010 and then generally decreases to about 580 by mid-2011. It then generally increases to about 660 by August 2011. NIPA begins in 2001 at about 390 and generally increases to about 525 by 2004. From 2004 to early 2007 it fluctuates between about 505 and 540. It then generally increases to about 650 by mid-2010 and then generally decreases to about 607 by early 2011. It then generally increases to about 625 by 2011: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: Trade Balance

Line chart, by billions of dollars, 2001 to 2011. The series begins in early 2001 at about -35 and generally increases to about -26 by late 2001. It then generally decreases to about -68 by 2005 and then generally increases to about -56 by 2007. By 2008 it has generally decreased to about -68 and by 2009 it has generally increased to about -26. It then generally decreases to about -49 by mid-2010 and then generally increases to about -39 by late 2010. By July 2011 it has generally

decreased to about -45.

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

Figure: Exports and Non-Oil Imports

Line chart, by billions of dollars, 2001 to 2011. There are two series, Non-oil imports and Exports. Non-oil imports begins in early 2001 at about 114 and generally decreases to about 97 by late 2001. It then generally increases to about 180 by 2008 and then generally decreases to about 132 by 2009. By July 2011 it has generally increased to about 187. Exports begins in early 2001 at about 89 and generally decreases to about 77 by late 2001. It then generally increases to about 165 by 2008 and then generally decreases to about 122 by 2009. By July 2011 it has generally increased to about 179.

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

Figure: Total PCE Prices

Line chart, by percent, 2001 to 2011. There is a horizontal line at zero. There are two series, 12-month change and 3-month change. 12-month change begins in 2001 at about 2.5 and generally decreases to about 0.7 by early 2002. It then generally increases to about 4 by 2005 and then generally decreases to about 1.5 by 2006. By 2008 it has generally increased to about 4.5 and by 2009 it has generally decreased to about -1. It then generally increases to about 2.5 by early 2010 and then generally decreases to about 1.0 by late 2010. By July 2011 it has generally increased to about 2.7. 3-month change begins in early 2001 at about 3 and generally decreases to about -2.2 by late 2001. It then generally increases to about 7 by early 2002. From early 2002 to mid-2005 it fluctuates between about -1.8 and 4.0. It then generally increases to about 8.5 by mid-2005 and then generally decreases to about -1 by late 2005. By mid-2008 it has generally increased to about -3.5. It then generally increases to about 4.0 by 2009 and then generally decreases to about -1.2 by 2010. By early 2011 it has generally increased to about 4.8 and by July 2011 it has generally decreased to about 1.7.

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

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

Figure: PCE Prices ex. Food and Energy

Line chart, by percent, 2001 to 2011. There is a horizontal line at zero. There are two series, 12-month change and 3-month change. 12-month change begins in early 2001 at about 1.9 and generally decreases to about 1 by late 2001. It then generally increases to about 2.7 by late 2002 and then generally decreases to about 1.3 by 2003. By mid-2008 it has generally increased to about 2.5 and by 2009 it has generally decreased to about 1.3. It then generally increases to about 1.8 by early 2010 and then generally decreases to about 0.9 by late 2010. By July 2011 it generally increases to about 1.5. 3-month change begins in early 2001 at about 2.45 and generally decreases to about -1.1 by late 2001. It then generally increases to about 4.0 by the end of 2001 and then generally decreases to about 0.8 by 2003. It then generally increases to about 3.5 by 2005. From 2005 to early 2008 it fluctuates between about 1 and 3.5. It then generally decreases to about 0.3 by 2008 and then generally increases to about 2.6 by 2009. By 2010 it has generally decreased to about 0.5 and by July 2011 it has increased to about 2.5.

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

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

Projections of Real GDP and Related Components

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

Measure	20	11	2012	2013
Measure	H1	H2	2012	2013
Real GDP	.8	2.2	2.6	3.4
Previous Tealbook	.9	2.7	3.0	
Final sales	.7	1.7	2.4	2.9
Previous Tealbook	.7	2.3	2.9	
Personal consumption expenditures	1.2	1.4	2.3	3.1
Previous Tealbook	1.1	1.8	2.5	
Residential investment	.6	-1.0	7.2	9.6
Previous Tealbook	.5	1.8	6.1	
Nonresidential structures	2.5	1.0	-3.4	.6
Previous Tealbook	7	-1.1	-1.3	
Equipment and software	7.7	5.1	5.3	6.7
Previous Tealbook	7.1	6.3	5.6	
Federal purchases	-3.9	1.5	7	-4.0
Previous Tealbook	-3.8	1.6	9	
State and local purchases	-3.1	-1.9	4	.8

Previous Tealbook	-3.1	-1.3	2		
Exports	5.7	8.8	7.4	7.1	
Previous Tealbook	6.9	10.0	9.0		
Imports	4.8	4.1	3.4	4.9	
Previous Tealbook	4.7	4.4	3.3		
	Contributions to change in real GDP (percentage points)				
Inventory change	.1	.5	.2	.5	
Previous Tealbook	.2	.4	.0		
Net exports	.0	.5	.5	.2	
Previous Tealbook	.1	.6	.7		

Figure: Real GDP

Line chart, by 4-quarter percent change, 1982 to 2013. There are two series, Current and Previous Tealbook. Current begins in early 1982 at about -2.3. By 1984 it has generally increased to about 8.5 and by 1991 it has generally decreased to about -1.2. It then generally increases to about 4.2 by late 1992. From late 1992 to early 2000 it fluctuates between about 2 and 5.7. It then generally decreases to about 0.2 by 2001 and then generally increases to about 4.1 by 2004. By 2009 it has generally decreased to about -5.4 and by 2010 it generally increases to about 3.8. It then generally decreases to about 1.5 by 2011 and then generally increases to about 3.3 by late 2013. Previous Tealbook follows the Current series almost exactly until 2011 when it begins decreasing at a slower rate. By late 2011 it has generally decreased to about 1.8 and by late 2012 it has increased to about 2.9.

Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research: July 1981-November 1982, July 1990-March 1991, March 2001-November 2001, and December 2007-June 2009. Light blue shading represents the projection period, beginning in 2011: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 2013. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about 2.75 and generally decreases to about -3.1 by 2009:Q2. It then generally increases to about 3.0 by 2010:Q4 and then generally decreases to about 1.2 by 2012:Q1. By 2013:Q4 it has generally increased to about 3.05. Previous Tealbook follows the Current series almost exactly until 2011 when it begins decreasing at a different rate. By 2012:Q1 it has generally decreased to about 1.3 and by 2012:Q4 it has increased to about 2.4.

Figure: Residential Investment

Line chart, by 4-quarter percent change, 2007 to 2013. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about -18.5 and generally decreases to about -28 by 2009:Q2. It then generally increases to about 5 by 2010:Q2 and then generally decreases to about -8.5 by 2010:Q3. By 2011:Q1 it has generally increased to about -2.5 and by 2011:Q2 it has generally decreased to about -7.5. It then generally increases to about 9.8 by 2013:Q4. Previous Tealbook follows the Current Tealbook series almost exactly until 2011:Q3 when it begins increasing at a different rate. By 2012:Q4 it has increased to about 6.

Figure: Equipment and Software

Line chart, by 4-quarter percent change, 2007 to 2013. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about 3 and generally increases to about 4.8 by 2007:Q4. It then generally decreases to about -21 by 2009:Q1. By 2010:Q3 it has generally increased to about 18 and by 2012:Q2 it has generally decreased to about 5. It then generally increases to about 7 by 2013:Q4. Previous Tealbook begins in 2007:Q1 at about 3 and generally increases to about 4.8 by 2007:Q4. It then generally decreases to about -21 by 2009:Q1. By 2010:Q3 it has generally increased to about 18 and by 2012:Q4 it has generally decreased to about 5.05.

Figure: Nonresidential Structures

Line chart, by 4-quarter percent change, 2007 to 2013. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about 11 and generally increases to about 17.5 by 2007:Q4. By 2009:Q4 it has generally decreased to about -29.8 and by 2011:Q2 it has generally increased to about 5 by 2012:Q1. By 2012:Q3 it has generally decreased to about -4 and by 2013:Q4 it has generally increased to about 0.05. Previous Tealbook begins in 2007:Q1 at about 11 and generally increases to about 17.5 by 2007:Q4. By 2009:Q4 it has generally decreased to about -29.8 and by 2011:Q2 it has generally increased to about 2.5. It then generally decreases to about -0.05 by 2011:Q4 and then generally increases to about 2 by 2012:Q1. By 2012:Q4 it has generally decreased to about -1.

Figure: Government Consumption & Investment

Line chart, by 4-quarter percent change, 2007 to 2013. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about 0.4 and generally increases to about 2.9 by 2008:Q1. By 2011:Q3 it has generally decreased to about -2.97. It then generally increases to about -0.2 by 2012:Q3 and then generally decreases to about -1.1 by 2013:Q4. Previous Tealbook begins in 2007:Q1 at about 0.4 and generally increases to about 2.9 by 2008:Q1. By 2011:Q3 it has generally decreased to about -2.5. It then generally increases to about -0.4 by 2012:Q2 and remains relatively constant here until 2012:Q4.

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

Figure: Exports and Imports

Line chart, by 4-quarter percent change, 2007 to 2013. There is a horizontal line at zero. There are four series, Exports Current Tealbook, Imports Current Tealbook, Exports Previous Tealbook and Imports Previous Tealbook. Exports Current Tealbook begins in 2007:Q1 at about 8 and generally increases to about 11.5 by 2008:Q2. It then generally decreases to about -14.8 by 2009:Q2 and then generally increases to about 14 by 2010:Q2. By 2013:Q4 it has generally decreased to about 7. Exports Previous begins in 2007:Q1 at about 8 and generally increases to about 11.5 by 2008:Q2. It then generally decreases to about -14.8 by 2009:Q2 and then generally increases to about 14 by 2010:Q2. By 2011:Q2 it has generally decreased to about 7.5 and by 2012:Q4 it has generally increased to about 9.5. Imports Current Tealbook begins in 2007:Q1 at about 4 and generally decreases to about -18.5 by 2009:Q2. It then generally increases to about 17 by 2010:Q2 and then generally decreases to about 2.5 by 2012:Q1. By 2013:Q4 it has generally increased to about 5. Imports Previous Tealbook begins in 2007:Q1 at about 4 and generally decreases to about -18.5 by 2009:Q2. It then generally decreases to about 2 by 2012:Q3. By 2012:Q4 it has generally increased to about 3.

Light blue shading represents the projection period, beginning in 2011:Q2.

Aspects of the Medium-Term Projection

Figure: Personal Saving Rate

Line chart, by percent, 1990 to 2013. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 6.4 and generally increases to about 7.7 by 1992. It then generally decreases to about 1.5 by late 2001 and then generally increases to about 4.1 by early 2002. By 2005 it has generally decreased to about 1.1 and by 2009 it has generally increased to about 6.4. It then generally decreases to about 4.2 by early 2010 and then generally increases to about 5.4 by 2013. Previous Tealbook follows the Current Tealbook series almost exactly until 2010. It generally increases to about 5.2 by 2012.

Figure: Wealth-to-Income Ratio

Line chart, by ratio, 1990 to 2013. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 4.82. From 1990 to 1995 it fluctuates between about 4.65 and 4.9. It then generally increases to about 6.15 by 2000 and then generally decreases to about 4.97 by 2002. By 2005 it has generally increased to about 4.57. It then generally increases to about 5.12 by early 2011 and then generally decreases to about 4.8 by late 2011. By late 2013 it has generally increased to about 4.98. Previous Tealbook begins in 1990 at about 4.82. From 1990 to 1995 it fluctuates between about 4.65 and 4.9. It then generally increases to about 6.15 by 2000 and then generally decreases to about 4.97 by 2002. By 2005 it has generally increased to about 4.57. It then generally increases to about 5.12 by early 2011 and then generally decreases to about 4.95 by late 2011 and remains relatively constant here until late 2012.

Note: Household net worth as a ratio to disposable personal 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, 1990 to 2013. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 1.05 and generally decreases to about 0.7 by 1991. It then generally increases to about 1.75 by 2006 and then generally decreases to about 0.33 by 2009. By then end of 2010 it has generally increased to about 0.53 and by 2011 it has generally decreased to about 0.40. It then generally increases to about 0.56 by late 2013. Previous Tealbook follows the Current Tealbook series exactly except that it ends in late 2012 at about 0.50.

Source: U.S. Census Bureau.

Figure: Equipment and Software Spending

Line chart, by share of nominal GDP, 1990 to 2013. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 7.4 and generally decreases to about 6.7 by 1992. It then generally increases to about 9.6 by 2000 and then generally decreases to about 7.5 by 2004. By 2006 it has generally increased to about 8.03 and by 2009 it has generally decreased to about 6.4. It then generally increases to about 7.6 by the end of 2013. Previous Tealbook follows the Current Tealbook series almost exactly except that it ends in late 2012 at about 7.45.

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

Figure: Federal Surplus/Deficit

Line chart, by share of nominal GDP, 1990 to 2013. Data is 4-quarter moving average. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 1990 at about -3.1 and generally decreases to about -5.4 by 1992. It then generally increases to about 2.5 by 2000 and then generally decreases to about -3.8 by 2004. By 2007 it has generally increased to about -1.2 and by 2009 it has generally decreased to about -10.7. It has generally increased to

about -5.3 by the end of 2013. Previous Tealbook follows the Current Tealbook series almost exactly except that it ends in late 2012 at about -6.8.

Source: Monthly Treasury Statement.

Figure: Current Account Surplus/Deficit

Line chart, by share of nominal GDP, 1990 to 2013. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 1990 at about -1.6 and generally increases to about 0.9 by 1991. It then generally decreases to about -6.7 by 2005 and then generally increases to about -2.35 by 2009. By 2010 it has generally decreased to about -3.3 and by the end of 2013 it has generally increased to about -2.1. Previous Tealbook follows the Current Tealbook series almost exactly except that it ends in late 2012 at about -2.2.

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

Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research: July 1990-March 1991, March 2001-November 2001, and December 2007-June 2009. Light blue shading represents the projection period, beginning in 2011:Q2.

Decomposition of Potential GDP

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

Measure	1974-1995	1996-2000	2001-2009	2010	2011	2012	2013			
Potential GDP	3.0	3.5	2.5	1.7	2.1	2.1	2.2			
Previous Tealbook	3.0	3.5	2.5	1.7	2.1	2.1				
Selected contributions ¹										
Structural labor productivity	1.5	2.7	2.4	1.5	1.7	1.7	1.9			
Previous Tealbook	1.5	2.7	2.4	1.5	1.7	1.7				
Capital deepening	.7	1.5	.8	.4	.6	.6	.8			
Previous Tealbook	.7	1.5	.8	.4	.6	.6				
Multifactor productivity	.5	.9	1.4	1.0	1.0	1.0	1.0			
Previous Tealbook	.5	.9	1.4	1.0	1.0	1.0				
Trend hours	1.5	1.0	.6	.5	.6	.7	.6			
Previous Tealbook	1.5	1.0	.6	.5	.6	.7				
Labor force participation	.4	.0	3	4	3	2	3			
Previous Tealbook	.4	.0	3	4	3	2				

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

Source: Staff assumptions.

Figure: Nonfarm Business Productivity

Line chart, by chained (2005) dollars per hour, 2001 to 2013. There are two series, Nonfarm business productivity and Structural productivity. Nonfarm business productivity begins in 2001:Q1 at about 43.7 and generally increases to about 57.9 by 2013:Q4. Structural productivity begins in 2001:Q1 at about 44 and increases to about 57.9 by 2013:Q4.

Figure: Labor Force Participation Rate

Line chart, by percent, 2001 to 2013. There are two series, Labor Force Participation Rate and Trend. Labor Force Participation Rate begins in 2001:Q1 at about 67.15 and generally decreases to about 65.95 by 2005:Q1. It then generally increases to about 66.3 by 2007:Q1 and then generally decreases to about 63.9 by 2012:Q4. By 2013:Q4 it has generally increased to about 64. Trend begins in 2001:Q1 at about 66.8 and generally decreases to about 64.45 by 2013:Q4.

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

Note: Light blue shading represents the projection period, beginning in 2011:Q3.

The Outlook for the Labor Market

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

Measure 2010 2011 2012 2013

Output per hour, nonfarm business	2.5	.8	1.3	1.8
Previous Tealbook	2.5	.5	1.7	
Nonfarm private employment	.9	1.5	1.8	2.3
Previous Tealbook	.9	1.6	2.1	
Labor force participation rate ¹	64.5	64.0	63.9	64.0
Previous Tealbook	64.5	64.2	64.3	
Civilian unemployment rate ¹	9.6	9.1	8.7	8.1
Previous Tealbook	9.6	9.2	8.5	
Memo:				
GDP gap ²	-5.6	-6.2	-5.8	-4.7
Previous Tealbook	-5.6	-5.9	-5.2	

Note: A negative number indicates that the economy is operating below potential.

- 1. Percent, average for the fourth guarter. Return to table
- 2. Percent difference between actual and potential GDP in the fourth quarter of the year indicated. Return to table

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

Figure: Private Payroll Employment, Average Monthly Changes

Line chart, by thousands, 1990 to 2013. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 200 and generally decreases to about -220 by 1991. It then generally increases to about 320 by 1994. From 1994 to 1999 it fluctuates between about 100 and 320. It then generally decreases to about -350 by 2001 and then generally increases to about 320 by 2006. By 2009 it has generally decreased to about -820 and by the end of 2013 it has generally increased to about 220. Previous Tealbook follows the Current Tealbook series almost exactly except that it ends in late 2012 at about 200.

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

Figure: Unemployment Rate

Line chart, by percent, 1990 to 2013. There are four series, Current Tealbook, Previous Tealbook, NAIRU, and NAIRU with EEB adjustment. Current Tealbook begins in 1990 at about 5.25 and generally increases to about 7.7 by 1992. It then generally decreases to about 3.95 by 2000 and then generally increases to about 6.2 by 2003. By 2007 it has generally decreased to about 4.5 and by 2009 it has generally increased to about 10. It then generally decreases to about 8.05 by the end of 2013. Previous Tealbook follows Current Tealbook exactly except that it ends in late 2012 at about 8.7. NAIRU begins in 1990 at about 5.9 and generally decreases to about 5.0 by 1996. It remains constant at 5.0 until 2008. It then generally increases to about 6 by 2009 and remains constant here until the end of 2013. NAIRU with EEB adjustment begins in 1990 at about 5.9 and decreases to about 5.4 by 1991. It then generally increases to about 5.6 by 1992 and then generally decreases to about 5 by 1996. It remains relatively constant at 5 until 2001 and then increases to about 5.1 by 2002. It then generally decreases to about 5 by 2004 and remains constant here until 2008. By 2010 it has increased to about 6.85 and by the end of 2013 it has generally decreased to about 6.0.

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

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

Figure: GDP Gap

Line chart, by percent, 1990 to 2013. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 1.0 and generally decreases to about -3.5 by 1991. It then generally increases to about 3.5 by 2000 and then generally decreases to about -2.5 by 2003. By 2006 it has generally increased to about 0.7 and by 2009 it has generally decreased to about -7.8. It then generally increases to about -4.7 by the end of 2013. Previous Tealbook follows Current Tealbook exactly until 2011. By the end of 2012 it has generally increased to about -5.2.

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

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

Figure: Manufacturing Capacity Utilization Rate

Line chart, by percent, 1990 to 2013. There is a horizontal line at about 79 which represents the average rate from 1972 to 2010. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 82.3 and generally decreases to about 77.5 by 1991. It then generally increases to about 84.5 by 1995 and then generally decreases to about 71.5 by 2001. By 2007 it has generally increased to about 79.7 and by 2009 it has generally decreased to about 64.5. It then generally increases to about 78.7 by the end of 2013. Previous Tealbook follows the Current Tealbook series almost exactly until 2010 when it begins increasing at a faster rate. By the end of 2012 it has generally increased to about 77.5.

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: July 1990-March 1991, March 2001-November 2001, and December 2007-June 2009. Light blue shading represents the projection period, beginning in 2011:Q2.

Inflation Projections

(Percent change, Q4 to Q4)

Measure	2010	2011	2012	2013
PCE chain-weighted price index	1.3	2.6	1.2	1.3
Previous Tealbook	1.3	2.4	1.5	
Food and beverages	1.3	4.6	1.4	1.4
Previous Tealbook	1.3	4.3	1.4	
Energy	6.2	11.6	-3.1	.6
Previous Tealbook	6.2	9.3	1.4	
Excluding food and energy	1.0	1.9	1.5	1.3
Previous Tealbook	1.0	1.8	1.5	
Prices of core goods imports ¹	2.6	4.8	1.4	1.5
Previous Tealbook	2.6	4.9	1.5	

^{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, 1990 to 2013. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in early 1990 at about 4.2 and generally increases to about 5.4 by late 1990. It then generally decreases to about 0.95 by 1998 and then generally increases to about 2.7 by 2000. By 2002 it has generally decreased to about 0.7 and by 2005 it has generally increased to about 3.2. It then generally decreases to about 1.7 by 2006 and then generally increases to about 4.4 by 2008. By 2009 it has generally decreased to about -0.9 and by early 2010 it has generally increased to about 2.5. It then generally decreases to about 1.1 by late 2010 and then increases to about 2.9 by 2011. By the end of 2013 it has generally decreased to about 1.3. Previous Tealbook follows the Current series almost exactly except it ends in late 2012 at about 1.4.

Note: Light blue shading represents the projection period, beginning in 2011: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, 1990 to 2013. There are three series, Current Tealbook, Previous Tealbook, and Market based. Current Tealbook begins in early 1990 at about 3.8 and generally increases to about 4.6 by mid-1990. It then generally decreases to about 1.3 by 1998 and then generally increases to about 2.6 by 2007. By late 2010 it has generally decreased to about 0.95 and by early 2012 it has generally increased to about 1.95. It then generally decreases to about 1.35 by late 2013. Previous Tealbook follows Current Tealbook almost exactly except that it ends in late 2012 at about 1.7. Market based begins in early 1990 at about 4.35 and generally increases to about 4.85 by mid-1990. It then generally decreases to about 0.95 by 1998 and then generally increases to about 1.9 by 2001. By 2003 it has generally decreased to about 1.3 and by 2008 it has generally increased to about 2.45. It then generally decreases to about 0.7 by late 2010 and then generally increases to about 1.95 by early 2012. It then generally decreases to about 1.2 by the end of 2013.

Note: Light blue shading represents the projection period, beginning in 2011:Q2.

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

Figure: Compensation per Hour

Line chart, by 4-quarter percent change, 1990 to 2013. There is a horizontal line at zero. There are four series, Current Productivity and Costs, Previous Productivity and Costs, Current Employment cost index, and Previous Employment cost index. Current Productivity and Costs begins in early 1990 at about 4.4 and generally increases to about 7.2 by mid-1990. It then generally decreases to about 1 by 1995 and then generally increases to about 7 by 1998. By 1999 it has generally decreased to about 3 and by 2000 it has generally increased to about 8.7. It then generally decreases to about 2.5 by 2002 and then generally increases to about 5.7 by 2003. By 2009 it has generally decreased to about 0 and by the end of 2013 it has generally increased to about 2.1. Previous Productivity and Costs follows Current Productivity and Costs almost exactly until the end of 2009. It generally increases to about 2.1 by the end of 2012. Current Employment cost index begins in 1990 at about 5.1 and generally decreases to about 2.5 by 1995. It then generally increases to about 4.7 by 2000 and then generally decreases to about 1.2 by 2009. By the end of 2013 it has generally increased to about 2.2. Previous Employment cost index follows the Current Employment cost index almost exactly except that it ends in late 2012 at about 2.2.

Note: Light blue shading represents the projection period, beginning in 2011:Q2.

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

Figure: Long-Term Inflation Expectations

Line chart, by percent, 1990 to 2011. There are two series, Thomson Reuters/Michigan next 5 to 10 yrs. and SPF next 10 yrs. Thomson Reuters/Michigan begins in early 1990 at about 4 and generally increases to about 4.75 by mid-1990. It then generally decreases to about 2.55 by 1998. From 1998 to early 2005 it fluctuates between about 2.4 and 3.25. From early 2005 to late 2007 it fluctuates between about 2.7 and 3.3. It then generally increases to about 3.4 by 2008 and then generally

decreases to about 2.6 by 2010. By August 2011 it has generally decreased to about 2.9. SPF begins in early 1990 at about 3.99 and generally increases to about 4.2 by mid-1990. It then generally decreases to about 2.3 by early 1999 and then generally increases to about 2.5 by mid-1999. It remains relatively stable here at 2.5 until late 2009 and then generally decreases to about 2.1 by 2010. By 2011:Q3 it has generally increased to about 2.4.

