

# Accessible Material

---

## August 2011 Tealbook Tables and Charts

---

### Table of Contents

Document Section	Accessible Material
<b>Book A</b>	
Domestic Economic Developments and Outlook	<a href="#">FOMC20110809tealbooka20110803_1.htm</a>
International Economic Developments and Outlook	<a href="#">FOMC20110809tealbooka20110803_2.htm</a>
Financial Developments	<a href="#">FOMC20110809tealbooka20110803_3.htm</a>
Risks and Uncertainty	<a href="#">FOMC20110809tealbooka20110803_4.htm</a>
Greensheets	<a href="#">FOMC20110809tealbooka20110803_5.htm</a>
<b>Book B</b>	
Monetary Policy Strategies	<a href="#">FOMC20110809tealbookb20110804_1.htm</a>
Monetary Policy Alternatives	<a href="#">FOMC20110809tealbookb20110804_2.htm</a>
Explanatory Notes	<a href="#">FOMC20110809tealbookb20110804_3.htm</a>

**Last update: February 3, 2017**

---

### August 2011 Tealbook A Tables and Charts<sup>‡</sup>

---

#### Domestic Economic Developments and Outlook

##### Key Background Factors underlying the Baseline Staff Projection

###### *Figure: Federal Funds Rate*

Line chart, 2007 to 2012. Unit is percent. Data are quarterly averages. There are four series, "Current," "Previous Tealbook," "Market, expected rate," and "Market, modal rate." The series begin at about 5.25 and generally decrease together to about 0 in 2009:Q1. They remain about constant to the end of the timeline.

###### *Figure: Long-Term Interest Rates*

Line chart, 2007 to 2012. Unit is percent. Data are quarterly averages. There are six series, "BBB Corporate Yield: Current," "BBB Corporate Yield: Previous Tealbook," "Conforming Mortgage Rate: Current," "Conforming Mortgage Rate: Previous Tealbook," "10-year Treasury Yield: Current," and "10-Year Treasury Yield: Previous Tealbook." BBB Corporate Yield: Current and Previous Tealbook begin at about 6 and generally increase together to about 9.5 in 2008:Q4. They generally decrease together to about 5 in 2010:Q3 then generally increase together to about 5.5 in 2011:Q1. BBB Corporate Yield: Current generally decreases to about 5 in 2011:Q3 then generally increases ending at about 6. BBB corporate yield generally decreases to about 5.25 in 2011:Q1 then generally increases ending at about 6.25. Conforming Mortgage Rate: Current and Previous Tealbook begin at about 6 and fluctuate but generally decrease together to about 4.5 in 2010:Q3. Conforming Mortgage Rate: Current generally increases to about 5 then generally increases to about 5 in 2011:Q1. It generally decreases to about 4.25 in 2011:Q3 then generally increases ending at about 5.5. Conforming Mortgage Rate: Previous Tealbook generally increases to about 5 in 2011:Q1 then generally decreases to about 4.75 in 2011:Q2 then generally increases ending at about 6. 10-year Treasury Yield: Current and Previous Tealbook begin at about 5 and fluctuate but generally decrease together to about 3 in 2009:Q1. They generally increase together to about 4 in 2010:Q1 then generally decrease together to about 3 in 2010:Q3. They generally increase together to about 4 in 2011:Q1 then generally decrease together to about 3.25 in 2011:Q2. 10-Year Treasury Yield: Current generally decreases to about 3 in 2011:Q3 then generally increases ending at about 4. 10-Year Treasury Yield generally increases ending at about 4.5.

###### *Figure: Equity Prices*

Line chart, 2007 to 2012. Unit is ratio scale, 2007:Q1 = 100. Data are quarter-end. There are two series, "Dow Jones U.S. Total Stock Market Index: Current" and "Dow Jones U.S. Total Stock Market Index: Previous Tealbook." The series begin at about 100 and generally increase together to about 110 in 2007:Q4. They generally decrease together to about 55 in 2009:Q1. They generally increase together to about 100 in 2011:Q1. Dow Jones U.S. Total Stock Market Index: Current generally decreases to about 90 in 2011:Q3 then generally increases ending at about 105. Dow Jones U.S. Total Stock Market Index: Previous Tealbook generally decreases to about 90 in 2011:Q1 then generally increases ending at about 110.

###### *Figure: House Prices*

Line chart, 2007 to about 2012. Unit is ratio scale, 2007:Q1 = 100. Data are quarterly. There are two series, "Core Logic Index: Current" and "Core Logic Index: Previous Tealbook." The series begin at about 100 and generally decrease together to about 72 in 2009:Q1. They generally increase together to about 75 in 2010:Q2. They generally decrease together ending at about 67.

###### *Figure: Crude Oil Prices*

Line chart, 2007 to 2012. Unit is dollars per barrel. Data are quarterly averages. There are two series, "West Texas Intermediate: Current" and "West Texas Intermediate: Previous Tealbook." The series begin at about 60 and generally increase together to about 120 in 2008:Q2. They generally decrease together to about 40 in 2009:Q1 then generally increase together to about 105 in 2011:Q1. The generally decrease together to about 95 in 2011:Q2 then remain about constant to the end of the timeline.

###### *Figure: Broad Real Dollar*

Line chart, 2007 to 2012. Unit is an index, 2007:Q1 = 100. Data are quarterly averages. There are two series, "Current" and "Previous Tealbook." The series begin at about 100 and generally decrease together to about 90 in 2008:Q1. They generally increase together to about 100 and generally decreases together ending at about 80.

Note: Blue shading represents the projection period, which begins in 2011:Q3.

#### Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

Measure	2011:Q2		2011:Q3	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
<b>Real GDP</b>	<b>1.9</b>	<b>1.4</b>	<b>3.9</b>	<b>2.9</b>
Private domestic final purchases	2.1	1.1	3.4	1.9
Personal consumption expenditures	1.5	.1	2.6	1.6
Residential investment	1.3	3.5	1.6	3.1
Nonres. structures	6.1	15.2	-.6	-2.0
Equipment and software	7.0	5.6	13.2	6.3
Federal purchases	2.1	2.2	4.7	1.9
State and local purchases	-2.3	-2.9	-1.3	-1.8
	Contribution to change in real GDP (percentage points)			
Inventory investment	-.6	.1	1.2	1.4
Net exports	.9	.6	-.4	.0

## Recent Nonfinancial Developments (1)

### *Figure: Change in Private Payroll Employment*

Line chart, 2001 to June 2011. Unit is thousands of employees. The series begins at about 0 and fluctuates but generally decreases to about -400 in late 2001. It fluctuates but generally increases to about 350 in mid-2005. It fluctuates but generally decreases to about -1000 in early 2009 then fluctuates but generally increases to about 250 in mid-2009. It generally decreases to about 50 in late 2009 then generally increases to about 300 in late 2010. It generally decreases ending at about 50. There is a second series labeled 3-month moving average that runs about concurrent with the first.

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

### *Figure: Unemployment Rate*

Line chart, 2001 to June 2011. Unit is percent. The series begins at about 4 and generally increases to about 6.25 in late 2003. It generally decreases to about 4 in late 2006 then generally increases to about 10 in early 2009. It generally decreases to about 8.75 in early 2011 then generally increases ending at about 9.25.

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

### *Figure: Manufacturing IP ex. Motor Vehicles and Parts*

Line chart, 2001 to June 2011. Unit is 3-month percent change, annual rate. The series begins at about -2.5 and generally decreases to about -10 in late 2001. It generally increases to about 7 in early 2002 then generally decreases to about -2 in late 2002. It generally increases to about 10 in early 2005 then generally decreases to about -5 in mid-2005. It generally increases to about 12 in early 2006 then fluctuates but generally decreases to about -25 in early 2009 then generally increases to about 12 in early 2010. It generally decreases to about 2.5 in late 2010 then generally increases to about 10 in early 2011 then generally decreases ending at about 0.

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

### *Figure: Production of Light Motor Vehicles*

Line chart, 2001 to June 2011. Unit is millions of units, annual rate. The series begins at about 10 and fluctuates but generally increases to about 12.5 in early 2003. It fluctuates but generally decreases to about 3 in early 2009 then fluctuates but generally increases to about 9 in early 2011. It generally decreases ending at about 7.5.

Source: Ward's Auto Infobank.

## [Box:] The Near-Term Outlook for Light Motor Vehicle Production

### *Figure: U.S. Light Motor Vehicle Production*

Line chart, 2006 to June 2011. Unit is millions of units. There are two series, "Non-Japanese nameplates," and "Japanese nameplates." Non-Japanese nameplates begins at about 8.5 and generally increases to about 9.0 in 2006:Q2. It generally decreases to about 6.5 in 2006:Q3. It generally increases to about 8.25 in 2007:Q4

then generally decreases to about 2.0 in 2009:Q1 then fluctuates but generally increases to about 6.0 in 2011:Q1. It generally decreases ending at about 5.5. Q2 and Q3 are marked by circles at about 6.0 and 6.25, respectively. Japanese nameplates begins at about 3.0 and fluctuates but remains about constant until 2008:Q2. It generally decreases to about 1.0 in 2009:Q1 then generally increases to about 3.0 in 2011:Q1. It generally decreases ending at about 2.0. Q2 and Q3 are marked by circles at about 1.5 and 3.0, respectively.

Note: Ward's schedules for 2011:Q3. Circles represent quarterly averages.

Source: Ward's Communications; adjusted using FRB seasonals.

### *Figure: Japan Auto Parts Exports to United States*

Line chart, 2006 to June 2011. Unit is billions of yen. The series begins at about 85 and generally increases to about 96 in 2006:Q2. It generally decreases to about 75.0 in 2006:Q4 then generally increases to about 100.0 in 2007:Q1. It generally decreases to about 20.0 in 2009:Q1 then generally increases to about 60.0 in 2010:Q1. It generally decreases to about 50.0 in 2010:Q4 then generally increases to about 60.0 in 2011:Q1. It generally decreases to about 40 in 2011:Q1 then generally increases ending at about 45.0.

Source: Japan Ministry of Finance, using FRB seasonals.

## Recent Nonfinancial Developments (2)

### *Figure: Real PCE*

Line chart, 2001 to June 2011. Unit is billions of chained (2005) dollars. The series begins at about 7750 and generally increases to about 9250 in late 2007. It generally decreases to about 9000 in early 2009 then generally increases ending at about 9450.

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

### *Figure: Sales of Light Motor Vehicles*

Line chart, 2001 to July 2011. Unit is millions of units, annual rate. The series begins at about 18 and generally decreases to about 15 in late 2001. It generally increases to about 22 in early 2002. It generally decreases to about 15 in early 2002 then fluctuates but remains about constant until early 2005. It generally increases to about 20 in mid-2005 then generally decreases to about 14 in late 2005. It generally increases to about 17 in late 2005 then generally decreases to about 9 in early 2009. It generally increases to about 15 in mid-2009 then generally decreases to about 9 in late 2009. It generally increases to about 13 in early 2011 then generally decreases ending at about 12.

Source: Ward's Auto Infobank.

### *Figure: Single-Family Housing Starts*

Line chart, 2001 to June 2011. Unit is thousands of units, annual rate. There are two series, "Starts" and "Adjusted permits." The series begin at about 1300 and generally increase together to about 1900 in late 2005. They generally decrease together to about 300 in early 2009 then generally increase together to about 600 in early 2010. They generally decrease together ending at about 400.

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

Source: U.S. Census Bureau.

### *Figure: Single-Family Home Sales*

Line chart, 2001 to June 2011. Unit is thousands of units, annual rate. There are two series, "New" and "Existing." New begins at about 900 and generally increases to about 1350 in late 2005. It generally decreases ending at about 300. Existing begins at about 4500 and generally increases to about 6250 in late 2005. It generally decreases to about 4000 in late 2008 then generally increases to about to about 5700 in late 2009. It fluctuates but generally decreases to about 3250 in mid-2010 then generally increases to about 4700 in early 2011. It generally decreases ending at about 4250.

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

### *Figure: Nondefense Capital Goods ex. Aircraft*

Line chart, 2001 to June 2011. Unit is billions of dollars. There are two series, "Orders" and "Shipments." Orders begins at about 62 and generally decreases to about 45 in early 2002. It generally increases to about 70 in early 2008 then generally decreases to about 45 in early 2009. It generally increases ending at about 67. Shipments begins at about 62 and generally decreases to about 50 in early 2003. It generally increases to about 65 in late 2008 then generally decreases to about 50 in early 2009. It generally increases ending at about 65.