Note: The Survey of Professional Forecasters (SPF) projection is for the CPI.

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: July 1990-March 1991, March 2001-November 2001, and December 2007-June 2009.

[Box:] Rents and Inflation

Figure: Measures of Vacancy Rates

Line chart, by percent, 2006 to 2013. There are four series, National multifamily (Census), National multifamily (Census) alternative path, Apartment (Torto-Wheaton), and Apartment (Reis). National multifamily (Census) begins in 2006 at about 9.5 and generally increases to about 12 by 2009. It then generally decrease to about 9.35 by 2011 and then generally increase to about 10 by the end of 2013. National multifamily (Census) alternative path follows the National multifamily (Census) exactly until 2012:Q2. It then decreases to about 8 by 2012:Q1 and remains constant here until the end of 2013. Apartment (Torto-Wheaton) begins in 2006 at about 4.4 and generally increases to about 7.4 by 2009. It then generally decreases to about 5.3 by mid-2011. Apartment (Reis) begins in 2007 at about 6 and generally increases to about 8 by 2009. It then generally decreases to about 6 by mid-2011.

Light blue shading represents the projection period, beginning in 2011:Q2.

Source: Census data are from the Housing Vacancy Survey.

Figure: PCE Rental Inflation

Line chart, by percent change, annual rate, 2006 to 2013. There are three series, History and staff projection, Model simulation and Alternative model simulation. History and staff projection begins in early 2006 at about 3.5 and generally increases to about 5 by mid-2006. It then generally decreases to about 2.4 by early 2007 and then generally increases to about 3.5 by late 2007. By 2009 it has generally decreased to about -0.5 and by the end of 2013 it has generally increased to about 2.2. Model simulation begins in early 2006 at about 3.8 and increases to about 4.3 by mid-2006. It then generally decreases to about -0.15 by 2010 and then generally increases to about 2 by the end of 2013. Alternative model simulation follows Model simulation exactly until mid-2011. It then generally increases to about 3.1 by the end of 2013.

Note: Light blue shading represents the projection period, beginning in 2011:Q2. PCE rental inflation includes both tenants' and owners' equivalent rent.

Source: Bureau of Economic Analysis and staff forecasts.

The Long-Term Outlook

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

Item	2011	2012	2013	2014	2015	2016
Real GDP	1.5	2.6	3.4	3.9	4.2	3.6
Civilian unemployment rate ¹	9.1	8.7	8.1	7.3	6.6	5.9
PCE prices, total	2.6	1.2	1.3	1.4	1.5	1.6
Core PCE prices	1.9	1.5	1.3	1.4	1.5	1.6
Federal funds rate ¹	.1	.1	.1	.6	2.1	3.1
10-year Treasury yield ¹	2.2	3.2	3.8	3.9	4.1	4.3

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

Figure: Real GDP

Line chart, by 4-quarter percent change, 2002 to 2016. There is a horizontal line at zero. There are two series, Real GDP and Potential GDP. Real GDP begins in 2002 at about 1.6 and generally increases to about 4.1 by 2004. It then generally decreases to about -5.1 by 2009 and then generally increases to about 3.5 by 2010. By 2011 it has generally decreased to about 1.5 and by 2015 it has generally increased to about 4.25. It then generally decreases to about 3.6 the end of 2016. Real GDP begins in 2002 at about 3.4 and generally decreases to about 2.1 by late 2004. It then generally increases to about 2.4 by 2007 and then generally decreases to about 1.0 by 2009. By the end of 2016 it has generally increased to about 2.6.

Figure: Unemployment Rate

Line chart, by percent, 2002 to 2016. There is a shaded bar from 2011:Q3 to 2015:Q4 that represents the projection period. There are three series, Unemployment

rate, NAIRU with EEB adjustment and NAIRU. Unemployment rate begins in 2002 at about 5.7 and generally increases to about 6.1 by 2003. It then generally decreases to about 4.3 by late 2006 and then generally increases to about 10 by 2009. By the end of 2016 it has generally decreased to about 5.9. NAIRU with EEB adjustment begins in early 2002 at about 5 and generally increases to about 5.2 by mid-2002. It then generally decreases to about 5 by 2004 and remains constant here until 2008. It then generally increases to about 6.75 by 2010 and then generally decreases to about 5.2 by the end of 2016. NAIRU begins in 2002 at about 5 and remains constant here until 2008. It then generally increases to about 6 by 2009 and remains constant here until late 2012. By the end of 2016 it has decreased to about 5.2.

Figure: PCE Prices

Line chart, by 4-quarter percent change, 2002 to 2016. There are two series, PCE prices excluding food and energy and Total PCE prices. PCE prices excluding food and energy begins in early 2002 at about 1.5 and generally increases to about 2 by mid-2002. It then generally decreases to about 1.4 by 2003 and then generally increases to about 2.5 by 2008. By 2009 it has generally decreased to about 1.3 and by early 2010 it has generally increased to about 1.8. It then generally decreases to about 0.95 by late 2010 and generally increases to about 1.9 by 2012. By 2013 it has generally decreased to about 1.3 and by the end of 2016 it has generally increased to about 1.6. Total PCE prices begins in 2002 at about 0.8 and generally increases to about 3.25 by 2005. It then generally decreases to about 1.9 by 2006 and then generally increases to about 4.25 by 2008. By 2009 it has generally decreased to about -0.7 and by early 2010 it has generally increased to about 1.3 by late 2010 and then generally increases to about 2.85 by 2011. By 2012 it has decreased to about 1.1 and by end of 2016 it has generally increased to about 1.65.

Figure: Interest Rates

Line chart, by percent, 2002 to 2016. There are three series, Federal funds rate, 10-year Treasury and BBB corporate. Federal funds rate begins in 2002 at about 1.75 and generally decreases to about 1 by 2003. It then generally increases to about 5.25 by 2006 and then generally decreases to about 0.13 by 2009. It remains relatively stable here until early 2014. It then generally increases to about 3.1 by the end of 2016. 10-year Treasury begins in 2002 at about 5.4 and generally decreases to about 3.75 by 2003. It then generally increases to about 5.1 by 2006 and then generally decreases to about 2.1 by late 2011. By the end of 2016 it has generally increased to about 4.3. BBB corporate begins in 2002 at about 7.6 and generally decreases to about 5.4 by 2004. It then generally increases to about 9.4 by 2008 and then generally decreases to about 4.8 by 2011. By the end of 2016 it has generally increased to about 6.0.

Note: In each panel, light blue shading represents the projection period, beginning in 2011:Q3.

Evolution of the Staff Forecast

Figure: Change in Real GDP

Line chart, by percent, 2009 to 2011. Data are Q4 over Q4 and are plotted on the Tealbook publication dates. There are four series 2010, 2011, 2012 and 2013. 2010 begins on January 22, 2009 at about 2.6 and decreases to about 1.5 by March 12, 2009. By January 20, 2010 it has generally increased to about 3.55 and by October 27, 2010 it has generally decreased to about 2.3. It then generally increases to about 3.05 by September 14, 2011. 2011 begins on September 16, 2009 at about 4.5 and generally increases to about 4.75 by January 20, 2010. It then generally decreases to about 3.25 by September 15, 2010 and then generally increases to about 3.8 by January 19, 2011. By September 14, 2011 it has decreased to about 1.4. 2012 begins on September 15, 2010 at about 4.3 and increases to about 4.75 by October 27, 2010. It then decreases to about 4.3 by December 8, 2010 and remains constant here until March 9, 2011. By September 14, 2011 it has decreased to about 2.5. 2013 begins on September 14, 2011 at about 3.3.

Figure: Unemployment Rate

Line chart, by percent, 2009 to 2011. Data are from the fourth quarter and are plotted on the Tealbook publication dates. There are four series, 2010, 2011, 2012 and 2013. 2010 begins on January 22, 2009 at about 8.1 and generally increases to about 9.5 by March 12, 2009. It then decreases to about 9.1 by April 22, 2009 and then increases to about 9.7 by June 17, 2009. By September 16, 2009 it has decreased to about 9.15 and by December 9, 2009 it has increased to about 9.6. It then decreases to about 9.3 by April 21, 2010 and then generally increases to about 9.6 by September 14, 2011. 2011 begins on September 16, 2009 at about 7.9 and generally increases to about 9.1 by September 15, 2010. It then generally decreases to about 8.6 by March 9, 2011 and then increases to about 9.2 by August 3, 2011. By September 14, 2011 it has decreased to about 9.1. 2012 begins on September 15, 2010 at about 8.0 and decreases to about 7.9 by October 27, 2010. It then increases to about 8.0 by December 8, 2010 and then decreases to about 7.5 by March 9, 2011. By September 14, 2011 it has increased to about 8.75. 2013 begins on September 14, 2011 at about 8.1.

Figure: Change in PCE Prices excluding Food and Energy

Line chart, by percent, 2009 to 2011. Data are Q4 over Q4 and are plotted on the Tealbook publication dates. There are four series, 2010, 2011, 2012 and 2013. 2010 begins on January 22, 2009 at about 0.8 and decreases to about 0.5 by March 12, 2009. It then generally increases to about 1.2 by December 9, 2009 and then generally decreases to about 0.8 by June 16, 2010. By August 4, 2010 it has generally increased to about 1.1 and it remains here until October 27, 2010. It then generally decreases to about 0.75 by January 19, 2011 and remains constant here until June 15, 2011. By September 14, 2011 it has generally increased to about 1.0. 2011 begins on September 16, 2009 at about 1 and generally increases to about 1.05 by December 9, 2009. It then generally decreases to about 0.8 by June 16, 2010 and then generally increases to about 1.0 by October 27, 2010. By December 8, 2010 it has decreased to about 0.9 and by September 14, 2011 it has increased to about 0.9 and by June 15, 2011 it has increased to about 1.5. It remains constant here until September 14, 2011. 2013 begins on September 14, 2011 at about 1.3.

Note: Because the core PCE price index was redefined as part of the comprehensive revisions to the NIPA, projections prior to the August 2009 Tealbook are not strictly comparable with more recent projections.

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

Last update: February 3, 2017

September 2011 Tealbook A Tables and Charts[±]

International Economic Developments and Outlook

Recent Foreign Indicators

Figure: Nominal Exports

Line chart, by scale where January 2007 = 100, 2007 to 2011. There is a horizontal line at 100. There are three series, Foreign, AFE, and EME. Foreign begins in early 2007 at about 100 and generally increases to about 133 by mid-2008. It then generally decreases to about 85 by early 2009 and then generally increases to about 140 by mid-2011. AFE begins in early 2007 at about 100 and generally increases to about 130 by mid-2008. It then generally decreases to about 81 by early 2009 and then generally increases to about 122 by mid-2011. EME begins in early 2007 at about 100 and generally increases to about 134 by mid-2008. By early 2009 it has generally decreased to about 88 and by mid-2011 it has generally increased to about 158.

Note: EME excludes Venezuela

Figure: Industrial Production

Line chart, by scale where January 2007 = 100, 2007 to 2011. There is a horizontal line at 100. There are three series, Foreign, AFE and EME. Foreign begins in early 2007 at about 100 and generally increases to about 103 by early 2008. It then generally decreases to about 90 by early 2009 and then generally increases to about 104.5 by mid-2011. AFE begins in early 2007 at about 100 and generally increases to about 101.5 by mid-2007. It then generally decreases to about 84 by early 2009 and then generally increases to about 91.5 by mid-2011. EME begins in early 2007 at about 100 and generally increases to about 108.5 by early 2008. It then generally decreases to about 95 by early 2009 and then generally increases to about 122 by mid-2011.

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

Figure: Retail Sales

Line chart, by 12-month percent change, 2007 to 2011. There is a horizontal line at zero. There are three series, Foreign, AFE and EME. Foreign begins in early 2007 at about 4.5. From early 2007 to early 2008 it fluctuates between about 4 and 5.3. It then generally decreases to about -2.3 by early 2009 and then generally increases to about 6.2 by early 2010. By mid-2011 it has generally decreased to about 2.4. AFE begins in early 2007 at about 3.5. From early 2007 to early 2008 it fluctuates between about 2.5 and 4.5. It then generally decreases to about -4.3 by early 2009 and then generally increases to about 5.1 by early 2010. By early 2011 it has generally decreased to about -1.5 and by mid-2011 it has generally increased to about 1. EME begins in early 2007 at about 6 and generally increases to about 10.5 within a month or so. It then generally decreases to about 3.3 by late 2008. By early 2010 it has generally increased to about 11 and by early 2011 it has generally decreased to about 4.2. It then generally increase to about 7 by mid-2011.

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

Figure: Employment

Line chart, by 4-quarter percent change, 2007 to 2011. There is a horizontal line at zero. There are three series, Foreign, AFE and EME. Foreign begins in early 2007 at about 2.1 and decreases to about 2.02 by mid-2007. It then generally increases to about 2.3 by late 2007 and then generally decreases to about -1.25 by mid-2009. By late 2010 it has generally increased to about 1.5. AFE begins in early 2007 at about 1.95 and generally decreases to about 1.8 by mid-2007. It generally increases to about 1.95 by late 2007. It then generally decreases to about -1.8 by mid-2009 and then generally increases to about 1.3 by early 2011. EME begins in early 2007 at about 2.9 and generally increases to about 3.3 by late 2007. It then generally decreases to about 0.4 by mid-2009 and then generally increases to about 2.4 by late 2010.

Note: EME excludes Argentina and Mexico.

Figure: Consumer Prices: Advanced Foreign Economies

Line chart, by 12-month percent change, 2007 to 2011. There is a horizontal line at zero. There are two series, Headline and Core. Headline begins in early 2007 at about 1.3 and generally increases to about 3.5 by mid-2008. It then generally decreases to about -1 by mid-2009. By mid-2011 it has generally increased to about 2.3. Core begins in early 2007 at about 1.28 and generally increases to about 1.5 by mid-2007. It then generally decreases to about 0.95 by early 2008 and then generally increases to about 1.3 by late 2008. By mid-2010 it has generally decreased to about 0.6 and by mid-2011 it has generally increased to about 1.3.

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

Source: Haver Analytics and CEIC.

Figure: Consumer Prices: Emerging Market Economies

Line chart, by 12-month percent change, 2007 to 2011. There is a horizontal line at zero. There are three series, Headline, Excluding food -- East Asia*, and Excluding food -- Latin America. Headline begins in early 2007 at about 2.9. It then generally increases to about 6.8 by mid-2008 and then generally decreases to about 0.6 by mid-2009. By mid-2011 it has generally increased to about 5.2. Excluding food -- East Asia begins in early 2007 at about 1.3. It then generally increases to about 3.8 by mid-2008 and then generally decreases to about -2.2 by mid-2009. By mid-2011 it has generally increased to about 2.4. Excluding food -- Latin America begins in early 2007 at about 3.6 and then generally decreases to about 3.2 within a few months. It then generally increases to about 5.5 by late 2008 and then generally decreases to about 3.4 by late 2009. By early 2010 it has generally increased to about 4.6 and by mid-2011 it has generally decreased to about 3.2.

The Foreign Outlook

(Percent change, annual rate)

	2010		20	11		2012	2042
	2010	Q1	Q2	Q3	Q4	2012	2013
Real GDP							
Total foreign	4.3	4.1	2.2	3.5	3.0	3.2	3.4
Previous Tealbook	4.3	4.2	2.2	3.7	3.4	3.4	n.a.
Advanced foreign economies	2.7	2.2	.1	2.3	1.8	1.9	2.2
Previous Tealbook	2.7	2.4	.7	2.5	2.2	2.1	n.a.
Emerging market economies	6.1	6.2	4.4	4.8	4.4	4.6	4.8
Previous Tealbook	6.1	6.2	3.9	5.0	4.7	4.7	n.a.
Consumer Prices							
Total foreign	3.2	4.3	3.2	2.9	2.2	2.3	2.4
Previous Tealbook	3.2	4.3	3.2	2.5	2.2	2.4	n.a.
Advanced foreign economies	1.7	3.3	2.1	.8	1.3	1.3	1.4
Previous Tealbook	1.8	3.3	2.2	.5	1.5	1.4	n.a.
Emerging market economies	4.4	5.1	4.0	4.6	2.8	3.2	3.1
Previous Tealbook	4.4	5.1	4.0	4.0	2.8	3.2	n.a.

n.a. Not available. Return to table

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

Figure: Real GDP

Line chart, by percent change, 2008 to 2013. Data are annual rate. There is a horizontal line at zero. There are two series, Total Foreign Current Tealbook and Total Foreign Previous Tealbook. Total Foreign Current Tealbook begins in early 2008 at about 3 and generally decreases to about -9.8 by early 2009. It then generally increases to about 5.5 by late 2009 and then generally decreases to about 2 by mid-2011. By the end of 2013 it has generally increased to about 3.5. Total Foreign Previous Tealbook follows the Current Tealbook series almost exactly except that it ends in late 2012 at about 3.5.

Figure: Real GDP

Line chart, by percent change, 2008 to 2013. Data are annual rate. There is a horizontal line at zero. There are four series, Advanced Foreign Economies Previous Tealbook, Emerging Market Economies Current Tealbook and Emerging Market Economies Previous Tealbook. Advanced Foreign Economies Current Tealbook begins in early 2008 at about 1 and generally decreases to about -9.7 by early 2009. It then generally increases to about 4.5 by early 2010 and then generally decreases to about 0 by early 2011. By the end of 2013 it has generally increased to about 2.3. Advanced Foreign Economies Previous Tealbook follows the Advanced Foreign Economies Current Tealbook series almost exactly until early 2011 when it generally decreases to about 1. It then generally increases to about 2.3 by the end of 2012. Emerging Market Economies Current Tealbook begins in early 2008 at about 5.2 and generally decreases to about -9.7 by early 2009. By mid-2009 it has generally increased to about 10 and by early 2011 it has generally decreased to about 4.5. It then generally increases to about 4.9 by the end of 2013. Emerging Market Economies Previous Tealbook follows the Emerging Market Economies Current Tealbook series almost exactly until early 2011 when it generally decreases to about 3.5. It then generally increases to about 4.8 by the end of 2012.

Figure: Consumer Prices

Line chart, by percent change, 2008 to 2013. Data are annual rate. There is a horizontal line at zero. There are two series, Total Foreign Current Tealbook and Total Foreign Previous Tealbook. Total Foreign Current Tealbook begins in early 2008 at about 5. It then generally decreases to about -0.8 by late 2008 and then generally increases to about 3.3 by early 2010. By mid-2010 it has generally decreased to about 1.9 and by late 2010 it has generally increased to about 5.2. It then generally decreases to about 2.1 by late 2011 and generally increases to about 2.3 by the end of 2013. Total Foreign Previous Tealbook follows Total Foreign Current Tealbook almost exactly until it ends in late 2012 at about 2.3.

Figure: Consumer Prices

Line chart, by percent change, 2008 to 2013. Data are annual rate. There is a horizontal line at zero. There are four series, Advanced Foreign Economies Current Tealbook, Advanced Foreign Economies Previous Tealbook, Emerging Market Economies Current Tealbook and Emerging Market Economies Previous Tealbook. Advanced Foreign Economies Current Tealbook begins in early 2008 at about 2.7 and generally increases to about 3.9 by mid-2008. It then generally decreases to about -2.2 by late 2008. It then generally increases to about 0.5 by mid-2010. By early 2011 it has generally increased to about 3.2 and by mid-2011 it has generally decreased to about 0.7. It then generally increases to about 1.6 by late 2013. Advanced Foreign Economies Previous Tealbook follows the Advanced Foreign Economies Current Tealbook series almost exactly until late 2010 when in generally increases to about 3.5. It then generally decrease to about 0.6 by mid-2011 and then generally increases to about 1.5 by the end of 2012. Emerging Market Economies Current Tealbook begins in early 2008 at about 7.1. It then generally decreases to about -0.7 by early 2009 and then generally increases to about 4.5 by early 2010. By mid-2010 it has generally increased to about 2.7 and by late 2010 it has generally increased to about 6.7. It then generally decreases to about 2.6 by late 2011 and then increases to about 3.1 by early 2012. It stays constant here until the end of 2013. Emerging Market Economies Previous Tealbook follows Emerging Market Economies Current Tealbook almost exactly until the end of 2012 when it ends at about 3.1.

Note: Light blue shading represents the projection period, beginning in 2011:Q3.

[Box:] Recent Policy Developments in the Euro Area

Figure: 10-Year Sovereign Bonds Spreads (relative to Germany)

Line chart, by basis points, 2009 to 2011. There are three series, Greece, Spain and Italy. Greece begins in 2009:Q4 at about 100 and generally increases to about 950 by 2010:Q3. By 2010:Q4 it has generally decreased to about 620 and by early 2011:Q1 it has generally increased to about 955. It then generally decreases to about 730 by mid-2011:Q1 and then generally increases to about 1600 by early 2011:Q3. Within a few weeks it generally decreases to about 1150 and by late 2011:Q3 it has generally increased to about 2370. Spain begins in 2009:Q4 at about 60 and remains relatively stable here until 2010:Q1. It then generally increases to about 220 by 2010:Q2. From 2010:Q2 to early 2010:Q4 it fluctuates between about 125 and 220. It then generally increases to about 300 by late 2010:Q4 and then generally decreases to about 305 by late 2011:Q3. Italy begins in 2009:Q4 at about 95 and remains relatively stable here until early 2010:Q2. It then generally increases to about 395 by late 2011:Q3. Italy begins in 2009:Q4 at about 95 and remains relatively stable here until early 2010:Q2. It then generally increases to about 160 by late 2010:Q2. From late 2010:Q2 to 2011:Q3 it fluctuates between about 120 and 230. It then generally increases to about 400 by early 2011:Q3 and then decreases to about 255 by mid-2011:Q3. By late 2011:Q3 it has generally increased to about 395.

Source: Bloomberg.

Figure: ECB Securities Markets Programme

Line chart, by billions of euros, 2010 to 2011. There are two series, weekly purchases and cumulative purchases. Weekly purchases begins in week 2 of May 2010 at about 16.2 and decreases to about 5 by week 5 of May 2010. It then increases to about 6.8 by week 1 of June 2010 and then generally decreases to about 0 by week 1 of August 2010. By week 4 of September 2010 it has generally increased to about 1.5 and by week 4 of October 2010 it has generally decreased to about 0. It then generally increases to about 3 by week 1 of December 2010 and generally decreases to about 0.1 by week 1 of January 2011. By week 2 of January 2011 it has increased to about 1.1 and by week 4 of January 2011 it fluctuates between about 0 and 0.6. It then increases to about 22 by week 2 of August 2011 and then decreases to about 5 by week 4 of August 2011. By week 1 of September 2011 it has increased to about 13.5. Cumulative purchases begins in week 1 of May 2010 at about 0 and generally increases to about 60 by week 4 of June 2010. It remains relatively stable there until week 3 of July 2010. It then generally increases to about 77 by week 1 of March 2011 and then generally decreases to about 74 by week 1 of August 2011. By week 1 of September 2011 it has generally increased to about 143.

Note: Weekly bond purchases are calculated net of redemption.

Source: European Central Bank.

Evolution of Staff's International Forecast

Figure: Total Foreign GDP

Line chart, by percent change, Q4 over Q4, January 22, 2009 to September 14, 2011. The x-axis is Tealbook publication dates. There are four series, 2010, 2011, 2012 and 2013. 2010 begins on January 22, 2009 at about 2.9 and generally decreases to about 2.2 by March 12, 2009. It then generally increases to about 4.3 by September 14, 2011. 2011 begins on September 16, 2009 at about 4.0 and remains relatively stable here until January 20, 2010. It then generally decreases to about 3.1 by December 8, 2010 and then generally increases to about 3.6 by June 15, 2011. By September 14, 2011 it has decreased to about 3.2. 2012 begins on September 15, 2010 at about 3.5. From September 15, 2010 to June 15, 2011 it fluctuates between about 3.5 and 3.7. It then decreases to about 3.1 by September 14, 2011. 2013 begins on September 14, 2011 at about 3.4.

Figure: Total Foreign CPI

Line chart, by percent change, Q4 over Q4, January 22, 2009 to September 14, 2011. The x-axis is Tealbook publication dates. There are four series, 2010, 2011, 2012 and 2013. 2010 begins on January 22, 2009 at about 2.0 and generally decreases to about 1.5 by March 12, 2009. It then generally increases to about 2.5 by April 21, 2010 and then generally decreases to about 2.1 by August 4, 2010. By September 14, 2011 it has generally increased to about 3.2. 2011 begins on September 16, 2009 at about 1.75 and generally increases to about 3.17 by April 20, 2011. It then decreases to about 3.0 by June 15, 2011 and then increases to about 3.1 by September 14, 2011. 2012 begins on September 15, 2010 at about 2.25 and generally increases to about 2.4 by August 3, 2011. It then decreases to about 2.3 by September 14, 2011. 2013 begins on September 14, 2011 at about 2.4.

Figure: U.S. Current Account Balance

Line chart, by percent of GDP, January 22, 2009 to September 14, 2011. The x-axis is Tealbook publication dates. There are four series, 2010, 2011, 2012 and 2013. 2010 begins on January 22, 2009 at about -3.5 and generally decreases to about -4.2 by March 12, 2009. It then generally increases to about -3 by October 29, 2009. From October 29, 2009 to September 15, 2010 it fluctuates between about -3.25 and -3. It then decreases to about -3.4 by October 27, 2010 and then generally increases to about -3.9 by April 20, 2011. It remains relatively stable here until September 14, 2011. 2011 begins on September 16, 2009 at about -3.1 and generally increases to about -2.9 by October 29, 2009. It then generally decreases to about -3.25 by June 16, 2010 and then generally increases to about -2.9 by August 4, 2010. By December 8, 2010 it has decreased to about -3.4 and by June 15, 2011 it has increased to about -2.5. It then decreases to about -2.9 by August 3, 2011 and then increases to about -2.7 by September 14, 2011. 2012 begins on September 15, 2010 at about -2.9 and decreases to about -3.1 by December 8, 2010. It then increases to about -2.0 by June 15, 2011 and then decreases to about -2.2 by September 14, 2011. 2013 begins on September 14, 2011 at about -2.2.

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

Last update: February 3, 2017

September 2011 Tealbook A Tables and Charts[‡]

Financial Developments

Policy Expectations and Treasury Yields

Figure: Selected Interest Rates

Line chart, by percent, August 8, 2011 to September 13, 2011. There is a vertical line on August 9th noting the August FOMC, on August 15th noting the Empire State Manufacturing Survey, on August 17th noting PPI, on August 18th noting CPI and the Business Outlook Survey, on August 24th noting Durable goods, on August 26th noting GDP and FRBKC symposium, on August 30th noting the FOMC minutes, and on September 2nd nothing the unemployment report. There are two series, June 2013 Eurodollar and 10-year Treasury yield. June 2013 Eurodollar begins on August 8th at about 0.84 and generally increases to about 0.91 by August 9th. It then generally decreases to about 0.53 by August 10th. From August 10th to August 18th it fluctuates between about 0.5 and 0.61. It then generally increases to about 0.55 by September 1st. From September 13th to September 13th it fluctuates between about 0.55 and 0.61. On September 13th it is at about 0.59. 10-year Treasury yield begins on August 8th at about 2.48 and generally decreases to about 2.08 by August 11th. It then generally increases to about 2.35 by August 12th and then generally decreases to about 2.08 by August 12th and then generally decreases to about 2.18 by August 24th it has generally increased to about 2.3. From August 24th to September 1st it fluctuates between about 2.13 and 2.3. It then generally decreases to about 1.91 by September 6th and then generally increases to about 1.99.

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, 2011:Q4 to 2015:Q1. There are four series, "Mean: September 13, 2011", "Mean: August 8, 2011", "Mode: September 13, 2011" and "Mode: August 8, 2011". "Mean: September 13, 2011" begins in 2011:Q4 at about 0.1 and generally decreases to about 0.05 by 2012:Q3. It then generally increases to about 1.2 by 2015:Q1. "Mean: August 8, 2011" begins in 2011:Q4 at about 0.05 and generally increases to about 1.6 by 2015:Q1. "Mode: September 13, 2011" begins in 2011:Q4 at about 0.05 and generally decreases to a

Note: Mean is estimated using OIS 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 the Quarter of First Rate Increase from the Desk's Dealer Survey

Bar chart, by percent, from 2011:Q3 to greater than or equal to 2014:Q1. There are two series, "Recent: 20 respondents" and "August FOMC: 19 respondents". "Recent: 20 respondents" begins in 2011:Q3 at about 0 and increases to about 45 by greater than or equal to 2014:Q1. "August FOMC: 19 respondents" begins in 2011:Q3 at about 0 and increases to about 19 by 2012:Q4. It then decreases to about 13 by 2013:Q2 and then increases to about 18 by 2013:Q3. By greater than or equal to 2014:Q1 it has decreased to about 0.

Note: For the August FOMC, the probability reported in the 2013:Q3 bin corresponds to the probability that the first policy rate hike will occur in 2013:Q3 or later.

Source: Desk's Dealer Survey from September 12, 2011.

Figure: Short Rate Implied Volatility

Line chart, by percent, August 2011 to September 2011. Data are daily. There is a vertical line on August 9th marking the August FOMC. The series begins on August 1st at about 59 and decreases to about 55 by August 3rd. It then increases to about 59 by August 9th and then decreases to about 34 by August 11th. By August 22nd it has generally increased to about 47 and by August 31st it has generally decreased to about 41. It then generally increases to about 45 by September 13th.

Note: Based on basis point implied volatility from 1-year swaptions 1 year ahead.

Source: Bloomberg.

Figure: Inflation Compensation

Line chart, by percent, 2007 to 2011. Data are daily. There is a label in August 2011 representing the August FOMC. There is also a horizontal line at zero. There are two series, 5 to 10 years ahead and Next 5 years. 5 to 10 years ahead begins in 2007:Q1 at about 2.5 and generally increases to about 3.1 by 2008:Q1. It then generally decreases to about 2.5 by early 2008:Q4 and then generally increases to about 3.7 by mid-2008:Q4. By late 2008:Q4 it has generally decreased to about 2 and by 2010:Q1 it has generally increased to about 3.25. It then generally decreases to about 2.1 by 2010:Q3 and then generally increases to about 3.25 by 2010:Q4. By September 13, 2011 it has generally decreased to about 2.5. Next 5 years begins in 2007:Q1 at about 2.3. From 2007:Q1 to 2008:Q1 it fluctuates between about 1.75 and 2.4. It then generally increases to about 2.6 by 2008:Q3 and then generally decreases to about -1.7 by 2008:Q4. By 2010:Q1 it has generally increased to about 2.1 and by 2010:Q3 it has generally decreased to about 1.1. It then generally increases to about 2.4 by 2011:Q1 and then generally decreases to about 1.6 by

September 13, 2011.

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.

[Box:] Policy Rate Expectations and Term Premiums

Figure: Alternative Estimates of the Expected Policy Rate Path

Line chart, by percent, 2011 to 2013. There are four series, OIS-implied: 09/13/2011, OIS-implied: 08/08/2011, Futures-implied: 09/13/2011, and Futures-implied: 08/08/2011. OIS-implied: 09/13/2011 begins in December 2011 at about 0.1 and generally decreases to about 0.07 by July 2012. It then generally increases to about 0.28 by August 2013. OIS-implied: 08/08/2011 begins in December 2011 at about 0.1 and generally decreases to about 0.09 by May 2012. It then generally increases to about 0.5 by August 2013. Futures-implied: 09/13/2011 begins in December 2011 at about 0.08 and generally increases to about 0.1 by April 2012. It then generally decreases to about 0.08 by August 2012 and then generally increases to about 0.22 by August 2013. Futures-implied: 08/08/2011 begins in December 2011 at about 0.1 and generally increases to about 0.49 by August 2013.

Source: Staff estimate.

Figure: Estimates of the Per-Month Term Premium Based on OIS

Line chart, by basis points, 2002 to 2011. There are two series, 12 months ahead and 18 months ahead. 12 months ahead begins in early 2002 at about 2.3 and generally increases to about 3.6 within a few months. It then generally decreases to about -1.2 by 2003 and then generally increases to about -2.8 by 2004. By early 2008 it has generally decreased to about -3.3 and by mid-2008 it has generally increased to about 2. It then generally decreases to about -1.2 within a month or so and then generally increases to about 0.9 by late 2008. From late 2008 to late 2009 it fluctuates between about -0.4 and 1.1. It then generally decreases to about -1.1 by September 13, 2011. 18 months ahead begins in early 2002 at about 2.2 and generally increases to about 2.9 within a few months. It then generally decreases to about -0.8 by 2003 and then generally increases to about 2.1 by 2004. By early 2008 it has generally decreased to about -2 and by mid-2008 it has generally increased to about -0.6 within a month or so and then generally increases to about 0.8 by late 2008. From late 2008 to late 2009 it fluctuates between about -0.4 and 0.8. It then generally decreases to about -1.1 by September 13, 2011.

Source: Staff estimate.

Figure: Expected Policy Rate Path

Line chart, by percent, 2011 to 2013. There are two series, Smoothed OIS yield curve: 09/13/2011 and Three-factor OIS model: 09/13/2011. Smoothed OIS yield curve: 09/13/2011 begins in December 2011 at about 0.09 and generally decreases to about 0.06 by September 2012. It then generally increases to about 0.27 by August 2013. Three-factor OIS model: 09/13/2011 begins in December 2011 at about 0.07 and generally increases to about 0.51 by August 2013.

Source: Staff estimate

Financial Institutions and Short-Term Funding Markets

Figure: CDS Spreads

Line chart, by basis points, 2010 to 2011. Data are daily. There is a vertical line in August 2011 representing the August FOMC. There are two series, foreign banks and Large U.S. bank holding companies. Foreign banks begins in January 2010 at about 77 and generally increases to about 112 by February 2010. It then generally decreases to about 77 by March 2010 and then generally increases to about 182 by June 2010. By August 2010 it has generally decreased to about 95. From August 2010 to December 2010 it fluctuates between about 94 and 125. It then generally increases to about 250 by September 13, 2011. Large U.S. bank holding companies begins in January 2010 at about 93 and generally increases to about 149 by February 2010. It then generally decreases to about 94 by April 2010 and then generally increases to about 203 by May 2010. By April 2011 it has generally decreased to about 110 and by September 13, 2011 it has generally increased to about 270.

Source: Markit.

Figure: Libor-OIS Term Structure

Line chart, by basis points, 1 week to 6 months. Data are daily. There are three series, Current: September 14, 2011, August Tealbook: August 2, 2011, and July 15, 2010. July 15, 2010, represents the peak of the 3-month OIS spread just before the release of the 2010 European bank stress test results. Current: September 14, 2011 begins at 1 week at about 9 and increases to about 44 by 6 months. August Tealbook: August 2, 2011 begins at 1 week at about 8.5 and decreases to about 8 by 1 month. It then increases to about 30 by 6 months. July 15, 2010 begins at 1 week at about 13 and increases to about 53 by 6 months.

Source: Bloomberg

Figure: Dollar Funding Spreads

Line chart, by basis points, April 2010 to September 2011. Data are daily. There is a vertical line in August 2011 representing the August FOMC. There are two series,

USD 3x6 FRA-OIS and Euro-dollar implied basis swap. USD 3x6 FRA-OIS begins in April 2010 at about 13 and generally increases to about 69 by May 2010. It then generally decreases to about 17 by October 2010 and then generally increases to about 34 by November 2010. By April 2011 it has generally decreased to about 14 and by September 13, 2011 it has generally increased to about 48. Euro-dollar implied basis swap begins in April 2010 at about 15 and generally increases to about 68 by May 2010. It then generally decreases to about 5 by October 2010 and then generally increases to about 55 by December 2010. By April 2011 it has generally decreased to about -3 and by September 13, 2011 it has generally increased to about 79.

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

Source: Bloomberg; Federal Reserve Bank New York.

Figure: Unsecured Dollar Financial Commercial Paper Outstanding

Line chart, by billions of dollars, January 2011 to September 2011. Data are daily. There is a vertical line in August 2011 representing the August FOMC. There are two series, European issuers and U.S. issuers. European issuers begins in January at about 330 and generally increases to about 375 by May. It then generally decreases to about 235 by September 13. U.S. issuers begins in January at about 100 and remains relatively stable here until late April. It then gradually decreases to about 80 by September 16.

Source: Depository Trust & Clearing Corporation.

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

Line chart, by days, January 2010 to September 2011. Data are weekly. There is a vertical line in August 2011 representing the August FOMC. There are two series, U.S. parent and European parent. U.S. parent begins in January 2010 at about 40 and generally increases to about 50 by March 2010. It then generally decreases to about 35 by June 2010 and then generally increases to about 52.5 by September 2010. By January 2011 it has generally decreased to about 39.8 and by March 2011 it has generally increases to about 51. It then generally decreases to about 44.5 by May 2011 and then generally increases to about 50.5 by June 2011. By September 7, 2011 it has generally decreased to about 45.5. European parent begins in January 2010 at about 40.5 and generally increases to about 48 by March 2011. It then generally decreases to about 35 by June 2010 and then generally increases to about 55.5 by November 2010. By January 2011 it has generally decreased to about 42.5 and by June 2011 it has generally increased to about 51. It then generally decreases to about 42 by September 7, 2011.

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

Figure: MMF Exposures to Selected European Countries

Line chart, by billions of dollars, December 2010 to August 2011. Data are monthly. There are six series, France, Germany, U.K., Belgium, Italy and Spain. France begins in December 2010 at about 290 and increases to about 305 by February 2011. It then decreases to about 290 by March 2011 and then increases to about 340 by May 2011. By August 31, 2011 it has decreased to about 255. Germany begins in December 2010 at about 150 and increases to about 180 by February 2011. It then decreases to about 149 by March 2011 and then increases to about 155 by May 2011. By July 2011 it has decreased to about 130 and by August 31, 2011 it has increased to about 150. U.K. begins in December 2010 at about 240 and generally increases to about 275 by February 2011. It then generally decreases to about 250 by March 2011 and then generally increases to about 280 by May 2011. By June 2011 it has generally decreased to about 245 and by August 31, 2011 it has generally increased to about 270. Belgium begins in December 2010 at about 26 and decreases to about 17 by January 2011. It then increases to about 22.5 by April 2011 and then decreases to about 4 by July 2011. By August 31, 2011 it has increased to about 10.5. Italy begins in December 2010 at about 21 and generally decreases to about 12.5 by March 2011. It then increases to about 18.5 by April 2011 and then decreases to about 2.5 by August 31, 2011.

Note: MMF is U.S. money market fund.

Source: Securities and Exchange Commission.

Foreign Developments

Figure: Stock Price Indexes

Line chart, by scale where January 1, 2010=100, 2010 to 2011. Data are daily. There is a label in August 2011 representing the August FOMC. There are four series, DJ Euro, Topix, FTSE, and MSCI Emerging Markets. DJ Euro begins in early 2010:Q1 at about 100 and generally decreases to about 90 by mid-2010:Q1. It then generally increases to about 103 by early 2010:Q2 and then generally decreases to about 87 by late 2010:Q2. By mid-2011:Q1 it has generally increased to about 95. It then generally increases to about 107 by mid-2011:Q2 and then generally decreases to about 76 by September 13, 2011. Topix begins in early 2010:Q1 at about 100 and generally increases to about 107 within a few weeks. It then generally decreases to about 97 by mid-2010:Q1 and then generally increases to about 110 by early 2010:Q2. By 2010:Q4 it has generally decreased to about 89 and by mid-2011:Q1 it has generally increased to about 108. It then generally decreases to about 84 by late 2011:Q1. Within a week or so it generally increases to about 97 and by September 13, 2011 it has generally decreased to about 82. FTSE begins in early 2010:Q1 at about 100 and generally decreases to about 93 by mid-2010:Q1. It then generally increases to about 108 by early 2010:Q2 and then generally decreases to about 89 by early 2010:Q3. It then generally increases to about 113 by early 2011:Q1. By early 2011:Q3 it has generally increases to about 113 by early 2011:Q1 and then generally decreased to about 103 by late 2011:Q1. By early 2010:Q1 at about 100 and generally increases to about 113 by early 2010:Q4 it has generally increases to about 104 within a few weeks. It then generally decreased to about 97. MSCI Emerging Markets begins in early 2010:Q1 at about 100 and generally increases to about 104 within a few weeks. It then generally decreases to about 90 by mid-2010:Q1 and then generally increases to about 104 within a few weeks. It then generally decreases to about 98 by early 2010:Q4 to mid-2011:Q2. By mid-2010:Q2 it has generally increases to abou

Source: Bloomberg.

Figure: Nominal 10-year Government Bond Yields

Line chart, by percent, 2010 to 2011. Data are daily. There is a label in August 2011 representing the August FOMC. There are three series, Germany, United Kingdom and Japan. Germany begins in 2010:Q1 at about 3.3 and generally decreases to about 2.05 by 2010:Q3. It then generally increases to about 3.5 by 2011:Q3 and then generally decreases to about 1.85 by September 13, 2011. United Kingdom begins in early 2010:Q1 at about 4.0. From early 2010:Q1 to early 2010:Q2 it fluctuates between about 3.9 and 4.2. It then generally decreases to about 2.7 by 2010:Q3 and then generally increases to about 3.9 by 2011:Q1. By September 13, 2011 it has generally decreased to about 2.45. Japan begins in early 2010:Q1 at about 1.3. From early 2010:Q1 to early 2010:Q2 it fluctuates between about 1.25 and 1.4. It then generally decreases to about 1.0 by mid-2010:Q3 and then increases to about 1.25 by late 2010:Q3. By early 2010:Q4 it generally decreases to about 0.9 and by 2011:Q2 it generally increases to about 1.4. It then generally decreases to about 1.0 by September 13, 2011.

Source: Bloomberg.

Figure: Nominal Trade-Weighted Dollar Indexes

Line chart, by scale where January 1, 2010 = 100, 2010 to 2011. Data are daily. There is a label in August 2011 representing the August FOMC. There are three series, Broad, Major, and OITP (other important trading partners). Broad begins in early 2010:Q1 at about 100 and generally increases to about 102 by mid-2010:Q1. It then generally decreases to about 99 by early 2010:Q2 and then generally increases to about 104.8 by late 2010:Q2. By early 2010:Q3 it has generally decreased to about 99.8 and by mid-2010:Q3 it has generally increased to about 102. It then generally decreases to about 95.2 by early 2010:Q4 and then generally increases to about 99 by mid-2010:Q4. By 2011:Q2 it has generally decreased to about 92 and by September 13, 2011 it has generally increased to about 95.7. Major begins in early 2010:Q1 at about 100 and generally increases to about 103 by mid-2010:Q1. From mid-2010:Q1 to early 2010:Q2 it fluctuates between about 100.3 and 103. It then generally increases to about 109.2 by mid-2010:Q2. By early 2010:Q3 it has generally decreased to about 100.5 and by mid-2010:Q3 it has generally increased to about 101.3 by mid-2010:Q4. By 2011:Q2 it has generally increased to about 91.8 and by September 13, 2011 it has generally increased to about 96. OITP begins in early 2010:Q1 at about 100 and generally increases to about 101.5 by mid-2010:Q1. It then generally decreases to about 97.5 by early 2010:Q2 and then generally increases to about 101.8 by mid-2010:Q2. By 2011:Q2 it has generally decreased to about 92.1 and by September 13, 2011 it has generally increased to about 95.5.

Source: Federal Reserve Board; Bloomberg.

Figure: Euro-Area 10-Year Government Bond Spreads

Line chart, by percentage points, 2010 to 2011. Data are daily. There is a label in August 2011 representing the August FOMC. There are five series, Greece, Portugal, Spain, Ireland and Italy. Greece begins in 2010:Q1 at about 2.2 and generally increases to about 9.7 by early 2010:Q2. It then generally decreases to about 4.2 by mid-2010:Q2 and then generally increases to about 9.56 by late 2010:Q3. By early 2010:Q4 it has generally decreased to about 6.5 and by early 2011:Q1 has generally increased to about 9.8. It then generally decreases to about 7.5 by mid-2011:Q1 and then generally increases to about 15.8 by early 2011:Q3. Within a week or so it decreases to about 11.8 and by September 13, 2011 it has generally increased to about 23.8. Portugal begins in 2010:Q1 at about 0.6 and generally increases to about 3.7 by mid-2010:Q2. It then generally decreases to about 1.5 within a week or so. By mid-2010:Q4 it has generally increased to about 3.1 It then generally increases to about 10.7 by early 2011:Q3 and then generally decreases to about 7.7 by mid-2011:Q3. By September 13, 2011 it has generally increased to about 9.5. Spain begins in early 2010:Q1 at about 0.6 and generally increases to about 2.2 by late 2010:Q2. From late 2010:Q2 to early 2010:Q4 it generally fluctuates between 1.1 and 2.2. It then generally increases to about 1.4 and generally increases to about 1.5 by early 2011. By September 13, 2011 it has generally increased to about 3.5. Ireland begins in 2010:Q1 at about 1.4 and generally increases to about 3.0 by mid-2010:Q2. It then generally decreases to about 1.7 within a week or so. By mid-2010:Q4 it has generally increased to about 7.0 and by late 2010:Q4 it has generally decreased to about 5.0. It then generally increases to about 1.7 by early 2011 and then generally increased to about 7.0 by September 13, 2011. Italy begins in early 2010:Q2 to late 2011:Q2 it generally fluctuates between 1.0 and 2.0. It then generally increases to about 4.0 by September 13, 2011.

Note: Spread over German bunds.

Source: Bloomberg.

Figure: Selected Exchange Rates

Line chart, by scale where January 1, 2010 = 100, 2010 to 2011. Data are daily. There is a label in August 2011 representing the August FOMC. There are two series, CHF/USD and Yen/USD. CHF/USD begins in early 2010:Q1 at about 100 and generally increases to about 105.5 by mid-2010:Q1. It then generally decreases to about 101 by early 2010:Q2 and then generally increases to about 112.5 by late 2010:Q2. By August 2011 it has generally decreased to about 70.5 and by September 13, 2011 it has generally increased to about 85.3. Yen/USD begins in early 2010:Q1 at about 100 and generally decreases to about 95 by late 2010:Q1. It then generally increases to about 102.5 by early 2010:Q2 and then generally decreases to about 86 by early 2010:Q4. From early 2010:Q4 to early 2011:Q2 it fluctuates between about 85 and 92.5. It then generally decreases to about 83 by September 13, 2011.

Source: Bloomberg.

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

Bar chart, by billions of dollars, annual rate, 2009 to 2011. There is a horizontal line at zero. There are two series, Official and Private. Approximate values: 2009: Official 570, Private 10. 2010:H1: Official 220, Private 320. 2010:H2: Official 520, Private 180. 2011:Q1: Official 130, Private 3.2. 2011:Q2: Official 270, Private -200. July 2011: Official 120, Private -380.

Source: Treasury International Capital data adjusted for staff estimates.

Domestic Asset Market Developments

Figure: Selected Stock Price Indexes

Line chart, by log scale, January 2010 to September 2011. Data are daily. There is a label in August 2011 representing the August FOMC. There are two series, S&P 500 and S&P 500 Diversified Financials. S&P 500 begins in January 2010 at about 87.5 and generally decreases to about 81 by February 2010. It then generally increases to about 94 by April 2010 and then generally decreases to about 79 by July 2010. By April 2011 it has generally increased to about 106 and by September 13, 2011 it has generally decreased to about 90. S&P 500 Diversified Financials begins in January 2010 at about 96 and generally decreases to about 87 by February 2010. It then generally increases to about 110.5 by April 2010 and then generally decreases to about 81 by September 2010. By February 2011 it has generally increased to about 106 and by September 13, 2011 it has generally decreased to about 70.

Source: Bloomberg.