Source: U.S. Census Bureau.

### *Figure: Nonresidential Construction Put in Place*

Line chart, 2001 to June 2011. Unit is billions of chained (2005) dollars. The series begins at about 275 and generally decreases to about 225 in late 2002. It generally increases to about 425 in late 2008 then generally decreases ending at about 250.

Source: U.S. Census Bureau.

## Recent Nonfinancial Developments (3)

### *Figure: Inventory Ratios ex. Motor Vehicles*

Line chart, 2001 to 2011. Unit is months. There are two series, "Staff flow-of-goods system" and "Census book-value data." Staff flow-of-goods system begins at about 1.7 and generally decreases to about 1.5 in late 2007. It generally increases to about 1.65 in early 2009 then generally decreases ending at about 1.5 in June 2011. Census book-value data begins at about 1.4 and generally decreases to about 1.2 in mid-2005. It fluctuates but generally increases to about 1.4 in early 2009. It generally decreases ending at about 1.2 in May 2011.

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, 2001 to 2011. Unit is billions of chained (2005) dollars. There are two series, "Unified (monthly)" and "NIPA (quarterly)." Unified begins at about 400 and fluctuates but generally increases to about 700 in late 2010. It fluctuates but generally decreases ending at about 623 in June 2011. NIPA begins at about 400 and fluctuates but generally increases to about 650 in late 2010. It generally decreases ending at about 625 in 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. Dept. of Commerce, Bureau of Economic Analysis.

### *Figure: Trade Balance*

Line chart, 2001 to May 2011. Unit is billions of dollars. The series begins at about -30 and fluctuates but generally decreases to about -70 in late 2005. It fluctuates but generally increases to about -25 in early 2009 then generally decreases ending at about -50.

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

### *Figure: Exports and Non-Oil Imports*

Line chart, 2001 to May 2011. Unit is billions of dollars. There are two series, "Non-oil imports" and "Exports." Non-oil imports begins at about 120 and generally decreases to about 100 in late 2001. It generally increases to about 180 in late 2008 then generally decreases to about 135 in mid-2009. It generally increases ending at about 185. Exports begins at about 90 and generally decreases to about 80 in late 2001. It generally increases to about 170 in mid-2008 then generally decreases to about 120 in late 2008. It generally increases ending at about 180.

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

### *Figure: Total PCE Prices*

Line chart, 2001 to June 2011. Unit is percent. There are two series, "12-month change" and "3-month change." 12-month change begins at about 2 and generally decreases to about 0 in early 2002. It generally increases to about 4 in late 2005 then generally decreases to about 2 in mid-2006. It generally increases to about 4 in early 2008 then generally decreases to about -1 in early 2009. It generally increases to about 3 in early 2010 then generally decreases to about 2 in late 2010. It generally increases ending at about 2. 3-month change begins at about 3 and generally decreases to about -2 in late 2001. It fluctuates but generally increases to about 10 in early 2005 then generally decreases to about -1 in mid-2005. It generally increases to about 4 in mid-2006 then generally decreases to about -2 in early 2007. It fluctuates but generally increases to about 7 in early 2008 then generally decreases to about -10 in late 2008. It generally increases to about 4 in early 2009 then generally decreases to about -1 in early 2010. It generally increases to about 5 in late 2010 then generally decreases ending at about 2.

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, 2001 to June 2011. Unit is percent. There are two series, "12-month change" and "3-month change." 12-month change begins at about 2 and generally decreases to about 1 in late 2001. It generally increases to about 2.5 in late 2002 then generally decreases to about 1 in late 2003. It fluctuates but generally increases to about 2.5 in early 2008 then generally decreases ending at about 1. 3-month change begins at about 2.5 and generally decreases to about -1. It generally increases to about 4 in early 2002 then generally decreases to about 1 in early 2003. It fluctuates but generally increases to about 3 in early 2007 then fluctuates but generally decreases to about 0.25 in late 2008. It generally increases to about 3 in late 2009 then generally decreases to about 0.5 in late 2010. It generally increases ending at about 2.

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

## Projections of Real GDP and Related Components

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

Measure	2010	2011		2012
		H1	H2	
<b>Real GDP</b>	<b>3.1</b>	<b>.9</b>	<b>2.7</b>	<b>3.0</b>
Previous Tealbook	2.8	2.0	3.4	3.5
Final sales	2.4	.7	2.3	2.9
Previous Tealbook	2.4	1.7	3.1	3.2
Personal consumption expenditures	3.0	1.1	1.8	2.5
Previous Tealbook	2.6	1.9	2.5	2.8
Residential investment	-6.3	.5	1.8	6.1
Previous Tealbook	-4.6	-.8	2.2	6.0
Nonresidential structures	-1.8	-.7	-1.1	-1.3
Previous Tealbook	-4.0	-5.1	.0	-.8
Equipment and software	16.6	7.1	6.3	5.6
Previous Tealbook	16.9	8.6	11.4	8.0
Federal purchases	2.9	-3.8	1.6	-.9
Previous Tealbook	4.8	-3.0	2.1	-.8
State and local purchases	-1.7	-3.1	-1.3	-.2
Previous Tealbook	-1.3	-3.1	-.9	.1
Exports	8.8	6.9	10.0	9.0
Previous Tealbook	9.0	9.1	10.0	9.0
Imports	10.7	4.7	4.4	3.3
Previous Tealbook	11.0	4.0	5.8	4.0
	Contributions to change in real GDP (percentage points)			
Inventory change	.7	.2	.4	.0
Previous Tealbook	.4	.4	.3	.3
Net exports	-.6	.1	.6	.7
Previous Tealbook	-.6	.5	.4	.6

*Figure: Real GDP*

Line chart, 1981 to 2012. Unit is 4-quarter percent change. There are two series, "Current" and "Previous Tealbook." The series begin at about 2 and generally increase together to about 4.5 in late 2001. They generally decrease together about -4 in mid-1982 then generally increase together to about 8 in early 1984. They generally decrease together to about -1 in early 1991 then fluctuate but generally increase together to about 5 in early 2000. They generally decrease together to about 0 in late 2001 then generally increase together to about 4 in late 2003. They generally decrease together to about -6 in early 2009 then generally increase together to about 4 in early 2010. They generally decrease together to about 2 in early 2011 then generally increase together ending at about 3.

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, 2007 to 2012. Unit is 4-quarter percent change. There are two series, "Current" and "Previous Tealbook." Current begins at about 3 and generally decreases to about -3 in 2009:Q2. It generally increases to about 3 in 2010:Q4 then generally decreases to about 1 in 2011:Q4. It generally increases ending at about 2.5. Previous Tealbook begins at about 3 and generally decreases to about -2.5 in 2009:Q2. It generally increases to about 3 in 2010:Q4 then generally decreases to

about 2 in 2011:Q4. It generally increases ending at about 3.

### *Figure: Residential Investment*

Line chart, 2007 to 2012. Unit is 4-quarter percent change. There are two series, "Current" and "Previous Tealbook." The series begin at about -20 and generally decrease together to about -30 in 2009:Q2. They generally increase together to about 5 in 2010:Q2 then generally decrease together to about -10 in 2010:Q2. They generally increase together ending at about 5.

### *Figure: Equipment and Software*

Line chart, 2007 to 2012. Unit is 4-quarter percent change. There are two series, "Current" and "Previous Tealbook." The series begin at about 2.5 and generally decrease together to about -20 in 2009:Q1. They generally increase together to about 15 in 2010:Q2. Current generally decreases ending at about 5. Previous Tealbook generally decreases ending at about 8.

### *Figure: Nonresidential Structures*

Line chart, 2007 to 2012. Unit is 4-quarter percent change. There are two series, "Current" and "Previous Tealbook." The series begin at about 10 and generally increase together to about 17 in 2007:Q4. They generally decrease together to about -30 in 2009:Q4 then generally increase together to about 5 in 2011:Q1. They generally decrease together ending at about 0.

### *Figure: Government Consumption & Investment*

Line chart, 2007 to 2012. Unit is 4-quarter percent change. There are two series, "Current" and "Previous Tealbook." Current begins at about .5 and generally increases to about 3 in 2008:Q1. It generally decreases to about -3 in 2011:Q3 then generally increases to about -.5 in 2012:Q1. It remains about constant to the end of the timeline. Previous Tealbook begins at about .5 and generally increases to about 3 in 2008:Q4. It fluctuates but generally decreases to about -2 in 2011:Q3 then generally increases to about 0 in 2012:Q1. It generally decreases ending at about -0.75.

### *Figure: Exports and Imports*

Line chart, 2007 to 2012. Unit is 4-quarter percent change. There are four series, "Exports: Current," "Exports: Previous Tealbook," "Imports: Current," and "Imports: Previous Tealbook." Exports: Current and Previous Tealbook begin at about 7 and generally increase together to about 12 in 2007:Q4. They generally decrease together to about -15 in 2009:Q2 then generally increase together to about 15 in 2010:Q1. They generally decrease together to about 10 in 2010:Q3 then remain about constant to the end of the timeline. Imports: Current and Previous Tealbook begin at about 5 and generally decrease together to about -20 in 2009:Q2. They generally increase together to about 17 in 2010:Q2 then generally decrease together ending at about 5.

Note: Blue shading represents the projection period, which begins in 2011:Q2.

## Aspects of the Medium-Term Projection

### *Figure: Personal Saving Rate*

Line chart, 1990 to 2012. Unit is percent. There are two series, "Current" and "Previous Tealbook." The series begin at about 6.5 and generally increase together to about 7.5 in 1992. They generally decrease together to about 1 in 2001 then fluctuate but generally increase together to about 4 in 2004. They generally decrease together to about 1 in 2005 then generally increase together to about 6 in 2008. They generally decrease together to about 4 in 2009 then generally increase together to ending at about 5.

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

### *Figure: Wealth-to-Income Ratio*

Line chart, 1990 to 2012. Unit is ratio. There are two series, "Current" and "Previous Tealbook." The series begin at about 4.8 and generally increase together to about 6.2 in 1998. They generally decrease together to about 4.8 in 2003 then generally increase together to about 6.4 in 2005. They generally decrease together to about 4.4 in 2008 then fluctuate but generally increase together ending at about 5.0.

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

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

### *Figure: Single-Family Housing Starts*

Line chart, 1990 to 2012. Unit is millions of units. There are two series, "Current" and "Previous Tealbook." The series begin at about 1.00 and generally decrease together to about 0.75 in 1991. They generally increase together to about 1.75 in 2006 then generally decrease together to about 0.25 in 2008. They generally

increase together ending at about 0.50.

Source: U.S. Census Bureau.

### Figure: Equipment and Software Spending

Line chart, 1990 to 2012. Unit is share of nominal GDP. There are two series, "Current" and "Previous Tealbook." The series begin at about 7.5 and generally decrease together to about 6.5 in 1992. They generally increase together to about 9.75 in 1999 then generally decrease together to about 6.5 in 2009. Current generally increases ending at about 7.5. Previous Tealbook generally increases ending at about 8.0.

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

### Figure: Federal Surplus/Deficit

Line chart, 1990 to 2012. Unit is share of nominal GDP. There are two series, "Current" and "Previous Tealbook." The series begin at about -3 and generally decrease together to about -6 in 1993. They generally increase together to about 3 in 2000 then generally decrease together to about -4 in 2003. They generally increase together to about -1 in 2007 then generally decrease together to about -10 in 2009 then generally increase together ending at about -6.

Note: Share of federal government surplus/deficit is shown as a 4-quarter moving average.

Source: *Monthly Treasury Statement*.

### Figure: Current Account Surplus/Deficit

Line chart, 1990 to 2012. Unit is share of nominal GDP. There are two series, "Current" and "Previous Tealbook." The series begin at about -1.5 and generally increase together to about 1 in 1991. They generally decrease together to about -7 in 2005 then fluctuate but generally increase together to about -2 in 2008. They generally decrease together to about -3 in 2010 then generally increase together ending at about -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. Blue shading represents the projection period, which begins in 2011:Q2.