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

Line chart, by percent, log scale, 2007 to 2011. Data are daily. There is a label in August 2011 representing the August FOMC. The series begins in 2007:Q1 at about 9 and generally increases to about 33 by 2008:Q1. It then generally decreases to about 13 by 2008:Q2 and then generally increases to about 80 by 2008:Q4. By early 2010:Q2 it has generally decreased to about 13 and by mid-2010:Q2 it has generally increased to about 45. It then generally decreases to about 12 by 2011:Q2 and then generally increases to about 38 by September 13, 2011.

Source: Chicago Board Options Exchange.

Figure: Equity Risk Premium

Line chart, by percent, 1990 to 2011. Data are monthly. 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 early 1990 at about 7.6 and then increases to about 9.6 by late 1990. It then generally decreases to about 7 by 1992 and then generally increases to about 8.7 by 1995. By 2000 it has generally decreased to about 2.1 and by 2002 it has generally increased to about 6.9. It then generally decreases to about 4.8 by 2004 and then generally increases to about 12 by 2008. By 2010 it has generally decreased to about 8 and by September 13, 2011 it has generally increased to about 9.8. Expected real yield on 10-year Treasury begins in 1990 at about 4.3 and generally decreases to about 2 by 1993. It then generally increases to about 4.6 by 1995. From 1995 to 2000 it fluctuates between about 2.2 and 4.6. It then generally decreases to about 0.8 by 2003 and then generally increases to about 2.7 by 2007. By September 13, 2011 it has generally decreased to about -0.2.

Note: Expected real yield on 10-year Treasury is off-the-run 10-year Treasury yield less Philadelphia Fed 10-year expected inflation. September 13, 2011 values are the latest observations using daily interest rates and stock prices and latest earnings data from I/B/E/S.

Source: Thomson Financial.

Figure: Corporate Bond Spreads

Line chart, by basis points, 2007 to 2011. Data are daily. There is a label in August 2011 representing the August FOMC. There are two series, 10-year high-yield and 10-year BBB. 10-year high-yield begins in 2007:Q1 at about 350 and generally increases to about 1680 by 2008:Q4 and then generally decreases to about 430 by early 2010:Q2 and generally increases to about 550 by mid-2010:Q2. It then generally decreases to about 350 by 2011:Q1 and then generally increases to about 620 by September 13, 2011. 10-year BBB begins in 2007:Q1 at about 140 and then generally increases to about 660 by 2008:Q4. It then generally decreases to about 160 by early 2010:Q2 and then generally increases to about 240 by late 2010:Q2. By 2011:Q2 it has generally decreased to about 170 and by September 13, 2011 it has generally increased to about 275.

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

Source: Merrill Lynch and staff estimates.

Figure: Average Bid Price for Syndicated Leveraged Loans

Line chart, percent of par, 2007 to 2011. Data are daily. There is a label in August 2011 representing the August FOMC. The series begins in 2007:Q1 at about 98 and generally decreases to about 60 by 2008:Q4. It then generally increases to about 97 by 2011:Q2 and then generally decreases to about 91 by September 13, 2011.

Source: LSTA/LPC Mark-to-Market Pricing.

Figure: Spreads on 30-Day Commercial Paper

Line chart, by basis points, 2009 to 2011. Data are 5-day moving average. There is a label in August 2011 representing the August FOMC. There are two series, A2/P2 and ABCP. A2/P2 begins in April 2009 at about 85 and generally decreases to about 7 by January 2010. It then generally increases to about 25 by July 2010. From July 2010 to April 2011 it fluctuates between about 13 and 25. By September 13, 2011 it generally increases to about 26. ABCP begins in April 2009 at about 35 and generally decreases to about 12 by May 2009. From May 2009 to December 2009 it fluctuates between about 7 and 25. It then generally decreases to about 5 by April 2010 and then generally increases to about 23 by June 2010. By October 2010 it has generally decreased to about 4 and by November 2010 it has generally increased to about 23. It then generally decreases to about 6 by July 2011 and then generally increases to about 22 by September 13, 2011.

Note: The ABCP spread is the AA ABCP rate minus the AA nonfinancial rate. The A2/P2 spread is the A2/P2 nonfinancial rate minus the AA nonfinancial rate. The September 13, 2011 values are the latest available single-day observation.

Source: Depository Trust & Clearing Corporation.

Business Finance

Figure: Selected Components of Net Debt Financing, Nonfinancial Firms

Bar chart, by billions of dollars, 2007 to 2011. Data are monthly rate. There is a horizontal line at zero. There are three series, Commercial paper, C&I loans and Bonds. Commercial paper and C&I loans are seasonally adjusted on a period-end basis, bonds are not. There is also a "Total" series presented as a line chart which sums the total of the other series. Approximate values are: 2007: Bonds 25, C&I 22, Commercial paper 0, Total 47. 2008: Bonds 17, C&I 6, Commercial paper 1, Total 24. 2009: Bonds 32, C&I -21, Commercial paper -9, Total 2. 2010:H1: Bonds 28, C&I -16, Commercial paper 5, Total 17. 2010:H2: Bonds 42, C&I 2, Commercial paper 0, Total 44. 2011:Q1: Bonds 32, C&I 8, Commercial paper 2, Total 42. 2011:Q2: Bonds 37, C&I 6, Commercial paper 4, Total 47. July 2011: Bonds 15, C&I 13, Commercial paper 13, Total 41. August 2011: Bonds 28, C&I 20, Commercial paper 3, Total 51.

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

Figure: Institutional Leveraged Loan Issuance

Bar chart, by billions of dollars, 2007 to 2011. Data are quarterly rate. The series begins in 2007 at about 105 and decreases to about 15 by 2009. It then increases to about 103 by 2011:Q1. By July 2011 it has decreased to about 52.

Note: The July 2011 value is an estimate.

Source: Reuters Loan Pricing Corporation.

Figure: Selected Components of Net Equity Issuance, Nonfinancial Firms

Bar chart, by billions of dollars, 2007 to 2011. Data are monthly rate. There is a horizontal line at zero. There are four series, Private issuance, Public issuance, Repurchases and Cash mergers. There is also a "Total" series presented as a line chart which sums the total of the other series. Approximate values are: 2007: Private issuance 20, Public issuance 5, Repurchases -46, Cash mergers -39, Total -60. 2008: Private issuance 22, Public issuance 4, Repurchases -31, Cash mergers -17, Total -22. 2009: Private issuance 15, Public issuance 6, Repurchases -12, Cash mergers -12, Total -3. 2010:H1: Private issuance 11, Public issuance 4, Repurchases -24, Cash mergers -11, Total -20. 2010:H2: Private issuance 10, Public issuance 5, Repurchases -26, Cash mergers -15, Total -26. 2011:Q1: Private issuance 11, Public issuance 6, Repurchases -28, Cash mergers -17, Total -28. 2011:Q2: Private issuance 12, Public issuance 7, Repurchases -29, Cash mergers -19, Total -29.

Note: The 2011:Q2 values are preliminary.

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

Figure: S&P 500 Earnings Per Share

Line chart, dollars per share, 2000 to 2011. Data are quarterly. The series begins in early 2000 at about 14 and generally increases to about 14.4 by mid-2000. It then generally decreases to about 10.3 by late 2001 and then generally increases to about 24 by mid-2007. By late 2007 it has generally decreased to about 16 and by early 2008 it has generally increased to about 19.5. It then generally decreases to about 5.6 by late 2008 and then generally increases to about 23.5 by 2011:Q2.

Note: 2011:Q2 value is preliminary. Data are seasonally adjusted by Board staff.

Source: Thomson Financial.

Figure: Bond Ratings Changes of Nonfinancial Firms

Bar chart, by percent of outstandings, 1990 to 2011. Data are annual rate. There is a horizontal line at zero. There are two series, Upgrades and Downgrades. Upgrades begins in 1990 at about 10 and increases to about 16 by 1991. It then decreases to about 8 by 1992 and then increases to about 10 by 1993. By 1994 it has decreased to about 7 and by 1995 it has increased to about 21. It then decreases to about 9 by 1997 and then increases to about 14 by 1998. By 2002 it has decreased to about 3 and by 2007 it has generally increased to about 10. It then decreases to about 4 by 2008 and then generally increases to about 12 by 2010:H1. By 2011:H2 it has decreased to about 11 and by 2010:Q2 it increases to about 13. It then decreases to about 7 by August 2011. Downgrades begins in 1990 at about 32 and increases to about 44 by 1992. It then decreases to about 8 by 1995 and generally increases to about 37 by 2002. By 2004 it has decreased to about 10 and by 2009 it has generally increased to about 20. It then decreases to about 5 by 2010:H1 and increases to about 7 by 2010:H2. By 2011:Q1 it has decreased to about 3 and by 2011:Q2 it has increased to about 6. It then decreases to about 1 by July 2011 and then increases to about 4 by August 2011.

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

Figure: CMBS Issuance

Bar chart, by billions of dollars, 2007 to 2011. Data are annual rate. The series begins in 2007 at about 230 and decreases to about 0 by 2009. It then increases to about 33 by 2011:Q1 and then decreases to about 30 by 2011:Q2.

Source: Commercial Mortgage Alert.

Household Finance

Figure: Mortgage Rate and MBS Yield

Line chart, by percent, 2007 to 2011. Data are weekly. There is a label in August 2011 representing 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:Q1 at about 6.3 and generally increases to about 6.75 by 2007:Q2. It then generally decreases to about 5.48 by 2008:Q1 and then generally increases to about 6.6 by 2008:Q3. By early 2009:Q2 it has generally decreased to about 4.75 and by late 2009:Q2 it has generally increased to about 5.6. It then generally decreases to about 4.1 by 2010:Q4 and then generally increases to about 5.05 by 2011:Q1. By September 7, 2011 it has generally decreased to about 4.05. MBS yield begins in 2007:Q1 at about 5.8 and generally increases to about 6.45 by 2007:Q2. It then generally decreases to about 4.7 by 2008:Q1 and then generally increases to about 6.1 by 2008:Q4. By 2009:Q1 it has generally decreased to about 3.6 and by 2009:Q2 it has generally increased to about 5.1. It then generally decreases to about 4.5 by 2009:Q4 and then generally increases to about 4.6 by 2010:Q2. By 2010:Q4 it has generally decreased to about 3.2 and by 2011:Q1 it has generally increases to about 3.1 by September 13, 2011.

Note: For mortgage-backed securities (MBS) yield, Fannie Mae 30-year current coupon rate.

Source: For mortgage rate, Freddie Mac; for MBS yield, Bloomberg.

Figure: Purchase and Refinance Activity

Line chart, by scale where March 16, 1990=100, 2002 to 2011. Data are weekly. There are two series, Purchase Index and Refinance Index. Purchase Index begins in 2002 at about 305 and generally increases to about 510 by 2005. It then generally decreases to about 340 by 2006 and then generally increases to about 460 by 2007. By September 9, 2011 it has generally decreased to about 160. Refinance Index begins in 2002 to about 1500 and generally increases to about 10,200 by 2003. It then generally decreases to about 1100 by 2006 and then generally increases to about 4100 by early 2008. By late 2008 it has generally decreased to about 1000 and by the end of 2008 it has generally increased to about 5200 by late 2010. By early 2011 it has generally decreased to about 1800 and by September 9, 2011 it has generally increased to about 3000.

Note: Seasonally adjusted by FRB staff. Source: Mortgage Bankers Association.

Figure: Prices of Existing Homes

Line chart, by index peaks normalized to 100, 2005 to 2011. Data are monthly. There are three series, FHFA, CoreLogic, and 20-city S&P/Case-Shiller. FHFA begins in 2005 at about 89 and generally increases to about 100 by 2007. It then generally decreases to about 81 by June 2011. CoreLogic begins in 2005 at about 86 and generally increases to about 100 by early 2006. It then generally decreases to about 70 by early 2009 and then generally increases to about 72.5 by early 2010. By July 2011 it has generally decreased to about 67.5. 20-city S&P/Case-Shiller begins in 2005 at about 86 and generally increases to about 100 by early 2006. It then generally decreases to about 98 by late 2006 and then generally increases to about 99 by early 2007. By 2009 it has generally decreased to about 68 and by mid-2010 it has generally increased to about 71. It then generally decreases to about 68 by June 2011.

Source: For FHFA, Federal Housing Finance Agency; for CoreLogic, CoreLogic; for S&P/Case-Shiller, Standard & Poor's.

Figure: Delinquencies on Prime Mortgages

Line chart, by percent of loans, 2003 to 2011. Data are monthly. There is one series, Transition rate, which begins in 2003 at about 1.03 and generally decreases to about 0.76 by 2006. It then generally increases to about 1.71 by 2008 and then generally decreases to about 1.09 by early 2011. By July 2011 it generally increases to about 1.28

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 2011. Data are 3-month moving average. There is a horizontal line at zero. There are two series, Nonrevolving and Revolving. Nonrevolving begins in early 2004 at about 5.8. From early 2004 to mid-2005 it fluctuates between about 3.7 and 9. It then generally decreases to about 2.2 by late 2005 and then generally increases to about 6.5 by 2007. By 2009 it has generally decreased to about -3 and by July 2011 it has generally increased to about 7. Revolving begins in early 2004 at about 2.5 and generally increases to about 9.5 by 2007. It then generally decreases to about -12.4 by early 2010 and then generally increases to about 1 by July 2011.

Source: Federal Reserve Board.

Figure: Gross Consumer ABS Issuance

Bar chart, by billions of dollars, 2006 to 2011. Data are monthly rate. There are three series, Auto, Credit card, and Student Ioan. Approximate values are: 2006: Auto 7.5, Credit card 5.5, Student Ioan 6.5. 2007: Auto 6, Credit card 8, Student Ioan 5.6. 2008:H1: Auto 5, Credit card 8.5, Student Ioan 4.5. 2008:H2: Auto 0.8, Credit card 1.7, Student Ioan 1. 2009:H1: Auto 6.3, Credit card 7.8, Student Ioan 2.4. 2009:H2: Auto 9.5, Credit card 6, Student Ioan, 2.5. 2010:H1: Auto 4.5, Credit card 0.8, Student Ioan 2.2. 2010:H2: Auto 4.0, Credit card 0.2, Student Ioan 2.3. 2011:Q1: Auto 4.1, Credit card 0.5, Student Ioan 1.7. 2011:Q2: Auto 4.0, Credit card 1.0, Student Ioan 2.2. July 2011: Auto 4.9, Credit card 0, Student Ioan 2.7. August 2011: Auto 1.1, Credit card 0, Student Ioan 1.2.

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

Commercial Banking and Money

Figure: Weighted-Average C&I Loan Rate Spread

Line chart, by basis points, 1997 to 2011. Data are quarterly. The series begins in 1997 at about 154 and generally increases to about 189 by 2002. It then generally decreases to about 136 by 2008 and then generally increases to about 240 by 2010. By 2011:Q3 it has generally decreased to about 225.

Note: The rate on C&I loans of less than \$25 million over a market interest rate on an instrument of comparable maturity, adjusted for changes in nonprice loan characteristics.

Source: Survey of Terms of Business Lending.

Figure: Return on Assets, by BHC Size

Line chart, by percent, 1997 to 2011. Data are quarterly, s.a.a.r. There is a horizontal line at zero. There are two series, Top 5 BHCs and All other BHCs. Top 5 BHCs begins in 1997 at about 1. From 1997 to late 2006 it fluctuates between about 0.7 and 1.6. It then generally decreases to about -1.7 by 2008 and then generally increases to about 0.6 by late 2010. By 2011:Q2 it decreases to about 0.1. All other BHCs begins in 1997 at about 1.2. From 1997 to mid-2006 it fluctuates between about 0.7 and 1.3. It then generally decreases to about -1.95 by late 2008 and then generally increases to about 0.7 by 2011:Q2.

Note: BHC is a bank holding company.

Source: Federal Reserve Board.

Figure: Provisions and Charge-Offs

Bar chart, by billions of dollars, 2005 to 2011. There are two series, Provisions for loan and lease losses and Net charge-offs. Provisions for loan and lease losses begins in 2005:Q1 at about 5 and generally increases to about 72 by 2008:Q4. It then generally decreases to about 19 by 2011:Q2. Net charge-offs begins in 2005:Q1 at about -5 and generally decreases to about -60 by 2009:Q4. It then increases to about -33 by 2011:Q2. There is also a line and dots placed on the chart. The line represents the allowance for loan and lease losses (ALLL). It begins in 2005:Q1 at about 70 and remains relatively stable here until 2007:Q1. It then generally increases to about 265 by 2010:Q1 and then decreases to about 202 by 2011:Q2. The dots represent provisions less charge-offs. They begin in 2005:Q1 at about 0 and generally increase to about 38 by 2008:Q4. They then generally decreases to about -12 by 2011:Q2.

Source: Federal Reserve Board.

Figure: Changes in Bank Credit

Line chart, by percent, 2005 to 2011. Data are 3-month change, a.r. There is a horizontal line at zero. There are two series, Total bank credit and C&I loans. Total bank credit begins in 2005:Q1 at about 10. From 2005:Q1 to 2008:Q1 it fluctuates between about 4 and 13. It then generally decreases to about -3 by 2008:Q2 and then generally increases to about 9.8 by 2008:Q4. By 2009:Q4 it has generally decreased to about -12 and by 2010:Q3 it has generally increased to about 1.5. It then generally decreases to about -2 by 2011:Q1 and then generally increases to about 3 by August 2011. C&I loans begins in 2005:Q1 at about 13 and generally increases to about 16 by 2005:Q2. It then generally decreases to about 9.8 by 2005:Q3 and then generally increases to about 20 by 2006:Q2. By 2006:Q4 it has generally decreased to about 4 and by 2007:Q4 it has generally increased to about 29.5. It then generally decreased to about 1 by 2008:Q2 and then generally increases to about 20 by 2008:Q4. By 2009:Q4 it has generally decreased to about -26 and by August 2011 it has generally increased to about 9.5.

Source: Federal Reserve Board.

Growth of M2 and Its Components

Percent, s.a.a.r.

	M2	Liquid deposits	Small time deposits	Retail MMMFs	Curr.
2010	3.2	10.9	-21.5	-15.6	5.9
2011:Q1	5.0	10.3	-22.0	-9.0	7.7
2011:Q2	6.4	10.1	-16.9	-4.6	12.3
July	26.6	38.2	-21.5	2.9	6.6
Aug.	29.8	38.9	-23.1	33.6	8.2

Note: Retail MMMFs are retail money market mutual funds.

Source: Federal Reserve Board.

Figure: Level of Liquid Deposits

Line chart, by trillion of dollars, 2008 to 2011. Data are weekly. There is a label in August 2011 representing the August FOMC. The series begins in early 2008 at about 4.5 and generally increases to about 7.07 by September 5, 2011.

Note: Seasonally adjusted.

Source: Federal Reserve Board.

[Box:] Balance Sheet Developments over the Intermeeting Period

Federal Reserve Balance Sheet Billions of dollars

	Change since last FOMC	Current (09/12/11)
Total assets	-9	2,866
Selected assets:		
Liquidity programs for financial firms	<u>-0</u>	+0
Primary, secondary, and seasonal credit	-0	+0
Foreign central bank liquidity swaps	0	0
Term Asset-Backed Securities Loan Facility (TALF)	-0	12
Net portfolio holdings of Maiden Lane LLCs	-3	50
Maiden Lane	-3	18
Maiden Lane II	-0	10
Maiden Lane III	-0	21
Securities held outright*	-0	2,654
U.S. Treasury securities	15	1,659
Agency debt securities	-3	110
Agency mortgage-backed securities	-12	885
Total liabilities	-9	2,814
Selected liabilities:		
Federal Reserve notes in circulation	7	999
Reverse repurchase agreements	22	99
Foreign official and international accounts	22	99
Others	0	0
Reserve balances of depository institutions**	-25	1,620
Term deposits held by depository institutions	-5	0
U.S. Treasury, General Account	-15	14
U.S. Treasury, Supplementary Financing Account	0	0
Other deposits	7	62
Total capital	+0	52

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

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

Last update: February 3, 2017

^{*} Par value. Return to table

^{**} Includes required clearing balances and overdrafts. Excludes as-of adjustments. Return to table

September 2011 Tealbook A Tables and Charts ‡

Risks and Uncertainty

Alternative Scenarios

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

	201	11				
Measure and scenario	H1	H2	2012	2013	2014	2015-16
Real GDP						
Extended Tealbook baseline	.8	2.2	2.6	3.4	3.9	3.9
Recession	.8	-2.8	-1.5	3.9	4.6	5.6
Faster snapback	.8	2.8	3.4	3.7	3.6	3.2
Greater supply-side damage	.8	1.9	2.0	2.6	2.8	3.2
with higher inflation expectations	.8	1.9	2.0	2.5	2.5	3.
Very severe financial stress in Europe	.8	.3	-1.2	2.2	4.6	4.8
Unemployment rate ¹						
Extended Tealbook baseline	9.1	9.1	8.7	8.1	7.3	5.9
Recession	9.1	9.6	11.6	11.4	10.2	7.
Faster snapback	9.1	9.0	8.2	7.3	6.5	5.9
Greater supply-side damage	9.1	9.0	8.5	8.0	7.6	6.9
with higher inflation expectations	9.1	9.0	8.5	8.1	7.8	7.3
Very severe financial stress in Europe	9.1	9.3	10.4	10.4	9.4	7.:
Total PCE prices						
Extended Tealbook baseline	3.6	1.7	1.2	1.3	1.4	1.0
Recession	3.6	1.7	.8	.2	2	.(
Faster snapback	3.6	1.7	1.2	1.4	1.7	2.0
Greater supply-side damage	3.6	1.8	1.4	1.6	1.7	1.8
with higher inflation expectations	3.6	1.8	2.0	2.6	2.6	2.
Very severe financial stress in Europe	3.6	1	8	.5	1.3	2.0
Core PCE prices						
Extended Tealbook baseline	1.9	1.9	1.5	1.3	1.4	1.5
Recession	1.9	1.9	1.1	.2	2	
Faster snapback	1.9	1.9	1.5	1.4	1.7	1.9
Greater supply-side damage	1.9	2.0	1.7	1.6	1.7	1.
with higher inflation expectations	1.9	2.0	2.3	2.6	2.6	2.4
Very severe financial stress in Europe	1.9	1.1	.1	.6	1.2	1.8
Federal funds rate ¹		'	'			'
Extended Tealbook baseline	.1	.1	.1	.1	.6	3.
Recession	.1	.1	.1	.1	.1	.(
Faster snapback	.1	.3	1.1	1.3	1.4	3.0
Greater supply-side damage	.1	.1	.1	.8	1.5	3.2
with higher inflation expectations	.1	.1	.5	2.0	2.6	3.9
Very severe financial stress in Europe	.1	.1	.1	.1	.1	2.6

^{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 2016. There is a horizontal line at zero. There are eight series, Extending Tealbook baseline, Recession, Faster snapback, Greater supply-side damage, with higher inflation expectations, Very severe financial stress in Europe, 70 percent interval and 90 percent interval. Extending Tealbook baseline begins in 2008:Q1 at about 2 and generally decreases to about -5.1 by 2009:Q2. It then generally increases to about 3.5 by 2010:Q3 and then generally decreases to about 1.5 by 2011:Q4. By 2015:Q2 it has generally increased to about 4.2 and by 2016:Q4 it has generally decreased to about 3.65. Recession begins in 2011:Q2 at about 1.6 and generally decreases to about -3.8 by 2012:Q3. It then generally increases to about 5.7 by 2016:Q4. Faster snapback begins in 2011:Q2 at about 1.6 and generally increases to about 3.9 by 2013:Q3. It then generally decreases to about 3.0 by 2016:Q4. Greater supply-side damage begins in 2011:Q2 at about 1.6 and generally decreases to about 1.3 by 2015:Q4 and then generally decreases to about 1.3 by 2016:Q4. With higher inflation expectations begins in 2011:Q2 at about 1.6 and generally decreases to about 3.1 by 2015:Q4 and then generally decreases to about 3.0 by 2016:Q4. Very severe financial stress in Europe begins in 2011:Q2 at about 1.6 and generally decreases to about -1.3 by 2012:Q3. It then generally increases to about 5.3 by 2015:Q4 and then generally decreases to about 4.5 by 2016:Q4. The other 2 series track each other closely throughout the chart with the 70 percent interval beginning in 2011:Q2 at about 0.1 percent both lesser and greater than the Extended Tealbook baseline and widening out to about 2.0 percent both lesser and greater than the Extended Tealbook baseline by 2016:Q4. The 90 percent interval begins in 2011:Q2 at about 0.2 percent both lesser and greater than the Extended Tealbook baseline by 2016:Q4.