## Decomposition of Potential GDP

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

Measure	1974-1995	1996-2000	2001-2008	2009	2010	2011	2012
<b>Potential GDP</b>	<b>3.0</b>	<b>3.5</b>	<b>2.6</b>	<b>1.1</b>	<b>1.7</b>	<b>2.1</b>	<b>2.1</b>
Previous Tealbook	3.0	3.5	2.6	1.9	1.9	2.3	2.4
<i>Selected contributions<sup>1</sup></i>							
Structural labor productivity	1.5	2.7	2.5	1.4	1.5	1.7	1.7
Previous Tealbook	1.5	2.7	2.5	2.3	2.0	2.0	2.1
Capital deepening	.7	1.5	.8	.2	.4	.6	.6
Previous Tealbook	.7	1.5	.8	.3	.4	.5	.7
Multifactor productivity	.5	.9	1.4	1.0	1.0	1.0	1.0
Previous Tealbook	.5	.9	1.5	1.9	1.4	1.3	1.3
Trend hours	1.5	1.0	.6	-.2	.5	.6	.7
Previous Tealbook	1.5	1.0	.6	-.2	.5	.6	.7
Labor force participation	.4	.0	-.2	-.4	-.4	-.3	-.2
Previous Tealbook	.4	.0	-.2	-.4	-.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, 2001 to 2012. Unit is chained (2005) dollars per hour. The series begins at about 44 and fluctuates but generally increases ending at about 57. There is a second series showing Structural Productivity. It begins at about 44 and generally increases ending at about 57.

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

### Figure: Labor Force Participation Rate

Line chart, 2001 to 2012. Unit is percent. The series begins at about 67 and generally decreases to about 66 in 2005:Q1. It generally increases to about 66.5 in 2007:Q1 then fluctuates but generally decreases to about 64 in 2011:Q1. It remains about constant to the end of the timeline. There is a second series showing Trend that begins at about 66.8 and generally decreases ending at about 64.5.

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

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

## The Outlook for the Labor Market

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

Measure	2009	2010	2011	2012
Output per hour, nonfarm business	5.3	2.5	.5	1.7
Previous Tealbook	6.5	2.0	1.3	1.7
Nonfarm private employment	-5.0	.9	1.6	2.1
Previous Tealbook	-5.0	.9	2.1	2.4
Labor force participation rate <sup>1</sup>	64.9	64.5	64.2	64.3
Previous Tealbook	64.9	64.5	64.3	64.4
Civilian unemployment rate <sup>1</sup>	10.0	9.6	9.2	8.5
Previous Tealbook	10.0	9.6	8.9	8.1
Memo:				
GDP gap <sup>2</sup>	-6.9	-5.6	-5.9	-5.2
Previous Tealbook	-6.4	-5.7	-5.2	-4.2

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

1. Percent, average for the fourth quarter. [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, 1990 to 2012. Unit is thousands. There are two series, "Current" and "Previous Tealbook." The series begin at about 200 and generally decrease together to about -200. They generally increase together to about 350 in 1995. They fluctuate but generally decrease together to about -300 in 2001 then generally increase together to about 300 in 2005. They generally decrease together to about -800 in 2009. They generally increase together ending at about 200.

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

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

### Figure: Unemployment Rate

Line chart, 1990 to 2012. Unit is percent. There are four series, "Current," "Previous Tealbook," "NAIRU," and "NAIRU with EEB adjustment." Current and Previous Tealbook begin at about 5 and generally increase together to about 7.5 in 1992. They generally decrease together to about 4 in 2000 then generally increase together to about 6 in 2003. They generally decrease together to about 4 in 2007 then generally increase together to about 10 in 2008. They generally decrease together to ending at about 8.5. NAIRU begins at about 6 and generally decreases to about 5 in 1993. It remains about constant until 2008 then generally increases to about 6 in 2009. It remains about constant to the end of the timeline. NAIRU with EEB adjustment begins at about 6 and generally decreases to about 5 in 1994. It remains about constant until 2008 then generally increases to about 7 in 2009. It generally decreases ending at about 6.

Note: The EEB adjustment is the staff estimate of the effect of extended and emergency unemployment compensation programs on the NAIRU. Light blue shading represents the projection period, beginning in 2011:Q3.

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

### Figure: GDP Gap

Line chart, 1990 to 2012. Unit is percent. There are two series, "Current" and "Previous Tealbook." The series begin at about 1 then generally decrease together to

about -4 in 1991. They generally increase together to about 4 in 1999 then generally decrease together to about -8 in 2009. Current generally increases ending at about -6. Previous Tealbook generally increases ending at about -4.

Note: The GDP gap is the percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential. Light blue shading represents the projection period, beginning in 2011:Q2.

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

### Figure: Manufacturing Capacity Utilization Rate

Line chart, 1990 to 2012. Unit is percent. Average Rate from 1972 to 2010 is marked by a horizontal line at about 78. There are two series, "Current" and "Previous Tealbook." The series begin at about 83 and generally decrease together to about 77 in 1991. They generally increase together to about 85 in 1994 then generally decrease together to about 73 in 2001. They generally increase together to about 80 in 2007 then generally decrease together to about 65 in 2009. They generally increase together ending at about 78.

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

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.

## Inflation Projections

(Percent change, Q4 to Q4)

Measure	2009	2010	2011	2012
PCE chain-weighted price index	1.5	1.3	2.4	1.5
Previous Tealbook	1.5	1.1	2.3	1.5
Food and beverages	-1.7	1.3	4.3	1.4
Previous Tealbook	-1.6	1.3	4.5	1.4
Energy	2.6	6.2	9.3	1.4
Previous Tealbook	2.7	5.9	9.6	1.0
Excluding food and energy	1.7	1.0	1.8	1.5
Previous Tealbook	1.7	.8	1.7	1.5
Prices of core goods imports <sup>1</sup>	-1.7	2.6	4.9	1.5
Previous Tealbook	-1.9	2.7	5.0	1.4

1. Core goods imports exclude computers, semiconductors, oil, and natural gas. [Return to table](#)

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

### Figure: Total PCE Prices

Line chart, 1990 to 2012. Unit is 4-quarter percent change. There are two series, "Current" and "Previous Tealbook." The series begin at about 4 and generally increase together to about 5.5 in 1991. They fluctuate but generally decrease together to about 1 in 1998 then fluctuate but generally increase together to about 4.5 in 2008. They generally decrease together to about -1 in 2009 then fluctuate but generally increase together to about 3 in 2012. They generally decrease together ending at about 1.5.

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

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

### Figure: PCE Prices ex. Food and Energy

Line chart, 1990 to 2012. Unit is 4-quarter percent change. There are four series, "Current," "Previous Tealbook," "Market-based: Current," and "Market-based: Previous Tealbook." Current and Previous Tealbook begin at about 4 and generally increase to about 4.5 in 1991. They fluctuate but generally decrease together to about 1.5 in 1998. They fluctuate but generally increase together to about 2.75 in 2007 then fluctuate but generally decrease together to about 1 in 2010. They generally increase together to about 2 in 2011 then generally decrease together ending at about 1.5. Market Based: Current and Previous Tealbook begin at about 4.5 and generally increase together to about 5 in 1991. They generally decrease together to about 1 in 1998 then fluctuate but generally increase together to about 2.5 in 2008. They generally decrease together to about 1 in 2010 then generally increase together to about 2 in 2011. They generally decrease together ending at about 1.5.

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

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

### Figure: Compensation per Hour

Line chart, 1990 to 2012. Unit is 4-quarter percent change. There are four series, "Productivity and Costs: Current," "Productivity and Costs: Previous Tealbook," "Employment Cost Index: Current," and "Employment Cost Index: Previous Tealbook." Productivity and Costs: Current and Previous Tealbook begin at about 4.5 and generally increase together to about 7.5 in 1991. They generally decrease together to about 1 in 1995 then fluctuate but generally increase together to about 9 in 2000. They fluctuate but generally decrease together to about 0 in 2009 then fluctuate but generally increase ending at about 2. Employment Cost Index: Current and Previous Tealbook begin at about 5 and fluctuate but generally decrease together to about 2 in 1995. They generally increase together to about 5 in 1999 then generally decrease together to about 1 in 2009. They generally increase together ending at about 2.

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

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

### Figure: Long-Term Inflation Expectations

Line chart, 1990 to 2012. Unit is percent. There are two series, "Thomson Reuters/Michigan, next 5 to 10 years," and "SPF next 10 years." Thomson Reuters/Michigan, next 5 to 10 years begins at about 4 and generally increases to about 5 in 1991. It generally decreases to about 3 in 1997 then fluctuates but remains about constant until 2008. It generally increases to about 3.5 in 2009 then generally decreases to about 2.5 in 2010. It generally increases to about 3.5 in 2011 then generally decreases ending at about 3 in July 2011. SPF next 10 years begins at about 4.25 and generally decreases to about 2.5 in 1999. It fluctuates but remains about constant to end in 2011:Q2.

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.

## The Long-Term Outlook

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

Item	2010	2011	2012	2013	2014	2015
Real GDP	3.1	1.8	3.0	3.7	4.0	3.9
Civilian unemployment rate <sup>1</sup>	9.6	9.2	8.5	7.5	6.5	5.7
PCE prices, total	1.3	2.4	1.5	1.4	1.5	1.6
Core PCE prices	1.0	1.8	1.5	1.4	1.5	1.6
Federal funds rate <sup>1</sup>	.2	.1	.1	.7	1.7	3.2
10-year Treasury yield <sup>1</sup>	3.0	3.0	3.9	4.3	4.6	4.8

1. Percent, average for the final quarter of the period. [Return to table](#)

### Figure: Real GDP

Line chart, 2002 to 2015. Unit is 4-quarter percent change. There are two series, "Real GDP" and "Potential GDP." Real GDP begins at about 1.5 and generally increases to about 4 in 2003. It generally decreases to about -5 in 2009 then generally increases to about 4 in 2010. It generally decreases to about 2 in 2011 then generally increases ending at about 4. Potential GDP begins at about 3.5 and generally decreases to about 1 in 2009 then generally increases ending at about 2.5.

### Figure: Unemployment Rate

Line chart, 2002 to 2015. Unit is percent. The series begins at about 5.75 and generally increases to about 6.25 in 2003. It generally decreases to about 4.25 in 2007 then generally increases to about 10 in 2009. It generally decreases ending at about 5.75. There are two additional series, "NAIRU with EEB adjustment" and "NAIRU." NAIRU with EEB Adjustment begins at about 5 and remains about constant until 2008. It generally increases to about 7 in 2009 then generally decreases ending at about 5. NAIRU begins at about 5 and remains about constant until 2008. It generally increases to about 6 in 2010 then remains about constant until 2012. It generally decreases ending at about 5.

### Figure: PCE Prices

Line chart, 2002 to 2015. Unit is 4-quarter percent change. There are two series, "Total PCE prices," and "PCE prices excluding food and energy." Total PCE prices begins at about 1 and fluctuates but generally increases to about 3 in 2006. It generally decreases to about 2 in 2007 then generally increases to about 4.5 in 2008. It generally decreases to about -2 in 2009 then fluctuates but generally increases to about 2.5 in 2011. It generally decreases to about 1.5 in 2012 then remains about constant to the end of the timeline. PCE prices excluding food and energy begins at about 1.5 and fluctuates but generally increases to about 2.5 in 2008. It generally decreases to about 1 in 2010 then generally increases to about 2 in 2011. It generally decreases to about 1.5 then remains about constant to the end of the timeline.

### *Figure: Interest Rates*

Line chart, 2002 to 2015. Unit is percent. There are three series, "BBB Corporate," "10-year Treasury," and "Federal funds rate." BBB Corporate begins at about 7.5 and generally decreases to about 5.5 in 2004. It generally increases to about 10 in 2009 then generally decreases to about 5 in 2011. It generally increases ending at about 6.75. 10-year Treasury begins at about 5.5 and generally decreases to about 4 in 2003. It generally increases to about 5 in 2005 then generally decreases to about 3 in 2010. It generally increases ending at about 5. Federal funds rate begins at about 2 and generally decreases to about 1 in 2004. It generally increases to about 5 in 2006 then generally decreases to about 0 in 2009. It remains about constant until 2013 then generally increases ending at about 3.