Figure: Unemployment Rate

Line chart, by percent, 2008 to 2016. There are eight series, Extending Tealbook baseline, Recession, Faster snapback, Greater supply-side damage, with higher inflation expectations, Very severe financial stress in Europe, 70 percent interval and 90 percent interval. Extending Tealbook baseline begins in 2008:Q1 at about 4.9 and generally increases to about 10.1 by 2009:Q4. It then generally decreases to about 8.9 by 2011:Q1 and then generally increases to about 9.15 by 2012:Q1. It then generally decreases to about 6.0 by 2016:Q4. Recession begins in 2011:Q2 at about 9.1 and generally increases to about 11.6 by 2013:Q3. It then generally decreases to about 7.2 by 2016:Q4. Faster snapback begins in 2011:Q2 at about 9.1 and generally decreases to about 5.95 by 2016:Q34. Greater supply-side damage begins in 2011:Q2 at about 9.1 and generally decreases to about 7.3 by 2016:Q4. Very severe financial stress in Europe begins in 2011:Q2 at about 9.1 and generally increases to about 10.6 by 2013:Q3. It then generally decreases to about 7.35 by 2016:Q4. The other 2 series track each other closely throughout the chart with the 70 percent interval beginning in 2011:Q2 at about 0.1 percent both lesser and greater than the Extended Tealbook baseline and widening out to about 1.12 percent both lesser and greater than the Extended Tealbook baseline by 2016:Q4. The pother 2 series track each other 2 percent both lesser and greater than the Extended Tealbook baseline by 2016:Q4.

Figure: PCE Prices excluding Food and Energy

Line chart, by 4-quarter percent change, 2008 to 2016. There is a horizontal line at zero. There are eight series, Extending Tealbook baseline, Recession, Faster snapback, Greater supply-side damage, with higher inflation expectations, Very severe financial stress in Europe, 70 percent interval and 90 percent interval. Extending Tealbook baseline begins in 2008:Q1 at about 2.3 and generally increases to about 2.45 by 2008:Q2. It then generally decreases to about 1.35 by 2010:Q1. By 2010:Q1 it has generally decreased to about 0.9 and by 2012:Q1 it has generally increased to about 1.85. It then generally decreases to about 1.35 by 2011:Q1 and then generally increases to about 1.6 by 2016:Q4. Recession begins in 2011:Q2 at about 1.25 and generally increases to about 1.85 by 2011:Q4. It then generally decreases to about 1.85 by 2011:Q2 at about 1.25 and generally increases to about 1.97 by 2016:Q4. Greater supply-side damage begins in 2011:Q2 at about 1.25 and generally increases to about 1.65 by 2013:Q2 and then generally increases to about 1.75 by 2016:Q4. With higher inflation expectations begins in 2011:Q2 at about 1.25 and generally increases to about 2.6 by 2014:Q1. It then generally decreases to about 2.35 by 2016:Q4. Very severe financial stress in Europe begins in 2011:Q2 at about 1.25 and generally increases to about 1.55 by 2011:Q3. It then generally decreases to about 0.1 by 2012:Q4 and then generally increases to about 1.95 by 2016:Q4. The other 2 series track each other closely throughout the chart with the 70 percent interval beginning in 2011:Q2 at about 0.05 percent both lesser and greater than the Extended Tealbook baseline and widening out to about 1 percent both lesser and greater than the Extended Tealbook baseline by 2016:Q4. The 90 percent interval begins in 2011:Q2 at about 0.1 percent both lesser and greater than the Extended Tealbook baseline by 2016:Q4.

Figure: Federal Funds Rate

Line chart, by percent, 2008 to 2016. There are eight series, Extending Tealbook baseline, Recession, Faster snapback, Greater supply-side damage, with higher inflation expectations, Very severe financial stress in Europe, 70 percent interval and 90 percent interval. Extending Tealbook baseline begins in 2008:Q1 at about 3.2 and generally decreases to about 0.13 by 2010:Q1. It remains relatively stable here until 2014:Q1. It then generally increases to about 3.1 by 2016:Q4. Recession begins in 2011:Q2 at about 0.13 and remains stable here until 2016:Q2. It then generally increases to about 0.5 by 2016:Q4. Faster snapback begins in 2011:Q2 at about 0.13. It then generally increases to about 1.2 by 2014:Q3. By 2016:Q4 it has generally increased to about 2.95. Greater supply-side damage begins in 2011:Q2 at about 0.13 and remains stable here until 2013:Q1. It then generally increases to about 3.2 by 2016:Q4. With higher inflation expectations begins in 2011:Q2 at about 0.13 and remains stable here until 2012:Q1. It then generally increases to about 3.9 by 2016:Q4. Very severe financial stress in Europe begins in 2011:Q2 at about 0.13 and remains relatively stable here until 2015:Q2. It then generally increases to about 2.5 by 2016:Q4. The other 2 series track each other closely throughout the chart with the 70 percent interval beginning in 2014:Q1 at about 1.5 percent both lesser and greater than the

Extended Tealbook baseline and widening out to about 2 percent both lesser and greater than the Extended Tealbook baseline by 2016:Q4. The 90 percent interval begins in 2014:Q1 at about 1.6 percent both lesser and greater than the Extended Tealbook baseline and widens out to about 3 percent both lesser and greater than the Extended Tealbook baseline by 2016:Q4.

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

Measure	2011	2012	2013	2014	2015	2016
Real GDP (percent change, Q4 to Q4)						
Projection	1.5	2.6	3.4	3.9	4.2	3.6
Confidence interval						
Tealbook forecast errors	.7-2.4	.7-4.4	1.6-5.2			
FRB/US stochastic simulations	.7-2.3	1.0-4.3	1.4-5.2	1.6-5.5	2.0-6.2	1.5-6.0
Civilian unemployment rate (percent, Q4)						
Projection	9.1	8.7	8.1	7.3	6.6	5.9
Confidence interval						
Tealbook forecast errors	8.8-9.5	7.9-9.5	6.7-9.6			
FRB/US stochastic simulations	8.8-9.4	7.9-9.4	7.0-9.2	6.2-8.7	5.5-8.0	4.9-7.3
PCE prices, total (percent change, Q4 to Q4	4)					
Projection	2.6	1.2	1.3	1.4	1.5	1.6
Confidence interval						
Tealbook forecast errors	2.2-3.1	.1-2.3	.1-2.5			
FRB/US stochastic simulations	2.2-3.2	.2-2.3	.1-2.5	.1-2.7	.1-2.7	.3-2.9
PCE prices excluding food and energy (per	cent chan	ge, Q4 to	Q4)			
Projection	1.9	1.5	1.3	1.4	1.5	1.6
Confidence interval						
Tealbook forecast errors	1.6-2.2	.8-2.2	.3-2.4			
FRB/US stochastic simulations	1.6-2.1	.7-2.2	.4-2.2	.4-2.3	.5-2.4	.6-2.5
Federal funds rate (percent, Q4)						
Projection	.1	.1	.1	.6	2.1	3.1
Confidence interval						
FRB/US stochastic simulations	.12	.19	.1-1.9	.1-2.7	.3-4.2	1.1-5.2

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.

Tealbook Forecast Compared with Blue Chip

(Blue Chip survey released September 10, 2011)

Figure: Real GDP

Line chart, by percent change, annual rate, 2008 to 2012. There is a horizontal line at zero. There are two series, Blue Chip consensus and Staff forecast. Blue chip consensus begins in 2008:Q1 at about -1.9 and generally increases to about 1.5 by 2008:Q2. It then generally decreases to about -9.2 by 2008:Q4 and then generally increases to about 4 by 2010:Q1. By 2011:Q1 it has generally decreased to about 0.3 and by 2012:Q4 it has generally increased to about 2.8. Staff forecast begins in 2008:Q1 at about -1.9 and generally increases to about 1.5 by 2008:Q2. It then generally decreases to about -9.2 by 2008:Q4 and then generally increases to about 4 by 2010:Q1. By 2011:Q1 it has generally decreased to about 0.3 and by 2011:Q3 it has generally increased to about 2.5. It then generally decreases to about 2.0 by 2011:Q4 and then generally increases to about 3.0 by 2012:Q4. There is a shaded area that represents the area between the Blue Chip top 10 and bottom 10 averages. It begins in 2011:Q2 at about 0.1 percent both lesser and greater than the Blue Chip consensus by 2011:Q3 and remains generally stable here until 2012:Q4.

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

Figure: Real PCE

Line chart, by percent change, annual rate, 2008 to 2012. There are two series, Blue Chip consensus and Staff forecast. Blue chip consensus begins in 2008:Q1 at about -1.0 and generally increases to about 0 by 2008:Q2. It then generally decreases to about -5.2 by 2008:Q4 and then generally increases to about 0.3 by 2011:Q2 and then generally decreases to about 2.6 by 2012:Q4. Staff forecast begins in 2008:Q1 at about -1.0 and generally increases to about 0 by 2008:Q2. It then generally decreases to about 0 by 2008:Q2. It then generally decreases to about -5.2 by 2008:Q4 and then generally increases to about -5.2 by 2008:Q4 and then generally increases to about -5.2 by 2008:Q4 and then generally increases to about 3.5. It then generally decreases to about 0.3 and by 2010:Q4 it has generally increased to about 3.5. It then generally decreases to about 0.3 by 2011:Q2 and then generally increases to about 1.8 by 2011:Q3. By 2011:Q4 it has decreased to about 1.0 and by 2012:Q4 it has increased to about 2.8. There is a shaded area that represents the area between the Blue Chip top 10 and bottom 10 averages. It begins in 2011:Q2 at about 0.1 percent both lesser and greater than the Blue Chip consensus by 2011:Q4. It then narrows to about 0.8 percent both lesser and greater than the Blue Chip consensus by 2012:Q4.

Figure: Unemployment Rate

Line chart, by percent, 2008 to 2012. There are two series, Blue Chip consensus and Staff forecast. Blue chip consensus begins in 2008:Q1 at about 5 and generally increases to about 10 by 2009:Q4. It then generally decreases to about 9.6 by 2010:Q2 and remains constant here until 2010:Q4. By 2011:Q1 it has generally decreased to about 8.9 and by 2011:Q2 it has generally increased to about 9.05. It then generally decreases to about 8.7 by 2012:Q4. Staff forecast begins in 2008:Q1 at about 5 and generally increases to about 10 by 2009:Q4. It then generally decreases to about 9.6 by 2010:Q2 and remains constant here until 2010:Q4. By 2011:Q1 it has generally decreased to about 8.9 and by 2012:Q1 it has generally increased to about 9.05. It then generally decreases to about 8.7 by 2012:Q4. There is a shaded area that represents the area between the Blue Chip top 10 and bottom 10 averages. It begins in 2011:Q2 at about 0.1 percent both lesser and greater than the Blue Chip consensus and widens out to about 0.5 percent both lesser and greater than the Blue Chip consensus by 2012:Q4.

Figure: Consumer Price Index

Line chart, by percent change, annual rate, 2008 to 2012. There are two series, Blue Chip consensus and Staff forecast. Blue chip consensus begins in 2008:Q1 at about 4.4 and increases to about 6.5 by 2008:Q3. It then decreases to about -9.5 by 2008:Q4 and then increases to about 3.8 by 2009:Q3. By 2010:Q2 it has generally decreased to about -0.7 and by 2011:Q1 it has generally increased to about 5.2. It then generally decreases to about 2.0 by 2011:Q3 and remains relatively stable here until 2012:Q4. Staff forecast begins in 2008:Q1 at about 4.4 and increases to about 6.5 by 2008:Q3. It then decreases to about -9.5 by 2008:Q4 and then increases to about 3.8 by 2009:Q3. By 2010:Q2 it has generally decreased to about -0.7 and by 2011:Q1 it has generally increased to about 5.2. By 2012:Q1 it has generally decreased to about 0.5 and by 2012:Q4 it has generally increased to about 1.5. There is a shaded area that represents the area between the Blue Chip top 10 and bottom 10 averages. It begins in 2011:Q2 at about 0.1 percent both lesser and greater than the Blue Chip consensus and widens out to about 1.2 percent both lesser and greater than the Blue Chip consensus by 2012:Q4.

Figure: Treasury Bill Rate

Line chart, by percent, 2008 to 2012. There are two series, Blue Chip consensus and Staff forecast. Blue chip consensus begins in 2008:Q1 at about 2.02 and generally decreases to about 0.02 by 2009:Q4. It generally increases to about 0.1 by 2010:Q3 and then generally decreases to about 0.02 by 2011:Q2. By 2012:Q4 it has generally increased to about 0.3. Staff forecast begins in 2008:Q1 at about 2.02 and generally decreases to about 0.02 by 2009:Q4. It generally increases to about 0.1 by 2010:Q3 and then generally decreases to about 0.02 by 2011:Q2. By 2011:Q4 it has generally increased to about 0.1 and remains constant here until 2012:Q4. There is a shaded area that represents the area between the Blue Chip top 10 and bottom 10 averages. It begins in 2011:Q2 at about 0.05 percent both lesser and greater than the Blue Chip consensus and widens out to about 0.3 percent both lesser and greater than the Blue Chip consensus by 2012:Q4.

Figure: 10-Year Treasury Yield

Line chart, by percent, 2008 to 2012. There are two series, Blue Chip consensus and Staff forecast. Blue chip consensus begins in 2008:Q1 at about 3.65 and generally increases to about 3.9 by 2008:Q2. It then generally decreases to about 2.7 by 2009:Q1 and then generally increases to about 3.7 by 2010:Q1. By 2010:Q3 it has generally decreased to about 2.75 and by 2011:Q1 it has generally increased to about 3.5. It then generally decreases to about 2.5 by 2011:Q3 and then generally increases to about 3.1 by 2012:Q4. Staff forecast begins in 2008:Q1 at about 3.65 and generally increases to about 3.9 by 2008:Q2. It then generally decreases to about 2.7 by 2009:Q1 and then generally increases to about 2.75 and by 2011:Q1 it has generally increased to about 3.5. It then generally decreases to about 2.0 by 2011:Q4 and then generally increases to about 3.0 by 2012:Q4. There is a shaded area that represents the area between the Blue Chip top 10 and bottom 10 averages. It begins in 2011:Q2 at about 0.05 percent both lesser and greater than the Blue Chip consensus by 2012:Q4.

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.

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

Last update: February 3, 2017

September 2011 Tealbook A Tables and Charts

Greensheets

Changes in GDP, Prices, and Unemployment

(Percent, annual rate except as noted)

Interval	Nomin	al GDP	Real	GDP	PCE pri	ce index	Core PCE	orice index	Unemploy	ment rate ¹
intervai	08/03/11	09/14/11	08/03/11	09/14/11	08/03/11	09/14/11	08/03/11	09/14/11	08/03/11	09/14/11
Quarterly										
2011: Q1	3.1	3.1	.4	.4	3.9	3.9	1.6	1.6	8.9	8.9
Q2	3.9	3.8	1.4	1.2	3.1	3.2	2.1	2.2	9.1	9.1
Q3	5.1	5.3	2.9	2.5	1.5	2.2	1.9	2.1	9.2	9.1
Q4	3.6	3.9	2.4	2.0	1.1	1.2	1.7	1.7	9.2	9.1
2012: Q1	3.2	2.9	2.4	2.2	1.6	.9	1.6	1.6	9.1	9.1
Q2	5.9	4.5	2.9	2.3	1.5	1.3	1.5	1.5	8.9	9.0
Q3	4.6	4.0	3.2	2.7	1.4	1.3	1.4	1.4	8.7	8.9
Q4	4.6	4.2	3.4	3.0	1.4	1.3	1.4	1.4	8.5	8.7
2013: Q1		4.1		3.2		1.3		1.3		8.5
Q2		5.5		3.3		1.3		1.3		8.4
Q3		4.9		3.5		1.3		1.3		8.3
Q4		4.8		3.6		1.3		1.4		8.1
Two-quarte	er ²									
2011: Q2	3.5	3.5	.9	.8	3.5	3.6	1.8	1.9	5	5
Q4	4.4	4.6	2.7	2.2	1.3	1.7	1.8	1.9	.1	.0
2012: Q2	4.5	3.7	2.6	2.3	1.5	1.1	1.6	1.6	3	1
Q4	4.6	4.1	3.3	2.9	1.4	1.3	1.4	1.4	4	3
2013: Q2		4.8		3.2		1.3		1.3		3
Q4		4.9		3.5		1.3		1.3		3
Four-quart	er ³									
2010:Q4	4.7	4.7	3.1	3.1	1.3	1.3	1.0	1.0	4	4
2011:Q4	3.9	4.0	1.8	1.5	2.4	2.6	1.8	1.9	4	5
2012:Q4	4.5	3.9	3.0	2.6	1.5	1.2	1.5	1.5	7	4
2013:Q4		4.8		3.4		1.3		1.3		6
Annual										
2010	4.2	4.2	3.0	3.0	1.8	1.8	1.4	1.4	9.6	9.6
2011	4.0	4.0	1.9	1.7	2.3	2.4	1.4	1.5	9.1	9.0
2012	4.3	3.9	2.7	2.3	1.5	1.4	1.6	1.7	8.8	8.9
2013		4.6		3.1		1.3		1.4		8.3

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

Changes in Real Gross Domestic Product and Related Items

(Percent, annual rate except as noted)

 $^{2.\} Percent \ change \ from \ two \ quarters \ earlier; for \ unemployment \ rate, \ change \ is \ in \ percentage \ points. \ \underline{Return \ to \ table}$

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

li ana		20 ⁻	11			20	12			20	13		0044 1	2012 ¹	2042 1
Item	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2011 -	2012	2013
Real GDP	.4	1.2	2.5	2.0	2.2	2.3	2.7	3.0	3.2	3.3	3.5	3.6	1.5	2.6	3.4
Previous Tealbook	.4	1.4	2.9	2.4	2.4	2.9	3.2	3.4					1.8	3.0	
Final sales	.0	1.5	1.7	1.8	2.0	2.2	2.4	3.0	2.8	3.0	3.0	2.8	1.2	2.4	2.9
Previous Tealbook	.0	1.3	1.5	3.1	2.6	2.8	3.0	3.3					1.5	2.9	
Priv. dom. final purch.	2.0	1.7	2.1	1.2	1.8	2.2	2.7	3.2	3.2	3.5	3.7	3.8	1.7	2.5	3.5
Previous Tealbook	2.0	1.1	1.9	2.2	2.0	2.6	3.1	3.4					1.8	2.8	
Personal cons. expend.	2.1	.4	1.7	1.1	1.7	2.1	2.4	2.7	2.9	3.1	3.2	3.4	1.3	2.3	3.1
Previous Tealbook	2.1	.1	1.6	1.9	1.9	2.4	2.8	3.0					1.4	2.5	
Durables	11.7	-5.2	4.8	3.7	5.0	5.8	7.2	8.2	7.7	8.8	8.8	8.5	3.6	6.5	8.4
Nondurables	1.6	.4	3	.9	.9	1.3	1.4	1.6	1.8	2.0	2.2	2.5	.6	1.3	2.1
Services	.8	1.4	2.0	.7	1.5	1.8	2.0	2.3	2.5	2.5	2.6	2.8	1.2	1.9	2.6
Residential investment	-2.4	3.8	-1.3	8	3.8	7.2	8.7	9.1	8.8	9.7	9.7	10.3	2	7.2	9.6
Previous Tealbook	-2.4	3.5	3.1	.5	3.1	4.2	8.4	8.8					1.1	6.1	
Business fixed invest.	2.1	10.7	5.4	2.6	1.6	1.9	3.6	4.7	4.0	5.2	5.9	5.4	5.1	2.9	5.1
Previous Tealbook	2.1	8.1	4.0	4.5	2.6	3.0	4.3	5.0					4.7	3.7	
Equipment & software	8.7	6.7	6.0	4.2	4.0	3.9	6.1	7.1	5.5	6.7	7.7	7.0	6.4	5.3	6.7
Previous Tealbook	8.7	5.6	6.3	6.3	4.4	4.6	6.2	7.1					6.7	5.6	
Nonres. structures	-14.3	22.6	3.7	-1.6	-4.8	-3.6	-3.2	-1.8	1	.8	.9	1.0	1.7	-3.4	.6
Previous Tealbook	-14.3	15.2	-2.0	2	-2.2	-1.2	-1.0	-1.0					9	-1.3	
Net exports ²	-424	-416	-405	-384	-361	-344	-337	-322	-313	-304	-297	-293	-407	-341	-302
Previous Tealbook ²	-424	-406	-405	-366	-332	-307	-290	-271					-400	-300	
Exports	7.9	3.7	9.5	8.2	7.9	7.5	7.3	7.1	7.3	7.3	7.1	6.8	7.3	7.4	7.1
Imports	8.3	1.3	5.5	2.8	2.2	3.2	4.7	3.4	4.7	4.6	5.0	5.3	4.4	3.4	4.9
Gov't. cons. & invest.	-5.9	-1.0	-1.8	.8	8	5	4	3	3	8	-1.5	-2.2	-2.0	5	-1.2
Previous Tealbook	-5.9	8	3	.1	7	5	4	2					-1.8	5	
Federal	-9.4	1.9	7	3.7	7	6	8	8	-1.4	-2.9	-4.9	-6.8	-1.2	7	-4.0
Defense	-12.6	7.1	2.0	3.8	5	.2	.0	.1	8	-3.1	-6.0	-8.7	2	.0	-4.7
Nondefense	-2.7	-7.6	-6.2	3.6	-1.1	-2.2	-2.6	-2.6	-2.6	-2.7	-2.7	-2.7	-3.4	-2.2	-2.7
State & local	-3.4	-2.9	-2.6	-1.2	8	5	2	.0	.5	.7	.9	.9	-2.5	4	.8
Change in bus. inventories ²	49	45	69	75	79	83	92	93	105	114	132	158	59	87	127
Previous Tealbook ²	49	53	99	80	74	78	83	85					70	80	
Nonfarm ²	60	54	71	77	78	82	92	92	104	114	131	157	65	86	126
Farm ²	-8	-9	-2	-2	1	1	1	1	1	1	1	1	-5	1	1

 $^{{\}it 1. Change from fourth quarter of previous year to fourth quarter of year indicated.} \ \ \underline{\it Return\ to\ table}$

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)

	•						,		
ltem	2005	2006	2007	2008	2009	2010	2011	2012	2013
Real GDP	2.8	2.4	2.2	-3.3	5	3.1	1.5	2.6	3.4
Previous Tealbook	2.8	2.4	2.2	-3.3	5	3.1	1.8	3.0	
Final sales	2.7	2.8	2.4	-2.6	8	2.4	1.2	2.4	2.9
Previous Tealbook	2.7	2.8	2.4	-2.6	8	2.4	1.5	2.9	
Priv. dom. final purch.	3.2	2.4	1.2	-4.5	-2.5	3.6	1.7	2.5	3.5