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

## Evolution of the Staff Forecast

### *Figure: Change in Real GDP*

Line chart, Tealbook Publication Dates 1/22/2009 to 8/3/2011. Unit is percent, Q4/Q4. There are three series, "2010," "2011," and "2012." 2010 begins at about 2.5 and generally decreases to about 1.5 on 3/12/2009. It generally increases to about 3.5 on 12/9/2010 then generally decreases to about 2 on 9/15/2010 then generally increases ending at about 3 on 8/3/2011. 2011 begins at about 4.24 on 9/16/2009 then generally decreases to about 3 on 9/15/2010. It generally increases to about 3.75 on 1/19/2011 then generally decreases ending at about 1.5 on 8/3/2011. 2012 begins at about 4 on 9/15/2010 and generally increases to about 5 on 10/27/2010. It generally decreases ending at about 4 on 8/3/2011.

### *Figure: Unemployment Rate*

Line chart, Tealbook Publication Dates 1/22/2009 to 8/3/2011. Unit is percent, Q4/Q4. There are three series, "2010," "2011," and "2012." 2010 begins at about 8.0 and generally increases to about 10.0 on 3/12/2009. It generally decreases to about 9.5 on 4/22/2009 then fluctuates but remains about constant ending on 8/3/2011. 2011 begins at about 8.0 on 9/16/2009 and fluctuates but generally increases ending at about 9.25 on 8/3/2011. 2012 begins at about 8.0 on 9/15/2010 and generally decreases to about 7.5 on 3/9/2010. It generally increases ending at about 8.5 on 8/3/2011.

### *Figure: Change in PCE Prices excluding Food and Energy*

Line chart, Tealbook Publication Dates 1/22/2009 to 8/3/2011. Unit is percent, Q4/Q4. There are three series, "2010," "2011," and "2012." 2010 begins at about 0.75 and generally decreases to about 0.5 on 3/12/2009. It generally increases to about 1.5 on 12/9/2009 then generally decreases to about 1.0 on 6/16/2010. It generally increases to about 1.25 on 10/27/2010 then generally decreases to about 0.75 on 1/19/2011. It remains about constant until 6/15/2011 then generally increases ending at about 1.0 on 8/3/2011. 2011 begins at about 1.0 on 9/16/2009 then fluctuates but generally increases ending at about 2.0 on 8/3/2011. 2012 begins at about 1.0 and fluctuates but generally increases ending at about 1.5 on 8/3/2011.

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.

## Appendix: Annual Revision of the National Income and Product Accounts

### *Annual Revision to the National Income and Product Accounts*

#### **Figure: Real GDP**

Line chart, 2006 to 2011. Unit is billions of chained (2005) dollars. There are two series, "Revised (through 2011:Q2)" and "Previous (through 2011:Q1)." Revised begins at about 12900 and generally increases to about 13300 in 2008:Q1. It generally decreases to about 126000 in 2009:Q2 then generally increases ending at about 13300. Previous begins at about 12900 and generally increases to about 13400 in 2007:Q4. It generally decreases to about 12800 in 2009:Q2 then generally increases ending at about 13500.

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

#### **Figure: Real GDP and GDI**

Line chart, 2006 to 2011. Unit is 4-quarter percent change. There are two series, "Gross domestic product" and "Gross domestic income." Gross domestic product begins at about 3 and fluctuates but generally decreases to about -5 in 2009:Q2. It generally increases to about 4 in 2010:Q2 then generally decreases ending at about 2 in 2011:Q2. Gross domestic income begins at about 4 and generally decreases to about -6 in 2009:Q2. It generally increases to about 4 in 2010:Q2 then generally decreases ending at about 2 in 2011:Q1.

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

### Figure: Real DPI

Line chart, 2006 to 2011. Unit is 4-quarter percent change. There are two series, "Revised (through 2011:Q2)" and "Previous (through 2011:Q1)." Revised begins at about 4 and fluctuates but generally decreases to about 2 in 2007:Q4. It generally increases to about 4.5 in 2008:Q1 then generally decreases to about -4 in 2009:Q2. It generally increases to about 4 in 2010:Q3 then generally decreases ending at about 1.5. Previous begins at about 4 and fluctuates but generally decreases to about 1.5 in 2008:Q1. It generally decreases to about 4 in 2008:Q2 then generally decreases to about 0 in 2009:Q2. It generally increases ending at about 2.

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

### Figure: Personal Saving Rate

Line chart, 2006 to 2011. Unit is percent. There are two series, "Revised (through 2011:Q2)" and "Previous (through 2011:Q1)." Revised begins at about 2.5, generally increases to about 6 by 2008:Q2, and then fluctuates in a range between about 4.5 and 6 for the remainder of the period. It ends at a little more than 5. Previous begins at about 2.25, generally increases to a peak of about 7 by 2009:Q2, and then generally decreases to end at a little more than 5.

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

### Figure: Profits as a Share of GNP

Line chart, 2006 to 2011. Unit is percent. There are two series, "Revised (through 2011:Q2)" and "Previous (through 2011:Q1)." Both curves begin at about 12, and tracking one another, generally decrease to about 7 by 2008:Q4. Revised then generally increases and levels off around 12.5 to end in 2011:Q1, whereas Previous generally increases to end at about 11.5 in 2011:Q1.

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

### Figure: Real Personal Consumption Expenditures

Line chart, 2006 to 2011. Unit is 4-quarter percent change. There are two series, "Revised (through 2011:Q2)" and "Previous (through 2011:Q1)." Revised begins at about 2 and fluctuates but generally decreases to about -3 in 2009:Q2. It generally increases to about 3 in 2010:Q3. It generally decreases ending at about 2. Previous begins at about 3 and fluctuates but generally decreases to about -2 in 2009:Q2. It generally increases ending at about 3.

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

### Figure: Total PCE Prices

Line chart, 2006 to 2011. Unit is 4-quarter percent change. There are two series, "Revised (through 2011:Q2)" and "Previous (through 2011:Q1)." Revised begins at about 3 and generally decreases to about 2 in 2006:Q4. It generally increases to about 4.5 in 2008:Q3. It generally decreases to about -1 in 2009:Q3 then generally increases to about 2.5 in 2010:Q1. It generally decreases to about 1 in 2010:Q4 then generally increases ending at about 2.5. Previous runs about concurrent to the first.