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

Previous Tealbook	3.2	2.4	1.2	-4.5	-2.5	3.6	1.8	2.8	
Personal cons. expend.	2.8	3.2	1.7	-2.5	2	3.0	1.3	2.3	3.1
Previous Tealbook	2.8	3.2	1.7	-2.5	2	3.0	1.4	2.5	
Durables	2.8	7.0	4.6	-13.0	3.0	10.9	3.6	6.5	8.4
Nondurables	3.1	2.9	.8	-3.1	.6	3.5	.6	1.3	2.1
Services	2.7	2.6	1.4	5	9	1.6	1.2	1.9	2.6
Residential investment	5.3	-15.7	-20.7	-24.4	-12.9	-6.3	2	7.2	9.6
Previous Tealbook	5.3	-15.7	-20.7	-24.4	-12.9	-6.3	1.1	6.1	
Business fixed invest.	4.5	7.8	7.9	-9.4	-14.4	11.1	5.1	2.9	5.1
Previous Tealbook	4.5	7.8	7.9	-9.4	-14.4	11.1	4.7	3.7	
Equipment & software	6.2	6.0	3.9	-13.6	-5.8	16.6	6.4	5.3	6.7
Previous Tealbook	6.2	6.0	3.9	-13.6	-5.8	16.6	6.7	5.6	
Nonres. structures	1	13.0	17.3	-1.2	-29.3	-1.8	1.7	-3.4	.6
Previous Tealbook	1	13.0	17.3	-1.2	-29.3	-1.8	9	-1.3	
Net exports ¹	-723	-729	-649	-495	-359	-422	-407	-341	-302
Previous Tealbook ¹	-723	-729	-649	-495	-359	-422	-400	-300	
Exports	6.7	10.2	10.1	-2.5	1	8.8	7.3	7.4	7.1
Imports	5.2	4.1	.8	-5.9	-6.5	10.7	4.4	3.4	4.9
Gov't. cons. & invest.	.7	1.5	1.9	2.7	1.1	.1	-2.0	5	-1.2
Previous Tealbook	.7	1.5	1.9	2.7	1.1	.1	-1.8	5	
Federal	1.2	2.2	3.1	8.8	4.6	2.9	-1.2	7	-4.0
Defense	.4	4.4	2.6	9.8	3.5	1.5	2	.0	-4.7
Nondefense	2.6	-2.3	4.2	6.8	6.9	5.7	-3.4	-2.2	-2.7
State & local	.4	1.2	1.2	9	-1.1	-1.7	-2.5	4	.8
Change in bus. inventories ¹	50	59	28	-36	-145	59	59	87	127
Previous Tealbook ¹	50	59	28	-36	-145	59	70	80	
Nonfarm ¹	50	63	29	-38	-144	61	65	86	126
Farm ¹	0	-4	-1	1	-1	-1	-5	1	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		20	11			20	12			20	13		2011 1	2012 ¹	2012
item	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2011 -	2012	2013
Real GDP	.4	1.2	2.5	2.0	2.2	2.3	2.7	3.0	3.2	3.3	3.5	3.6	1.5	2.6	3.4
Previous Tealbook	.4	1.4	2.9	2.4	2.4	2.9	3.2	3.4					1.8	3.0	
Final sales	.0	1.5	1.7	1.8	2.0	2.2	2.4	3.0	2.8	3.0	2.9	2.8	1.2	2.4	2.9
Previous Tealbook	.0	1.3	1.5	3.0	2.6	2.8	3.0	3.3					1.5	2.9	
Priv. dom. final purch.	1.6	1.4	1.8	1.0	1.5	1.8	2.3	2.6	2.6	2.9	3.0	3.1	1.4	2.0	2.9
Previous Tealbook	1.6	.9	1.6	1.8	1.7	2.1	2.6	2.8					1.5	2.3	
Personal cons. expend.	1.5	.3	1.2	.8	1.2	1.5	1.7	1.9	2.0	2.2	2.2	2.4	.9	1.6	2.2
Previous Tealbook	1.5	.1	1.2	1.4	1.4	1.7	2.0	2.1					1.0	1.8	
Durables	.9	4	.4	.3	.4	.4	.5	.6	.6	.7	.7	.6	.3	.5	.6
Nondurables	.3	.1	1	.2	.2	.2	.2	.3	.3	.3	.3	.4	.1	.2	.3
Services	.4	.6	.9	.3	.7	.9	.9	1.1	1.2	1.2	1.2	1.3	.6	.9	1.2

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

lann -		20	11			201	2			201	13		2044 1	2012 ¹	2012
ltem	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2011 -	2012	2013
GDP chain-wt. price index	2.5	2.4	2.8	1.8	.7	2.1	1.2	1.2	.9	2.2	1.3	1.2	2.4	1.3	1.
Previous Tealbook	2.5	2.3	2.1	1.2	.7	2.9	1.3	1.2					2.0	1.5	
PCE chain-wt. price index	3.9	3.2	2.2	1.2	.9	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.6	1.2	1
Previous Tealbook	3.9	3.1	1.5	1.1	1.6	1.5	1.4	1.4					2.4	1.5	
Energy	40.7	15.0	2.2	-6.1	-9.5	-2.6	3	.3	.7	.6	.4	.5	11.6	-3.1	
Previous Tealbook	40.7	14.9	-5.2	-7.0	.8	1.9	1.8	1.3					9.3	1.4	
Food	6.5	6.4	3.3	2.2	1.4	1.3	1.4	1.4	1.4	1.4	1.3	1.4	4.6	1.4	1
Previous Tealbook	6.5	6.4	2.6	2.0	1.4	1.3	1.4	1.4					4.3	1.4	
Ex. food & energy	1.6	2.2	2.1	1.7	1.6	1.5	1.4	1.4	1.3	1.3	1.3	1.4	1.9	1.5	1
Previous Tealbook	1.6	2.1	1.9	1.7	1.6	1.5	1.4	1.4					1.8	1.5	
Ex. food & energy, market based	1.3	2.4	2.2	1.5	1.5	1.4	1.3	1.3	1.2	1.1	1.2	1.2	1.9	1.4	1
Previous Tealbook	1.3	2.4	2.2	1.5	1.5	1.4	1.3	1.3					1.9	1.4	
CPI	5.2	4.1	2.7	1.2	.6	1.2	1.4	1.4	1.4	1.4	1.3	1.4	3.3	1.2	1
Previous Tealbook	5.2	4.1	1.8	1.0	1.6	1.6	1.6	1.5					3.0	1.6	
Ex. food & energy	1.7	2.5	2.6	2.0	1.7	1.6	1.6	1.5	1.4	1.4	1.4	1.4	2.2	1.6	1
Previous Tealbook	1.7	2.5	2.6	1.8	1.7	1.6	1.6	1.6					2.2	1.6	
ECI, hourly compensation ²	2.1	3.2	2.3	2.1	2.4	2.4	2.5	2.5	2.3	2.3	2.3	2.4	2.5	2.4	2
Previous Tealbook ²	2.1	3.2	2.2	2.2	2.4	2.4	2.5	2.5					2.5	2.5	

Output per hour	6	3	3.0	1.0	.8	1.2	1.6	1.7	1.7	1.6	1.8	1.8	.8	1.3	1.8
Previous Tealbook	5	9	2.3	.9	1.1	1.6	2.0	2.1					.5	1.7	
Compensation per hour	5.6	2.7	1.4	1.7	2.4	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.8	2.3	2.2
Previous Tealbook	4.3	1.2	1.3	2.0	2.4	2.2	2.2	2.3					2.2	2.3	
Unit labor costs	6.2	3.0	-1.6	.8	1.6	1.0	.8	.6	.5	.6	.4	.4	2.1	1.0	.5
Previous Tealbook	4.9	2.1	-1.0	1.1	1.2	.6	.3	.2					1.7	.6	
Core goods imports chain-wt. price $\mathrm{index}^{\underline{3}}$	8.3	7.4	2.6	1.0	.9	1.4	1.6	1.6	1.6	1.5	1.4	1.4	4.8	1.4	1.5
Previous Tealbook ³	8.3	6.3	3.1	2.0	1.4	1.5	1.6	1.5					4.9	1.5	

- 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
GDP chain-wt. price index	3.5	2.9	2.6	2.1	.7	1.6	2.4	1.3	1.4
Previous Tealbook	3.5	2.9	2.6	2.1	.7	1.6	2.0	1.5	
PCE chain-wt. price index	3.2	1.9	3.5	1.7	1.5	1.3	2.6	1.2	1.3
Previous Tealbook	3.2	1.9	3.5	1.7	1.5	1.3	2.4	1.5	
Energy	21.5	-3.7	19.3	-8.8	2.6	6.2	11.6	-3.1	.6
Previous Tealbook	21.5	-3.7	19.3	-8.8	2.6	6.2	9.3	1.4	
Food	1.5	1.7	4.7	7.0	-1.7	1.3	4.6	1.4	1.4
Previous Tealbook	1.5	1.7	4.7	7.0	-1.7	1.3	4.3	1.4	
Ex. food & energy	2.3	2.3	2.4	2.0	1.7	1.0	1.9	1.5	1.3
Previous Tealbook	2.3	2.3	2.4	2.0	1.7	1.0	1.8	1.5	
Ex. food & energy, market based	2.0	2.2	2.1	2.2	1.7	.7	1.9	1.4	1.2
Previous Tealbook	2.0	2.2	2.1	2.2	1.7	.7	1.9	1.4	
CPI	3.7	2.0	4.0	1.6	1.5	1.2	3.3	1.2	1.4
Previous Tealbook	3.7	2.0	4.0	1.6	1.5	1.2	3.0	1.6	
Ex. food & energy	2.1	2.7	2.3	2.0	1.7	.6	2.2	1.6	1.4
Previous Tealbook	2.1	2.7	2.3	2.0	1.7	.6	2.2	1.6	
ECI, hourly compensation ¹	2.9	3.2	3.0	2.4	1.2	2.1	2.5	2.4	2.3
Previous Tealbook ¹	2.9	3.2	3.0	2.4	1.2	2.1	2.5	2.5	
Nonfarm business sector									
Output per hour	1.6	.8	2.5	-1.1	5.3	2.5	.8	1.3	1.8
Previous Tealbook	1.6	.8	2.5	-1.2	5.3	2.5	.5	1.7	
Compensation per hour	3.5	4.5	3.6	2.5	1.8	1.6	2.8	2.3	2.2
Previous Tealbook	3.5	4.5	3.6	2.2	2.0	1.7	2.2	2.3	
Unit labor costs	1.9	3.6	1.1	3.7	-3.3	9	2.1	1.0	.5
Previous Tealbook	1.9	3.6	1.1	3.4	-3.1	9	1.7	.6	
Core goods imports chain-wt. price index ²	2.2	2.5	2.9	3.7	-1.7	2.6	4.8	1.4	1.5
Previous Tealbook ²	2.2	2.5	2.9	3.7	-1.7	2.6	4.9	1.5	

^{1.} Private-industry workers. Return to table

Other Macroeconomic Indicators

 $^{2. \} Core \ goods \ imports \ exclude \ computers, \ semiconductors, \ oil, \ and \ natural \ gas. \ \ \underline{Return \ to \ table}$

lta		20	11			20	12			20 ⁻	13		2044 1	2012 ¹	2042 1
ltem	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2011 -	2012	2013 ¹
Employment and production															
Nonfarm payroll employment ²	.4	.5	.1	.2	.3	.4	.5	.5	.6	.7	.7	.7	1.2	1.7	2.7
Unemployment rate ³	8.9	9.1	9.1	9.1	9.1	9.0	8.9	8.7	8.5	8.4	8.3	8.1	9.1	8.7	8.1
Previous Tealbook ³	8.9	9.1	9.2	9.2	9.1	8.9	8.7	8.5					9.2	8.5	
NAIRU ³	6.0	6.0	6.0	6.0	6.0	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	-6.0	-6.2	-6.2	-6.2	-6.2	-6.1	-6.0	-5.8	-5.6	-5.3	-5.0	-4.7	-6.2	-5.8	-4.7
Previous Tealbook ⁴	-6.0	-6.2	-6.0	-5.9	-5.9	-5.7	-5.5	-5.2					-5.9	-5.2	
Industrial production ⁵	4.8	1.0	5.9	4.2	1.2	2.4	3.7	3.0	3.4	3.7	3.5	3.6	4.0	2.6	3.5
Previous Tealbook ⁵	4.8	.8	5.9	4.1	2.3	2.9	3.8	4.1					3.9	3.3	
Manufacturing industr. prod. ⁵	7.1	1.0	5.1	4.0	.6	2.6	4.5	3.6	3.7	4.1	3.9	3.9	4.3	2.8	3.9
Previous Tealbook ⁵	7.2	.2	4.9	4.7	2.7	3.4	4.2	4.8					4.2	3.8	
Capacity utilization rate - mfg.3	74.5	74.5	75.3	75.8	75.7	76.0	76.6	77.1	77.5	78.0	78.4	78.9	75.8	77.1	78.9
Previous Tealbook ³	74.5	74.4	75.1	75.8	76.1	76.5	77.1	77.7					75.8	77.7	
Housing starts ⁶	.6	.6	.6	.6	.7	.7	.8	.8	.9	.9	1.0	1.0	.6	.7	.9
Light motor vehicle sales ⁶	13.0	12.1	12.4	12.9	13.2	13.2	13.5	13.8	14.0	14.3	14.5	14.7	12.6	13.4	14.4
Income and saving															
Nominal GDP ⁵	3.1	3.8	5.3	3.9	2.9	4.5	4.0	4.2	4.1	5.5	4.9	4.8	4.0	3.9	4.8
Real disposable pers. income ⁵	1.2	.9	.4	3.2	1	3.4	3.8	3.7	2.4	2.9	3.0	3.1	1.4	2.7	2.9
Previous Tealbook ⁵	.7	.7	1.8	3.1	1	3.3	3.4	3.8					1.6	2.6	
Personal saving rate ³	5.0	5.2	5.0	5.4	5.0	5.3	5.5	5.7	5.6	5.6	5.5	5.5	5.4	5.7	5.5
Previous Tealbook ³	4.9	5.1	5.1	5.4	4.9	5.1	5.2	5.3					5.4	5.3	
Corporate profits [∑]	4.2	13.1	7.6	3.6	-6.8	2.7	-3.1	-1.4	2.7	12.7	8.6	6.9	7.1	-2.2	7.7
Profit share of GNP ³	12.4	12.7	12.8	12.8	12.4	12.4	12.2	12.0	12.0	12.2	12.3	12.4	12.8	12.0	12.4
Net federal saving ⁸	-1,201	-1,266	-1,196	-1,211	-1,024	-1,000	-986	-970	-897	-866	-839	-805	-1,218	-995	-852
Net state & local saving ⁸	-57	-48	-50	-66	-63	-51	-49	-45	-45	-34	-36	-36	-55	-52	-38
Gross national saving rate ³	12.6	12.7	13.0	13.2	13.4	13.7	13.8	13.8	13.9	14.2	14.4	14.6	13.2	13.8	14.6
Net national saving rate ³	1	.1	.5	.8	1.0	1.4	1.4	1.4	1.5	1.9	2.1	2.3	.8	1.4	2.3

- 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. $\,\underline{\text{Return to table}}$
- 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	.7	1.2	1.7	2.7
Unemployment rate ²	5.0	4.5	4.8	6.9	10.0	9.6	9.1	8.7	8.1
Previous Tealbook ²	5.0	4.5	4.8	6.9	10.0	9.6	9.2	8.5	
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	
GDP gap ³	.1	.0	1	-5.4	-6.9	-5.6	-6.2	-5.8	-4.7
Previous Tealbook ³	.1	.1	1	-5.4	-6.9	-5.6	-5.9	-5.2	
Industrial production ⁴	2.3	2.3	2.5	-9.1	-5.5	6.2	4.0	2.6	3.5
Previous Tealbook ⁴	2.3	2.3	2.5	-9.1	-5.5	6.2	3.9	3.3	
Manufacturing industr. prod.4	3.4	2.0	2.8	-11.8	-6.1	6.1	4.3	2.8	3.9
Previous Tealbook ⁴	3.4	2.0	2.8	-11.8	-6.1	6.1	4.2	3.8	
Capacity utilization rate - mfg. ²	78.5	78.4	79.0	70.1	67.7	73.3	75.8	77.1	78.9
Previous Tealbook ²	78.5	78.4	79.0	70.1	67.7	73.3	75.8	77.7	
Housing starts ⁵	2.1	1.8	1.4	.9	.6	.6	.6	.7	.9
Light motor vehicle sales ⁵	16.9	16.5	16.1	13.1	10.3	11.5	12.6	13.4	14.4
Income and saving									
Nominal GDP ⁴	6.4	5.3	4.9	-1.2	.0	4.7	4.0	3.9	4.8
Real disposable pers. income ⁴	.6	4.6	1.6	1.0	-2.4	3.5	1.4	2.7	2.9
Previous Tealbook ⁴	.6	4.6	1.6	1.0	-2.4	3.5	1.6	2.6	
Personal saving rate ²	1.6	2.8	2.5	6.2	4.3	5.2	5.4	5.7	5.5
Previous Tealbook ²	1.6	2.8	2.5	6.2	4.3	5.2	5.4	5.3	
Corporate profits ⁶	19.6	3.7	-8.1	-33.5	61.8	18.2	7.1	-2.2	7.7
Profit share of GNP ²	11.8	11.6	10.1	6.8	11.0	12.4	12.8	12.0	12.4
Net federal saving ⁷	-283	-204	-245	-613	-1218	-1274	-1218	-995	-852
Net state & local saving ⁷	26	51	12	-72	-78	-25	-55	-52	-38
Gross national saving rate ²	15.6	16.5	12.0	10.0	11.3	10.0	12.0	12.0	440
Net national saving rate ²	15.6	16.5	13.9	12.6		12.3	13.2	13.8	14.6
ivet national saving rate-	3.6	4.4	1.7	6	-1.9	4	.8	1.4	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. $\,\underline{\text{Return to table}}$
- $\textbf{6. Percent change, with inventory valuation and capital consumption adjustments.} \ \ \underline{\textbf{Return to table}}$
- 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)

(Billions of dollars except as noted)																
ltom		Fiscal	year			20	11			201	12			20	13	
ltem	2010 <u>a</u>	2011	2012	2013	Q1 ^a	Q2 ^a	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget									Not se	asonall	y adjust	ted				
Receipts ¹	2163	2320	2549	2768	488	714	586	553	551	788	656	637	574	848	709	665
Outlays ¹	3456	3616	3632	3633	949	855	911	922	960	896	854	939	932	895	867	950
Surplus/deficit ¹	-1293	-1296	-1083	-865	-460	-141	-325	-369	-409	-108	-198	-302	-358	-47	-157	-286

Previous Tealbook	-1293	-1306	-1138	-944	-460	-141	-336	-373	-425	-135	-206	-318	-378	-76	-172	-310
On-budget	-1370	-1349	-1120	-914	-451	-202	-306	-386	-398	-162	-175	-336	-344	-100	-135	-317
Off-budget	77	54	37	49	-10	61	-19	17	-11	54	-23	34	-15	53	-22	32
Means of financing																
Borrowing	1474	1128	1054	945	260	93	407	329	393	113	218	322	378	67	177	306
Cash decrease	-35	200	60	0	225	-19	27	19	26	15	0	0	0	0	0	0
Other ²	-146	-32	-30	-80	-24	67	-109	20	-10	-20	-20	-20	-20	-20	-20	-20
Cash operating balance, end of period	310	110	50	50	118	137	110	90	65	50	50	50	50	50	50	50
NIPA federal sector								Sea	asonally	adjuste	ed annu	al rates	6			
Receipts	2379	2537	2785	2999	2528	2563	2585	2614	2807	2843	2875	2909	2983	3031	3074	3117
Expenditures	3648	3774	3840	3892	3729	3829	3780	3824	3831	3843	3861	3879	3880	3896	3914	3922
Consumption expenditures	1042	1069	1100	1105	1059	1077	1079	1093	1100	1102	1104	1106	1110	1107	1099	1086
Defense	697	714	745	754	701	723	729	738	744	747	750	753	758	756	749	738
Nondefense	346	355	355	351	358	354	349	355	356	356	354	353	352	351	350	348
Other spending	2606	2706	2740	2787	2670	2752	2702	2732	2731	2741	2757	2773	2770	2790	2815	2836
Current account surplus	-1269	-1237	-1055	-893	-1201	-1266	-1196	-1211	-1024	-1000	-986	-970	-897	-866	-839	-805
Gross investment	165	164	163	162	161	160	161	163	163	163	163	164	163	162	159	154
Gross saving less gross investment $\underline{^3}$	-1305	-1266	-1074	-903	-1227	-1289	-1218	-1233	-1044	-1018	-1002	-985	-909	-874	-843	-802
Fiscal indicators ⁴																
High-employment (HEB) surplus/deficit	-938	-920	-700	-553	-893	-933	-862	-864	-666	-640	-628	-619	-550	-528	-514	-493
Change in HEB, percent of potential GDP	1.1	3	-1.6	-1.0	7	.2	5	.0	-1.2	2	1	1	4	2	1	1
Fiscal impetus (FI), percent of GDP	0.5	-0.1	-1.0	-0.8	-0.6	0.4	-0.1	0.1	-1.4	-0.9	-0.8	-0.7	-0.8	-0.6	-0.8	-0.8
Previous Tealbook	0.5	-0.1	-1.1	-0.6	-0.5	0.3	0.1	-0.2	-1.5	-1.0	-1.0	-0.8	-0.5	-0.5	-0.7	-0.8

- 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 NAIRU. 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		Rusinoss	State and local governments	Fodoral government	Momo: Nominal CDB
renou-	IOIAI	Total	Home mortgages	Consumer credit	Dusilless	State and local governments	rederal government	Mellio. Nollillai GDF
Year								
2006	9.0	10.0	11.1	4.1	10.6	8.3	3.9	5.3
2007	8.6	6.7	6.8	5.8	13.1	9.5	4.9	4.9
2008	6.0	.2	5	1.5	5.5	2.3	24.2	-1.2
2009	3.1	-1.6	-1.4	-4.4	-2.7	4.9	22.7	.0
2010	4.2	-2.0	-2.9	-1.8	.4	4.5	20.2	4.7
2011	3.8	5	-1.8	3.5	3.2	1	11.6	4.0
2012	4.6	1.4	2	6.1	3.5	3.8	10.0	3.9
2013	4.5	1.9	.1	7.3	4.3	3.6	8.1	4.8
Quarter								
2010: 1	3.5	-3.1	-4.9	-4.1	5	4.5	20.6	5.5

2	3.9	-2.1	-2.5	-3.1	-1.7	3	22.5	5.4
3	3.9	-2.1	-2.5	-1.9	1.4	4.8	16.0	3.9
4	5.1	8	-1.8	2.0	2.2	8.9	16.4	4.2
2011: 1	1.9	-2.0	-2.7	2.2	2.8	-4.2	7.9	3.1
2	3.0	6	-2.4	3.4	4.0	-3.2	8.6	3.8
3	5.1	.1	-1.2	3.7	3.2	1.6	14.9	5.3
4	4.9	.4	-1.0	4.4	2.7	5.7	13.2	3.9
2012: 1	4.8	.9	5	5.1	2.9	3.8	12.2	2.9
2	4.1	1.2	2	5.5	3.4	3.8	8.4	4.5
3	3.7	1.5	0	6.2	3.6	3.7	6.3	4.0
4	5.4	1.8	.1	6.9	4.0	3.6	11.7	4.2
2013: 1	5.2	1.8	.1	7.0	4.1	3.6	10.5	4.1
2	3.9	1.8	.1	7.0	4.1	3.6	6.1	5.5
3	3.5	1.9	.1	7.2	4.3	3.5	4.5	4.9
4	5.2	1.9	.1	7.2	4.3	3.5	10.2	4.8

Note: Quarterly data are at seasonally adjusted annual rates.

Flow of Funds Projections: Highlights

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

Cotonomi	2010	2011	2012	2042	20	11		20	12			20	13	
Category	2010	2011	2012	2013	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Domestic nonfinancial sectors														
Net funds raised														
Total	1173.2	942.3	1332.6	1425.7	1399.0	1399.8	1453.0	1188.0	998.8	1690.6	1702.4	1227.2	1029.1	1744.
Net equity issuance	-277.9	-420.5	-380.0	-340.0	-460.0	-420.0	-360.0	-360.0	-400.0	-400.0	-320.0	-320.0	-360.0	-360.
Net debt issuance	1451.1	1362.9	1712.6	1765.7	1859.0	1819.8	1813.0	1548.0	1398.8	2090.6	2022.4	1547.2	1389.1	2104
Borrowing indicators														
Debt (percent of GDP) ¹	243.4	243.3	243.8	243.8	241.7	242.4	243.7	243.7	243.6	243.9	244.6	244.0	243.4	243
Borrowing (percent of GDP)	10.0	9.0	10.9	10.8	12.2	11.9	11.7	9.9	8.9	13.1	12.6	9.5	8.4	12
Households														
Net borrowing ²	-275.5	-70.9	182.0	253.7	11.6	51.1	118.8	165.1	205.7	238.3	244.3	248.6	258.6	263
Home mortgages	-298.3	-183.4	-14.8	9.9	-119.1	-99.0	-49.4	-19.7	-0.0	9.9	9.9	9.9	9.9	9
Consumer credit	-44.2	84.8	152.7	194.7	92.0	110.3	127.5	141.1	160.5	181.8	186.8	190.1	199.1	202
Debt/DPI (percent)3	120.7	114.7	111.3	108.3	113.9	112.7	112.7	111.7	110.7	109.8	109.2	108.6	108.0	107
Business														
Financing gap ⁴	-197.3	-202.7	-107.7	15.5	-210.2	-227.7	-153.6	-141.1	-88.2	-47.9	10.9	-2.9	11.2	43
Net equity issuance	-277.9	-420.5	-380.0	-340.0	-460.0	-420.0	-360.0	-360.0	-400.0	-400.0	-320.0	-320.0	-360.0	-360
Credit market borrowing	39.6	346.5	391.2	492.2	356.3	296.1	325.9	381.0	404.1	453.8	472.8	483.8	502.7	509
State and local governments														
Net borrowing	106.9	-1.7	92.8	91.8	37.8	137.8	93.8	93.8	91.8	91.8	91.8	91.8	91.8	91
Current surplus ⁵	257.0	196.4	197.9	219.9	193.5	179.0	184.0	198.2	201.4	207.8	209.6	222.9	222.5	224
Federal government														
Net borrowing	1580.2	1089.0	1046.6	928.0	1453.3	1334.9	1274.5	908.1	697.2	1306.7	1213.4	723.0	536.0	1239
Net borrowing (n.s.a.)	1580.2	1089.0	1046.6	928.0	406.7	329.4	393.4	113.1	217.7	322.3	378.2	66.9	177.4	305
Unified deficit (n.s.a.)	1275.1	1295.5	1017.0	848.0	325.3	368.7	409.2	107.7	197.7	302.3	358.2	46.9	157.4	285

^{1.} Data after 2011:Q2 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

Depository institutions															
Funds supplied	-191.1	97.6	330.2	392.0	248.4	365.9	311.5	352.4	323.9	332.9	342.6	373.4	412.6	439.3	

Note: Data after 2011:Q2 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)

							Proje	cted				
Measure and country		20	11			20 ⁻	12			20	13	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Real GDP ¹												
Total foreign	4.1	2.2	3.5	3.0	3.1	3.1	3.2	3.2	3.4	3.4	3.4	3.
Previous Tealbook	4.2	2.2	3.7	3.4	3.3	3.3	3.4	3.4				
Advanced foreign economies	2.2	.1	2.3	1.8	1.8	1.8	1.9	2.0	2.1	2.2	2.2	2.
Canada	3.6	4	2.7	2.0	2.0	2.0	2.1	2.2	2.4	2.4	2.5	2.
Japan	-3.7	-2.1	4.7	3.3	2.8	2.3	2.1	1.9	1.7	1.6	1.5	1.
United Kingdom	1.9	.7	2.2	1.7	1.9	2.0	2.1	2.2	2.4	2.4	2.5	2.
Euro area	3.1	.6	.8	.7	.8	1.0	1.2	1.4	1.6	1.7	1.8	1.
Germany	5.5	.5	1.5	1.5	1.5	1.7	1.9	2.2	2.2	2.3	2.5	2.
Emerging market economies	6.2	4.4	4.8	4.4	4.5	4.5	4.7	4.6	4.7	4.8	4.8	4.
Asia	8.5	4.9	5.7	5.3	5.6	5.6	5.8	5.8	5.9	6.0	6.0	6.
Korea	5.4	3.6	3.7	3.7	3.7	3.8	3.9	3.9	4.1	4.2	4.3	4.
China	8.7	9.1	8.0	8.2	8.2	8.2	8.2	8.2	8.3	8.3	8.3	8.
Latin America	4.0	4.1	4.0	3.4	3.3	3.3	3.5	3.2	3.4	3.4	3.4	3.
Mexico	2.4	4.5	4.3	3.4	3.3	3.3	3.6	3.2	3.3	3.3	3.3	3.
Brazil	5.0	3.1	3.2	3.2	3.2	3.3	3.3	3.3	3.7	3.8	3.8	4.
Consumer prices ²												
Total foreign	4.3	3.2	2.9	2.2	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.
Previous Tealbook	4.3	3.2	2.5	2.2	2.4	2.3	2.4	2.4				
Advanced foreign economies	3.3	2.1	.8	1.3	1.3	1.2	1.3	1.4	1.3	1.4	1.5	1.
Canada	3.6	3.1	.3	1.8	2.0	1.8	1.9	1.8	1.9	1.9	1.9	1.
Japan	.4	8	.9	5	6	4	4	3	3	3	3	
United Kingdom	7.7	3.5	2.2	3.6	2.6	1.6	1.8	3.1	1.9	1.7	1.9	3.
Euro Area	3.7	2.7	.9	1.4	1.3	1.3	1.4	1.4	1.5	1.6	1.8	1.
Germany	3.7	2.2	1.1	1.4	1.5	1.6	1.6	1.6	1.7	1.7	1.8	1.
Emerging market economies	5.1	4.0	4.6	2.8	3.2	3.1	3.1	3.1	3.2	3.1	3.1	3.
Asia	5.4	4.7	5.0	2.4	2.9	2.8	2.8	2.8	2.8	2.8	2.8	2.
Korea	5.7	2.2	5.5	4.0	3.1	2.9	2.9	2.9	3.0	2.9	2.9	2.
China	4.6	5.8	5.9	1.8	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.
Latin America	4.3	2.5	3.9	3.8	4.0	3.9	3.9	3.9	3.9	3.9	3.9	3.
Mexico	3.6	1.8	3.7	3.5	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.
Brazil	9.5	7.5	5.1	5.2	5.7	5.3	4.9	4.9	5.3	5.1	4.9	4.

Foreign Real GDP and Consumer Prices: Selected Countries

(Percent change, Q4 to Q4)

Magazina and accepting	2005	2006	2007	2000	2000	2010	P	rojecte	d
Measure and country	2005	2006	2007	2008	2009	2010	2011	2012	2013
Real GDP ¹									
Total foreign	4.0	4.2	4.3	8	.7	4.3	3.2	3.2	3.4
Previous Tealbook	4.0	4.2	4.2	8	.7	4.3	3.4	3.4	
Advanced foreign economies	2.8	2.6	2.5	-1.7	-1.6	2.7	1.6	1.9	2.2
Canada	3.1	1.9	2.5	7	-1.4	3.3	2.0	2.1	2.4
Japan	2.9	2.1	1.8	-4.7	-1.8	2.5	.5	2.3	1.6
United Kingdom	2.4	2.7	2.4	-2.7	-2.8	1.5	1.6	2.0	2.5
Euro area	2.1	3.7	2.3	-2.1	-2.1	2.0	1.3	1.1	1.7
Germany	1.6	4.9	2.4	-1.9	-2.2	3.8	2.2	1.8	2.4
Emerging market economies	5.8	6.3	6.7	.4	3.4	6.1	5.0	4.6	4.8
Asia	7.6	7.8	8.8	.9	7.9	7.5	6.1	5.7	6.0
Korea	5.2	4.6	5.8	-3.2	6.3	4.7	4.1	3.8	4.3
China	10.3	12.8	13.7	7.7	11.4	9.6	8.5	8.2	8.3
Latin America	3.9	4.8	4.4	4	9	4.5	3.9	3.3	3.4
Mexico	3.6	4.1	3.5	-1.2	-2.3	4.2	3.6	3.3	3.3
Brazil	2.2	4.8	6.6	.8	5.0	5.0	3.6	3.3	3.8
Consumer prices ²									
Total foreign	2.3	2.2	3.7	3.3	1.3	3.2	3.1	2.3	2.4
Previous Tealbook	2.3	2.2	3.7	3.3	1.3	3.2	3.1	2.4	
Advanced foreign economies	1.6	1.4	2.2	2.0	.2	1.7	1.9	1.3	1.4
Canada	2.3	1.4	2.5	1.8	.8	2.2	2.2	1.9	1.9
Japan	7	.3	.5	1.0	-2.0	3	0	4	3
United Kingdom	2.1	2.7	2.1	3.9	2.1	3.4	4.2	2.3	2.1
Euro Area	2.3	1.8	2.9	2.3	.4	2.0	2.2	1.4	1.7
Germany	2.2	1.3	3.1	1.7	.3	1.6	2.1	1.6	1.7
Emerging market economies	3.0	2.9	5.1	4.6	2.1	4.4	4.1	3.2	3.1
Asia	2.5	2.4	5.5	3.6	1.3	4.3	4.4	2.9	2.8
Korea	2.5	2.1	3.4	4.5	2.4	3.6	4.4	2.9	2.9
China	1.4	2.1	6.7	2.5	.6	4.7	4.5	2.7	2.7
Latin America	3.8	4.2	4.2	6.7	3.9	4.4	3.6	3.9	3.9
Mexico	3.1	4.1	3.8	6.2	4.0	4.3	3.2	3.7	3.7
Brazil	6.1	3.2	4.3	6.2	4.2	5.4	6.8	5.2	5.1

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

U.S. Current Account

Quarterly Data

	Projected	
2011	2012	2013

^{2.} Foreign CPI aggregates calculated using shares of U.S. non-oil imports. $\,\underline{\text{Return to table}}$

	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
					Billio	ons of do	ollars, s.a	a.a.r.				
U.S. current account balance	-473.8	-476.6	-438.8	-401.5	-393.4	-346.9	-351.9	-355.2	-371.1	-340.1	-349.9	-363.2
Previous Tealbook	-477.1	-469.3	-448.7	-428.1	-431.4	-356.8	-354.6	-360.6				
Current account as percent of GDP	-3.2	-3.2	-2.9	-2.6	-2.5	-2.2	-2.2	-2.2	-2.3	-2.1	-2.1	-2.2
Previous Tealbook	-3.2	-3.1	-3.0	-2.8	-2.8	-2.3	-2.2	-2.2				
Net goods & services	-559.9	-580.0	-540.2	-497.9	-499.0	-450.8	-449.4	-442.0	-456.0	-414.3	-409.6	-414.3
Investment income, net	228.1	251.0	242.6	239.6	247.4	241.8	238.7	230.1	226.6	212.1	200.9	194.3
Direct, net	324.7	356.1	333.2	311.2	307.5	305.9	309.4	313.1	317.1	310.1	307.0	308.5
Portfolio, net	-96.6	-105.1	-90.6	-71.6	-60.1	-64.1	-70.6	-83.0	-90.5	-98.0	-106.2	-114.2
Other income and transfers, net	-142.0	-147.6	-141.2	-143.3	-141.8	-137.9	-141.2	-143.3	-141.8	-137.9	-141.2	-143.3

Annual Data

	2005	2000	2007	2000	2009	2212	Projected		
	2005	2006	2007	2008		2010	2011	2012	2013
				Bill	ions of doll	ars			
U.S. current account balance	-745.8	-800.6	-710.3	-677.1	-376.6	-470.9	-447.7	-361.8	-356.1
Previous Tealbook	-745.8	-800.6	-710.3	-677.1	-376.6	-470.9	-455.8	-375.9	
Current account as percent of GDP	-5.9	-6.0	-5.1	-4.7	-2.7	-3.2	-3.0	-2.3	-2.2
Previous Tealbook	-5.9	-6.0	-5.1	-4.7	-2.7	-3.2	-3.0	-2.4	
Net goods & services	-708.6	-753.3	-696.7	-698.3	-381.3	-500.0	-544.5	-460.3	-423.5
Investment income, net	78.7	54.7	111.1	157.8	137.1	174.5	240.3	239.5	208.5
Direct, net	173.2	174.0	244.6	284.3	262.2	280.6	331.3	309.0	310.7
Portfolio, net	-94.5	-119.4	-133.5	-126.5	-125.1	-106.2	-91.0	-69.4	-102.2
Other income and transfers, net	-115.9	-102.0	-124.7	-136.6	-132.3	-145.3	-143.5	-141.0	-141.0

Last update: February 3, 2017

September 2011 Tealbook B Tables and Charts[±]

Monetary Policy Strategies

Equilibrium Real Federal Funds Rate

Figure: Short-Run Estimates with Confidence Intervals

Line chart, 1990 to 2011. Unit is percent. There are five series, "The actual real funds rate based on lagged core inflation," "Range of four model-based estimates," "70 percent confidence interval," "90 percent confidence interval," and "Tealbook-consistent measure (FRB/US)." The actual real funds rate based on lagged core inflation begins at about 4.5 and generally decreases to about 0 in 1992:Q1. It generally increases to about 5 in 2000:Q4 then generally decreases to about -1 in 2004:Q2. It generally increases to about [1.5, 4] then generally decreases to about [-1, 0] in 1991:Q2. It generally increases ending at about [0.5, 4.5] in 2000:Q1 then fluctuates but generally decreases to about [-7, -2.5] 2009:Q2. It generally increases ending at about [-3.5, 0]. 70 percent confidence interval begins at a range of about [1, 4] and generally decreases to about [-1, 2.5] in 1991:Q2. It generally increases to about [-0.5, 4.5] in 2000:Q1 then fluctuates but generally decreases to about [-1, 2.5] in 1991:Q2. It generally increases to about [-2, 1.5] in 2003:Q2. It generally increases to about [-3] in 2006:Q2 then generally decreases to about [-7, -2] in 2009:Q2. It generally increases ending at about [-4, 0]. 90 percent confidence interval begins at about [0, 5.5] and generally decreases to about [-2.5, 3.5] in 1991:Q2. It generally increases to about [-2, 6] in 2000:Q2 then generally decreases to about [-3, 2] in 2003:Q2. It generally increases to about [-4, 6, 1] in 2009:Q2. It generally increases to about [-4, 5, 1] in 2009:Q2. It generally increases to about [-3, 1] in 2009:Q2. It generally increases to about [-4, 5, 1] in 2009:Q2. It generally increases to about [-5, 6] in 2009:Q2. It generally increases to about [-5, 6] in 2009:Q2. It generally increases to about [-5, 6] in 2009:Q2. It generally increases to about [-5, 6] in 2009:Q2. It generally increases to about [-5, 6] in 2009:Q2. It generally increases to about [-5, 6] in 2009:Q2. It generally increases to about [-5, 6] in 2009:Q2. It generally increases t

Short-Run and Medium-Run Measures

	Current Tealbook	Previous Tealbook				
Short-Run Measures						
Single-equation model	-2.4	-2.3				
Small structural model	-2.2	-2.1				
EDO model	-0.4	-0.2				
FRB/US model	-3.4	-2.7				
Confidence intervals for four mod	lel-based estimates					
70 percent confidence interval	-3.9 to -0.2					
90 percent confidence interval	-4.9 to 1.0					
Tealbook-consistent measures						
EDO model	-4.7	-3.3				
FRB/US model	-3.5	-2.9				
Medium-Run Measures						
Single-equation model	0.9	1.0				
Small structural model	0.7	0.8				
Confidence intervals for two mod	el-based estimates					
70 percent confidence interval	-0.1 to 1.7					
90 percent confidence interval	-0.7 to 2.4					
TIPS-based factor model	1.7	1.8				
Memo	Memo					
Actual real federal funds rate	-1.1	-1.1				

Note: Explanatory Note A provides background information regarding the construction of these measures and confidence intervals. The actual real federal funds rate shown is generated using lagged core inflation as a proxy for inflation expectations. For information regarding alternative measures, see Explanatory Note A.

Constrained vs. Unconstrained Monetary Policy (2 Percent Inflation Goal)

Figure: Nominal Federal Funds Rate

Line chart, 2011 to 2016. Unit is percent. There are three series, "Current Tealbook: Constrained," "Previous Tealbook: Constrained," "Current Tealbook: Unconstrained." Current Tealbook: Constrained begins at about 0 and remains about constant until 2015:Q3. It generally increases ending at about 2. Previous Tealbook: Constrained begins at about 0 and remains about constant until 2014:Q3. It generally increases ending at about 3.5. Current Tealbook: Unconstrained begins at about 0 and generally decreases to about -3.5 in 2013:Q1. It generally increases ending at about 3.

Figure: Real Federal Funds Rate

Line chart, 2011 to 2016. Unit is percent. There are three series, "Current Tealbook: Constrained," "Previous Tealbook: Constrained," "Current Tealbook: Unconstrained." Current Tealbook: Constrained begins at about -1 and generally decreases to about -2 in 2012:Q1. It remains about constant until 2015:Q4 then generally increases ending at about 0. Previous Tealbook: Constrained begins at about -1 and generally decreases to about -2 in 2012:Q1. It generally increases ending at about 1.5. Current Tealbook: Unconstrained begins at about -1 and generally decreases to about -5 in 2013:Q1. It generally increases ending at about 1.

Figure: Civilian Unemployment Rate

Line chart, 2011 to 2016. Unit is percent. There are three series, "Current Tealbook: Constrained," "Previous Tealbook: Constrained," "Current Tealbook: Unconstrained." Current Tealbook: Constrained begins at about 9 and generally decreases ending at about 5. Previous Tealbook: Constrained begins at about 9 and generally decreases to about 4.75 in 2016:Q1. It remains about constant to the end of the timeline. Current Tealbook: Unconstrained begins at about 9 and generally decreases to about 5 in 2015:Q1. It remains about constant to the end of the timeline.

Figure: PCE Inflation

Line chart, 2011 to 2016. Unit is percent. There are three series, "Current Tealbook: Constrained," "Previous Tealbook: Constrained," "Current Tealbook: Unconstrained." Current Tealbook: Constrained begins at about 1.75 and generally increases to about 2.75 in 2011:Q3. It generally decreases to about 2.25. Previous Tealbook: Constrained begins at about 1.75 and generally increases to about 2.6 in 2011:Q3. It generally decreases to about 1.8 in 2012:Q2 then generally increases ending at about 2.25. Current Tealbook: Unconstrained begins at about 1.75 and generally increases to about 2.75 in 2011:Q3. It generally decreases to about 1.6 in 2012:Q4 then generally increases to about 2.25 in 2014:Q3. It remains about constant to the end of the timeline.

Note: The optimal control simulations are derived from a loss function that uses headline inflation and the lower right panel displays the behavior of simulated headline inflation.

Policy Rules and Market-Based Expectations for the Federal Funds Rate

Figure: FRB/US Model Simulations of Estimated Outcome-Based Rule

Line chart, 2011 to 2016. Unit is percent. There are two series, "Current Tealbook" and "Previous Tealbook." Current Tealbook begins at about 0 and remains about constant until 2014:Q2. It generally increases ending at about 3. Previous Tealbook begins at about 0 and remains about constant until 2013:Q2. It generally increases ending at about 4. 70 percent confidence interval is presented as a dark shaded range that begins at about 0 and generally increases ending at about [1, 5.25]. 90 percent confidence interval is presented as a light shaded range that begins at about 0 and generally increases ending at about [0, 6.5].

Figure: Market-Based Expectations for the Federal Funds Rate

Line chart, 2011 to 2016. Unit is percent. There are two series, "Current Tealbook" and "Previous Tealbook." Current Tealbook begins at about 0 and remains about constant until 2012:Q3. It generally increases ending at about 2.25. Previous Tealbook begins at about 0 and generally increases ending at about 3. 70 percent confidence interval is presented as a dark shaded range that begins at about 0 in generally increases ending at about [.75, 3.75]. 90 percent confidence interval is presented as a light shaded range that begins at about 0 and generally increases ending at about [.25, 5.75].

Note: The staff baseline projection for the federal funds rate is derived from the outcome-based policy rule shown in the top-left panel. The top-right panel depicts the mean path and confidence intervals of future federal funds rates derived from market quotes as of September 14. In both panels, dark and light shadings represent the 70 and 90 percent confidence intervals respectively. Explanatory Note B provides further background information.

Near-Term Prescriptions of Simple Policy Rules

	Constrain	ed Policy	Unconstra	ined Policy
	2011Q4	2012Q1	2011Q4	2012Q1
Taylor (1993) rule	0.72	0.74	0.72	0.74
Previous Tealbook	0.76	0.81	0.76	0.81
Taylor (1999) rule	0.13	0.13	-2.37	-2.35
Previous Tealbook	0.13	0.13	-2.20	-2.12
Estimated outcome-based rule	0.13	0.13	-0.23	-0.57
Previous Tealbook Outlook	0.13	0.13	-0.15	-0.40

Estimated forecast-based rule	0.13	0.13	-0.30	-0.77
Previous Tealbook Outlook	0.13	0.13	-0.21	-0.53
First-difference rule	0.13	0.13	-0.07	-0.14
Previous Tealbook Outlook	0.13	0.25	0.12	0.25

Memo

	2011Q4	2012Q1
Staff assumption	0.13	0.13
Fed funds futures	0.07	0.07
Median expectation of primary dealers	0.13	0.13
Blue Chip forecast (September 1, 2011)	0.10	0.10

Note: In calculating the near-term prescriptions of these simple policy rules, policymakers' long-run inflation objective is assumed to be 2 percent. Explanatory Note B provides further background information. 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.

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

Last update: February 3, 2017

September 2011 Tealbook B Tables and Charts $^{\dot{\pm}}$

Monetary Policy Alternatives

Table 1: Overview of Alternatives for the Sept. 21 FOMC Statement

Key	August		September Alternative	es	
Components	Statement	A	В	С	
Economic Activity	/				
Economic Recovery	economic growth so far this year has been considerably slower than Committee had expected	economic growth remains quite slow	economic grov	vth remains quite slow	
Labor Market	indicators suggest deterioration in overall labor market conditions	indicators point to continuing weakness in overall labor market conditions, and unemployment rate remains elevated			
Temporary Factors Influencing Recovery	appear to account for only some of the recent weakness in economic activity	some recovery in sales of r supply-chain disruptions ea		sales of new motor vehicles recovering after auto manufacturers made progress in restoring supply chains and increased production	
Household Spending	has flattened out	has been increasing at only months	a modest pace in recent	increased at a modest pace in recent months	
Inflation					
Recent	Inflation picked up earlier in the year, mainly reflecting higher prices for some commodities and imported goods, as well as supply chain disruptions.	n.a.	n.a.	Inflation picked up earlier in the year, mainly reflecting higher prices for some commodities and imported goods, as well as supply chain disruptions.	
Developments	More recently, inflation has moderated as prices of energy and some commodities have declined from their earlier peaks.	Inflation has moderated since earlier in the year as prices of energy and some commodities have declined from their peaks.		More recently, inflation has moderated as prices of energy and some commodities have declined from their peaks.	
Longer-term expectations	Longer-term inflation expectations have remained stable	Longer-te	rm inflation expectations have	e remained stable	
Longer-run Goals		I			
Inflation	n.a.	The Committee judges that inflation of 2 percent as measured by the price index for personal consumption expenditures is most consistent, over the longer run, with the dual mandate.	n.a.	n.a.	
Employment	n.a.	Currently, the Committee projects that, in the absence of further shocks to the economy, the unemployment rate would converge over time to a level around [5 to 6] percent; this projection is subject to considerable uncertainty.	n.a.	n.a.	
Outlook			1	1	
	The Committee now expects a somewhat	Committee continues to expect some pickup in	Committee continues to expect some pickup in	Committee continues to expe	

Economic Activity	slower pace of recovery over coming quarters and anticipates that the unemployment rate will decline only gradually	pace of recovery over coming quarters but anticipates that the unemployment rate will decline only slowly	pace of recovery over coming quarters but anticipates that the unemployment rate will decline only gradually	some pickup in pace of recovery over coming quarters and anticipates that the unemployment rate will decline gradually		
Inflation	The Committee also anticipates that inflation will settle, over coming quarters, at or below levels consistent with the dual mandate as the effects of past energy and other commodity price increases dissipate further.	below levels consistent wit	The Committee also anticipates that inflation will settle, over coming quarters, at or below levels consistent with the dual mandate as the effects of past energy and other commodity price increases dissipate further.			
	the Committee will continue to pay close attention to the evolution of inflation and inflation expectations	the Committee will continu inflation expectations	e to pay close attention to the e	volution of inflation and		
Federal Funds Rate	e Target Range					
Intermeeting Period	0 to 1/4 percent		0 to 1/4 percent			
Forward Guidance	Committee currently anticipates that economic conditions-including low rates of resource utilization and a subdued outlook for inflation over the medium-termare likely to warrant exceptionally low levels for the federal funds rate at least through mid-2013	Committee anticipates that this exceptionally low range for the federal funds rate will be appropriate at least as long as unemployment exceeds [7] percent, inflation is projected to remain at or below [2½] percent in the medium term, and longer-term inflation expectations continue to be well anchored at mandate consistent levels. On the basis of currently available information, the Committee expects these conditions to prevail [at least through 2014].	conditionsincluding low rates of resource utilization and a subdued outlook for inflation over the medium-termare likely to warrant exceptionally low levels for the federal funds rate at least through mid-2013			
SOMA Portfolio Po	licy					
Asset purchases/holdings	n.a.	The Committee decided to expand its holdings of longer-term Treasury securities by [by a further \$1 trillion] at a pace of \$80 to \$85 billion over the next [12] months.	The Committee intends to purchase, over 9 months, \$400 billion of Treasury securities with maturities of 6 to 30 years and to sell an equal amount with maturities of 3 years or less. OR The Committee is initiating purchases of Treasury securities with remaining maturities of 6 years to 30 years at a pace of about \$45 billion per month and will sell Treasury securities with remaining maturities of 3 years or less at the same pace; the Committee anticipates continuing this maturity-extension program for up to 9 months.	n.a.		
Reinvestment Policy	maintain existing reinvestment policy	maintain existing policy of rolling over maturing Treasury securities at auction; reinvest MBS principal in longer-term Treasury securities	maintain existing policy of rolling over maturing Treasury securities at auction; reinvest MBS principal in Treasury securities with remaining	maintain existing reinvestment policy		

			maturities of 6 to 30 years			
Future Policy Action						
Asset Purchases / Holdings	will regularly review size and composition of securities holdings and is prepared to adjust as appropriate	will regularly review the pace of its securities purchases and the overall size of the purchase program in light of incoming information and will adjust the program as needed to best foster maximum employment and price stability	will regularly review the pace of its securities transactions and the overall size of the maturity extension program in light incoming information and will adjust the program needed to best foster maximum employment and stability	n.a.		
Overall	will continue to assess the economic outlook in light of incoming information and is prepared to employ these tools as appropriate	will continue to assess the economic outlook in light of incoming information and is prepared to employ its policy tools as appropriate	will continue to assess the economic outlook in light of incoming information and is prepared to employ its policy tools as appropriate	will regularly assess the implications of incoming information for the economic outlook and will employ its policy tools as necessary to foster maximum employment and price stability		

[Note: In the September 2011 FOMC Statement Alternatives, strong emphasis (bold) indicates bold red underlined text in the original document.]

September 2011 FOMC Statement--Alternative A

- 1. Information received since the Federal Open Market Committee met in **August** indicates that economic growth **remains quite slow**. **Recent** indicators **point to continuing weakness** in overall labor market conditions, and the unemployment rate **remains elevated**. Household spending has **been increasing at only a modest pace in recent months despite some recovery in sales of motor vehicles as supply-chain disruptions eased**. Investment in nonresidential structures is still weak, and the housing sector remains depressed. However, business investment in equipment and software continues to expand. Inflation has moderated **since earlier in the year** as prices of energy and some commodities have declined from their peaks. 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 judges that inflation of 2 percent as measured by the price index for personal consumption expenditures is most consistent, over the longer run, with the dual mandate. Whereas monetary policy can determine the longer-run inflation rate, monetary policy does not determine the longer-run equilibrium rate of unemployment, which depends on structural economic factors that may vary over time. Currently, the Committee projects that, in the absence of further shocks to the economy, the unemployment rate would converge over time to a level around [5 to 6] percent; this projection is subject to considerable uncertainty.
- 3. The Committee continues to expect some pickup in the pace of recovery over coming quarters but anticipates that the unemployment rate will decline only slowly toward its longer-run equilibrium level. Moreover, there are significant downside risks to the economic outlook, including strains in global financial markets. The Committee also anticipates that inflation will settle, over coming quarters, at levels at or below those consistent with the Committee's dual mandate as the effects of past energy and other commodity price increases dissipate further. However, the Committee will continue to pay close attention to the evolution of inflation and inflation expectations.
- 4. To promote a stronger economic recovery and to help ensure that inflation, over time, is consistent with the dual mandate, the Committee decided today to keep the target range for the federal funds rate at 0 to ½ percent. The Committee anticipates that this exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate exceeds [7] percent, inflation is projected to remain at or below [2½] percent in the medium term, and longer-term inflation expectations continue to be well anchored at mandate-consistent levels. On the basis of currently available information, the Committee expects these conditions to prevail [at least through 2014].
- 5. In addition, the Committee decided to expand its holdings of longer-term Treasury securities [by a further \$1 trillion] at a pace of \$80 to \$85 billion per month over the next [12] months. This program should put downward pressure on longer-term interest rates and help make broader financial conditions more accommodative. The Committee will regularly review the pace of its securities purchases and the overall size of the purchase program in light of incoming information and will adjust the program as needed to best foster maximum employment and price stability. The Committee will maintain its existing policy of rolling over maturing Treasury securities at auction and will reinvest principal payments from its holdings of agency securities in longer-term Treasury securities.
- 6. The Committee will continue to assess the economic outlook in light of incoming information and is prepared to employ **its** policy tools as appropriate to promote a stronger economic recovery in a context of price stability.

September 2011 FOMC Statement--Alternative B

- 1. Information received since the Federal Open Market Committee met in **August** indicates that economic growth **remains slow**. **Recent** indicators **point to continuing weakness** in overall labor market conditions, and the unemployment rate **remains elevated**. Household spending has **been increasing at only a modest pace in recent months despite some recovery in sales of motor vehicles as supply-chain disruptions eased**. Investment in nonresidential structures is still weak, and the housing sector remains depressed. However, business investment in equipment and software continues to expand. Inflation has moderated **since earlier in the year** as prices of energy and some commodities have declined from their peaks. 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 continues to expect some pickup in the pace of recovery over coming quarters but anticipates that the unemployment rate will decline only gradually toward levels that the Committee judges to be consistent with its dual mandate. Moreover, there are significant downside risks to the economic outlook, including strains in global financial markets. The Committee also anticipates that inflation will settle, over coming quarters, at levels at or below those consistent with the Committee's dual mandate as the effects of past energy and other commodity price increases dissipate further. However, the Committee will continue to pay close attention to the evolution of inflation and inflation expectations.

3. To support a stronger economic recovery and to help ensure that inflation, over time, is at levels consistent with the dual mandate, the Committee decided today to extend the average maturity of its holdings of securities. The Committee intends to purchase, over the next 9 months, \$400 billion of Treasury securities with remaining maturities of 6 years to 30 years and to sell an equal amount of Treasury securities with remaining maturities of 3 years or less. This program should put downward pressure on longer-term interest rates and help make broader financial conditions more accommodative. The Committee will regularly review the pace of its securities transactions and the overall size of the maturity extension program in light of incoming information and will adjust the program as needed to best foster maximum employment and price stability. The Committee will maintain its existing policy of rolling over maturing Treasury securities at auction and will reinvest principal payments from its holdings of agency securities in Treasury securities with remaining maturities of 6 years to 30 years.

OR

- 3'. To support a stronger economic recovery and to help ensure that inflation, over time, is at levels consistent with the dual mandate, the Committee decided today to extend the average maturity of its holdings of securities. The Committee is initiating purchases of Treasury securities with remaining maturities of 6 years to 30 years at a pace of about \$45 billion per month and will sell Treasury securities with remaining maturities of 3 years or less at the same pace; the Committee anticipates continuing this maturity-extension program for up to 9 months. This program should put downward pressure on longer-term interest rates and help make broader financial conditions more accommodative. The Committee will regularly review the pace of its securities transactions and the overall size of the maturity extension program in light of incoming information and will adjust the program as needed to best foster maximum employment and price stability. The Committee will maintain its existing policy of rolling over maturing Treasury securities at auction and will reinvest principal payments from its holdings of agency securities in Treasury securities with remaining maturities of 6 years to 30 years.
- 4. The Committee also decided to keep the target range for the federal funds rate at 0 to \(\frac{1}{2} \) 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 mid-2013.
- 5. The Committee [discussed the range of policy tools available to promote a stronger economic recovery in a context of price stability. It] will continue to assess the economic outlook in light of incoming information and is prepared to employ its tools as appropriate.

Note: If policymakers decide 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 10 basis points effective with the reserve maintenance period that begins on October 6, 2011.

September 2011 FOMC Statement--Alternative C

- 1. Information received since the Federal Open Market Committee met in August indicates that economic growth remains slow. Recent indicators point to continuing weakness in overall labor market conditions, and the unemployment rate remains elevated. Household spending has increased at a modest pace in recent months, with sales of new motor vehicles recovering after auto manufacturers made progress in restoring their supply chains and increased production. Investment in nonresidential structures is still weak, and the housing sector remains depressed. However, business investment in equipment and software continues to expand. Inflation picked up earlier in the year, mainly reflecting higher prices for some commodities and imported goods, as well as the supply chain disruptions. More recently, inflation has moderated as prices of energy and some commodities have declined from their peaks. Longer-term inflation expectations have remained stable.
- 2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. Though downside risks to the economic outlook remain, the Committee continues to expect some pickup in the pace of recovery over coming quarters and anticipates that the unemployment rate will decline gradually toward levels that the Committee judges to be consistent with its dual mandate. The Committee also anticipates that inflation will settle, over coming quarters, at levels at or below those consistent with the Committee's dual mandate as the effects of past energy and other commodity price increases dissipate further. However, the Committee will continue to pay close attention to the evolution of inflation and inflation expectations.
- 3. To promote the ongoing economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate, the Committee decided today to keep the target range for the federal funds rate at 0 to 1/4 percent. The Committee 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 mid-2013. The Committee also will maintain its existing policy of reinvesting principal payments from its securities holdings. The Committee will regularly assess the implications of incoming information for the economic outlook and will employ its policy tools as necessary to foster maximum employment and price stability.

Long-Run Projections of the Balance Sheet and Monetary Base

Figure: Total Assets

Line chart, 2006 to 2020. Unit is billions of dollars. Data are monthly. There are four series, "Alt A," "Alt B," "Alt C," and "August Alt B." The series begin at about 750 and generally increase together to about 2250 in early 2009. They generally decrease together to about 2000 in early 2009 then generally increase together to about 2900 in early 2011. Alt A generally increases to about 4000 then generally decreases to about 1600 in early 2018. It generally increases ending at about 2000. Alt B remains about constant until early 2014 then generally decreases to about 1600 in early 2018. It generally increases ending at about 2000. Alt C remains about constant until early 2014 then generally decreases to about 1500 in early 2017. It generally increases ending at about 2000. August Alt B remains about constant until early 2013 then generally decreases to about 1500 in mid-2016. It generally increases ending at about 2000.

Growth Rates for the Monetary Base

				Tealbook			
	Percent, annual rate						
	Monthly						
Aug-10	-2.4	-2.4	-2.4	-2.4			
Sep-10	-10.2	-10.2	-10.2	-10.2			
Oct-10	-9.8	-9.8	-9.8	-9.8			
Nov-10	3.2	3.2	3.2	3.2			
Dec-10	16.8	16.8	16.8	16.8			
Jan-11	23.3	23.3	23.3	23.3			
Feb-11	57.6	57.6	57.6	57.6			
Mar-11	97.8	97.8	97.8	97.8			
Apr-11	74.4	74.4	74.4	74.4			
May-11	42.1	42.1	42.1	42.1			
Jun-11	35.9	35.9	35.9	35.9			
Jul-11	27.0	27.0	27.0	26.9			
Aug-11	3.6	3.6	3.6	16.2			
Sep-11	-10.3	-9.9	-10.2	-0.5			
Oct-11	2.2	23.4	1.0	-2.9			
Nov-11	15.2	55.3	12.1	10.2			
Dec-11	4.5	42.2	0.7	-1.0			
		Quarterly					
2010 Q3	-6.4	-6.4	-6.4	-6.4			
2010 Q4	-3.2	-3.2	-3.2	-3.2			
2011 Q1	36.8	36.8	36.8	36.8			
2011 Q2	69.4	69.4	69.4	69.4			
2011 Q3	21.4	21.5	21.5	25.5			
2011 Q4	2.7	23.4	1.2	2.9			
2012 Q1	12.5	49.4	8.6	6.6			
2012 Q2	7.7	39.1	4.2	3.9			
	А	nnual - Q4 to Q	4				
2009	52.5	52.5	52.5	52.5			
2010	0.9	0.9	0.9	0.9			
2011	35.9	42.9	35.4	37.3			
2012	5.0	37.0	2.6	2.3			
2013	-1.2	-1.2	-1.2	-12.5			
2014	-4.9	-8.3	-9.4	-15.4			
2015	-9.3	-13.2	-15.0	-22.1			

Note: Not seasonally adjusted.

M2 Growth Rates

(percent, seasonally adjusted annual rate)

	Tealbook Forecast *
Monthly Growth Rates	
Jan-11	3.3
Feb-11	8.4
Mar-11	3.8
Apr-11	4.8
May-11	7.5
Jun-11	12.2
Jul-11	26.6

	T.
Aug-11	29.8
Sep-11	3.9
Oct-11	-2.1
Nov-11	-2.2
Dec-11	-2.1
Quarterly Growth Rat	res
2011 Q1	5.0
2011 Q2	6.4
2011 Q3	19.8
2011 Q4	2.7
Annual Growth Rates	3
2010	3.2
2011	8.7
2012	1.9
2013	3.2

^{*} This forecast is consistent with nominal GDP and interest rates in the Tealbook forecast. Actual data through August 2011; projections thereafter. Return to table

[Note: In the September 2011 FOMC Directive Alternatives, strong emphasis (bold) indicates bold red underlined text in the original document.]

September 2011 FOMC 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 purchase, by the end of September 2012, longer-term Treasury securities with a total face value of \$1 trillion in order to increase the total face value of domestic securities in the System Open Market Account to approximately \$3.6 trillion. The Committee also directs the Desk to maintain its existing policy of rolling over maturing Treasury securities into new issues and to reinvest principal payments on all agency securities in the System Open Market Account in longer-term Treasury securities. 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 2011 FOMC 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 purchase, by the end of June 2012, Treasury securities with remaining maturities of approximately 6 years to 30 years with a total face value of \$400 billion, and to sell Treasury securities with remaining maturities of 3 years or less with a total face value of \$400 billion. The Committee also directs the Desk to maintain its existing policy of rolling over maturing Treasury securities into new issues and to reinvest principal payments on all agency securities in the System Open Market Account in Treasury securities with remaining maturities of approximately 6 years to 30 years in order to maintain the total face value of domestic securities at approximately \$2.6 trillion. 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.

OR

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 purchase approximately \$45 billion (face value) per month of Treasury securities with remaining maturities of approximately 6 years to 30 years, and to sell approximately the same amount of Treasury securities with remaining maturities of 3 years or less. The Committee also directs the Desk to maintain its existing policy of rolling over maturing Treasury securities into new issues and to reinvest principal payments on all agency securities in the System Open Market Account in Treasury securities with remaining maturities of approximately 6 years to 30 years in order to maintain the total face value of domestic securities at approximately \$2.6 trillion. 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 2011 FOMC 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 also directs the Desk to maintain its existing policy of reinvesting principal payments on all domestic securities in the System Open Market Account in Treasury securities in order to maintain the total face value of domestic securities at approximately \$2.6 trillion. 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

† Note: Data values for figures are rounded and may not sum to totals. Return to text	ı	Last update: February 3, 2017
	•	† Note: Data values for figures are rounded and may not sum to totals. Return to text
IIIAXIIIUIII EIIDIOVIIIEII AIIU DIICE SIADIIIIV.	•	maximum employment and price stability.

September 2011 Tealbook B Tables and Charts

Explanatory Notes

A. Measures of the Equilibrium Real Rate

Measure	Description
Single- equation Model	The measure of the equilibrium real rate in the single-equation model is based on an estimated aggregate-demand relationship between the current value of the output gap and its lagged values as well as the lagged values of the real federal funds rate.
Small Structural Model	The small-scale model of the economy consists of equations for six variables: the output gap, the equity premium, the federal budget surplus, the trend growth rate of output, the real bond yield, and the real federal funds rate.
EDO Model	Estimates of the equilibrium real rate using EDOan estimated dynamic-stochastic-general-equilibrium (DSGE) model of the U.S. economydepend on data for major spending categories, prices and wages, and the federal funds rate as well as the model's structure and estimate of the output gap.
FRB/US Model	Estimates of the equilibrium real rate using FRB/USthe staff's large-scale econometric model of the U.S. economydepend on a very broad array of economic factors, some of which take the form of projected values of the model's exogenous variables.
Tealbook- consistent	Two measures are presented based on the FRB/US and the EDO models. Both models are matched to the extended Tealbook forecast. Model simulations determine the value of the real federal funds rate that closes the output gap conditional on the extended baseline.
TIPS- based Factor Model	Yields on TIPS (Treasury Inflation-Protected Securities) reflect investors' expectations of the future path of real interest rates. The TIPS-based measure of the equilibrium real rate is constructed using the seven-year-ahead instantaneous real forward rate derived from TIPS yields as of the Tealbook publication date. This forward rate is adjusted to remove estimates of the term and liquidity premiums based on a three-factor, arbitrage-free term-structure model applied to TIPS yields, nominal yields, and inflation.

Proxy used for expected inflation	Actual real federal funds rate (current value)	Tealbook-consistent FRB/US-based measure of the equilibrium real funds rate (current value)	Projected real funds rate (twelve-quarter- ahead average)
Lagged core inflation	-1.1	-3.5	-1.4
Lagged headline inflation	-2.4	-3.7	-1.5
Projected headline inflation	-1.0	-3.4	-1.2

B. Analysis of Policy Paths and Confidence Intervals

Rule Specifications

For the following rules, i_t denotes the federal funds rate for quarter t, while the right-hand-side variables include the staff's projection of trailing four-quarter core PCE inflation (π_t) , inflation two and three quarters ahead $(\pi_{t+2|t})$, the output gap in the current period and one quarter ahead $(y_t - y_t)$ and $y_{t+1|t} - y_{t+1|t}$, and the forecast of three-quarter-ahead annual average GDP growth relative to potential $(\Delta^4 y_{t+3|t} - \Delta^4 y_{t+3|t})$, and π^- denotes an assumed value of policymakers' long-run Processing math: 100% putcome-based and forecast-based rules were estimated using real-time data over the sample 1988:1-2006:4; each specification was chosen

processing math: 100% putcome-based and forecast-based rules were estimated using real-time data over the sample 1988:1-2006:4; each specification was chosen compared by the compared by the compared by Taylor (1993, 1999). The prescriptions of the first-difference rule do not depend on assumptions regarding r or the level of the output gap; see Orphanides (2003).

Rule	Specification				
Outcome-based rule	$i_t = 1.20i_{t-1} - 0.39i_{t-2} + 0.19[1.17 + 1.73\pi_t + 3.66(y_t - y_t) - 2.72(y_{t-1} - y_{t-1})]$				
Forecast-based rule	$= 1.18i_{t-1} - 0.38i_{t-2} + 0.20[0.98 + 1.72\pi_{t+2 t} + 2.29(y_{t+1 t} - y_{t+1 t}) - 1.37(y_{t-1} - y_{t-1})]$				
Taylor (1993) rule	$= 2 + \pi_t + 0.5(\pi_t - \pi) + 0.5(y_t - y_t)$				
Taylor (1999) rule	$i_t = 2 + \pi_t + 0.5(\pi_t - \pi) + (y_t - y_t)$				
First-difference rule	$i_t = i_{t-1} + 0.5(\pi_{t+3 t} - \pi) + 0.5(\Delta^4 y_{t+3 t} - \Delta^4 y_{t+3 t})$				

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

Federal Reserve Balance Sheet: End-of-Year Projections -- Alternative A Billions of dollars

	Aug 31, 2011	2012	2014	2016	2018	2020
Total assets	2,857	3,946	3,563	2,512	1,785	1,987
Selected assets						
Liquidity programs for financial firms	0	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	0	0	0	0	0	0
Lending through other credit facilities	12	4	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	12	4	0	0	0	0
Support for specific institutions	50	48	34	18	7	4
Credit extended to AIG	0	0	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	50	48	34	18	7	4
Securities held outright	2,647	3,639	3,334	2,348	1,660	1,879
U.S. Treasury securities	1,652	2,982	2,828	2,039	1,550	1,879
Agency debt securities	110	77	39	16	2	0
Agency mortgage-backed securities	885	579	468	293	108	0
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	148	254	193	145	117	104
Total liabilities	2,806	3,876	3,470	2,389	1,622	1,772
Selected liabilities						
Federal Reserve notes in circulation	996	1,080	1,212	1,361	1,504	1,654
Reverse repurchase agreements	105	70	70	70	70	70
Deposits with Federal Reserve Banks	1,637	2,708	2,171	942	33	33
Reserve balances held by depository institutions	1,592	2,701	2,164	935	25	25
U.S. Treasury, General Account	42	5	5	5	5	5
U.S. Treasury, Supplementary Financing Account	0	0	0	0	0	0
Other balances	3	3	3	3	3	3
Interest of Federal Reserve Notes due to U.S. Treasury	1	0	0	0	0	0
Total capital	52	70	93	123	162	215

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

	Aug 31, 2011	2012	2014	2016	2018	2020
Total assets	2,857	2,902	2,740	2,130	1,785	1,987
Selected assets						
Liquidity programs for financial firms	0	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	0	0	0	0	0	0
Lending through other credit facilities	12	4	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	12	4	0	0	0	0
Support for specific institutions	50	48	34	18	7	4
Credit extended to AIG	0	0	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	50	48	34	18	7	4

Securities held outright	2,647	2,639	2,532	1,975	1,667	1,886
U.S. Treasury securities	1,652	1,982	2,026	1,666	1,557	1,886
Agency debt securities	110	77	39	16	2	0
Agency mortgage-backed securities	885	579	468	293	108	0
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	148	210	173	137	111	97
Total liabilities	2,806	2,832	2,648	2,007	1,622	1,772
Selected liabilities						
Federal Reserve notes in circulation	996	1,080	1,212	1,361	1,504	1,654
Reverse repurchase agreements	105	70	70	70	70	70
Deposits with Federal Reserve Banks	1,637	1,664	1,349	560	33	33
Reserve balances held by depository institutions	1,592	1,657	1,341	553	25	25
U.S. Treasury, General Account	42	5	5	5	5	5
U.S. Treasury, Supplementary Financing Account	0	0	0	0	0	0
Other balances	3	3	3	3	3	3
Interest of Federal Reserve Notes due to U.S. Treasury	1	0	0	0	0	0
Total capital	52	70	93	123	162	215

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

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

Federal Reserve Balance Sheet: End-of-Year Projections -- Alternative C Billions of dollars

	Aug 31, 2011	2012	2014	2016	2018	2020
otal assets	2,857	2,826	2,533	1,694	1,785	1,987
Selected assets						
Liquidity programs for financial firms	0	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	0	0	0	0	0	0
Lending through other credit facilities	12	4	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	12	4	0	0	0	0
Support for specific institutions	50	48	34	18	7	4
Credit extended to AIG	0	0	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	50	48	34	18	7	4
Securities held outright	2,647	2,639	2,388	1,588	1,700	1,910
U.S. Treasury securities	1,652	1,950	1,840	1,252	1,580	1,910
Agency debt securities	110	77	39	16	2	0
Agency mortgage-backed securities	885	612	510	319	118	0
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	148	135	109	88	77	73
otal liabilities	2,806	2,756	2,440	1,572	1,622	1,772
Selected liabilities						
Federal Reserve notes in circulation	996	1,080	1,212	1,361	1,504	1,654
Reverse repurchase agreements	105	70	70	70	70	70
Deposits with Federal Reserve Banks	1,637	1,589	1,141	125	33	33
Reserve balances held by depository institutions	1,592	1,581	1,134	117	25	25
U.S. Treasury, General Account	42	5	5	5	5	5
U.S. Treasury, Supplementary Financing Account	0	0	0	0	0	0
Other balances	3	3	3	3	3	3
Interest of Federal Reserve Notes due to U.S. Treasury	1	0	0	0	0	0

 Total capital
 52
 70
 93
 123
 162
 215

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

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

Last update: February 3, 2017