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

### Figure: PCE Prices Ex. Food and Energy

Line chart, 2006 to 2011. Unit is 4-quarter percent change. There are two series, "Revised (through 2011:Q2)" and "Previous (through 2011:Q1)." Revised begins at about 2.0 and fluctuates but generally increases to about 2.5 in 2008:Q2. It fluctuates but generally decreases to about 1.0 in 2010:Q4 then generally increases ending at about 1.25. Previous runs about concurrent to the first.

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

### Figure: Market-Based PCE Prices Ex. Food and Energy

Line chart, 2006 to 2011. Unit is 4-quarter percent change. There are two series, "Revised (through 2011:Q2)" and "Previous (through 2011:Q1)." Revised begins at about 2.0 and generally increases to about 2.5 in 2006:Q4. It generally decreases to about 1.75 in 2007:Q3 then generally increases to about 2.5 in 2008:Q3. It generally decreases to about 0.5 in 2010:Q4 then generally increases ending at about 1.25. Previous runs about concurrent to the first.

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

### Figure: Productivity (Nonfarm business)

Line chart, 2006 to 2011. Unit is 4-quarter percent change. There are two series, "Revised (through 2011:Q2)" and "Previous (through 2011:Q1)." Revised begins at

about 1.5 and generally decreases to about 0 in 2007:Q1. It generally increases to about 2.5 in 2007:Q2 then generally decreases to about -1.5 in 2008:Q4. It generally increases to about 6 in 2010:Q1 then generally decreases ending at about 0.5. Previous begins at about 1.5 and generally decreases to about 0 in 2007:Q1. It generally increases to about 2.5 in 2007:Q4 then generally decreases to about -0.5 in 2008:Q4. It generally increases to about 7 in 2010:Q1 then generally decreases ending at about 1.5.

Note: Revised values are staff estimates.

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

### **Figure: Compensation per Hour (Nonfarm business)**

Line chart, 2006 to 2011. Unit is 4-quarter percent change. There are two series, "Revised (through 2011:Q2)" and "Previous (through 2011:Q1)." Revised begins at about 4 and generally decreases to about 2.5 in 2006:Q3. It generally increases to about 4.5 in 2006:Q4 then generally decreases to about 0 in 2009:Q1. It fluctuates but generally increases to about 3.5 in 2010:Q1 then generally decreases to about 1.5 in 2010:Q1. It generally increases to about 2.5 in 2011:Q1 then generally decreases ending at about 2. Previous begins at about 4 and generally decreases to about 2.5 in 2006:Q3. It generally increases to about 4.5 in 2006:Q4 then generally decreases to about 0 in 2009:Q1. It fluctuates but generally increases to about 4 in 2010:Q1 then generally decreases to about 1.5 in 2010:Q4. It generally increases ending at about 2.

Note: Revised values are staff estimates.

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

† Note: Data values for figures are rounded and may not sum to totals. [Return to text](#)

**Last update: February 3, 2017**

---

### International Economic Developments and Outlook

#### Recent Foreign Indicators

##### *Figure: Nominal Exports*

Line chart, 2007 to 2011. Unit is an index, Jan. 2007 = 100. There are three series, "Foreign," "AFE," and "EME" (excludes Venezuela). The three series begin at about 100 and generally increase together to about 135 in mid-2008. They generally decrease together to about 80 in early 2009. Foreign generally increases ending at about 140. AFE generally increases ending at about 130. EME generally increases ending at about 160.

##### *Figure: Industrial Production*

Line chart, 2007 to 2011. Unit is an index, Jan. 2007 = 100. There are three series, "Foreign," "AFE" (excludes Australia and Switzerland), and "EME" (excludes Colombia, Hong Kong, Philippines, and Venezuela). Foreign begins at about 100 and generally increases to about 105 in early 2008. It generally decreases to about 90 in early 2009 then generally increases ending at about 105. AFE begins at about 100 and generally decreases to about 85 in mid-2009. It generally increases ending at about 95. EME begins at about 100 and generally increases to about 110 in early 2008. It generally decreases to about 95 in early 2009 then generally increases ending at about 120.

##### *Figure: Retail Sales*

Line chart, 2007 to 2011. Unit is 12-month percent change. There are three series, "Foreign," "AFE" (excludes Australia and Switzerland), and "EME" (includes Brazil, China, Israel, Korea, Singapore, and Taiwan). Foreign begins at about 5 and generally decreases to about -.25. It generally increases to about 7 in early 2010 then generally decreases ending at about 2.5. AFE begins at about 4 and generally decreases to about -5 in early 2009. It generally increases to about 5 in early 2010 then generally decreases to about -.25 in early 2011. It generally increases ending at about 0. EME begins at about 6, increases immediately to about 10, and then fluctuates but generally decreases to about 4 by late 2008. It generally increases to about 11 by early 2010, and generally decreases to end at about 7.

##### *Figure: Employment*

Line chart, 2007 to 2011. Unit is 4-quarter percent change. There are three series, "Foreign," "AFE," and "EME" (excludes Argentina and Mexico). Foreign begins at about 2 and generally decreases to about -1 in mid-2009. It generally increases ending at about 2. AFE begins at about 2 and generally decreases to about -2 in mid-2009. It generally increases ending at about 1.25. EME begins at about 3 and fluctuates but generally decreases to about 0.5. It generally increases ending at about 2.75.

##### *Figure: Consumer Prices: Advanced Foreign Economies*

Line chart, 2007 to 2011. Unit is 12-month percent change. There are two series, "Headline" and "Core" (excludes all food and energy; staff calculation). Headline begins at about 1.5 and generally increases to about 3.5 in mid-2008. It generally decreases to about -1 in mid-2009 then generally increases ending at about 2.5. Core begins at about 1.5 and generally decreases to about 0.75 in mid-2010. It generally increases ending at about 1.5.

Note: Excludes Australia, Sweden, and Switzerland.

Source: Haver Analytics and CEIC.

##### *Figure: Consumer Prices: Emerging Market Economies*

Line chart, 2007 to 2011. Unit is 12-month percent change. There are three series, "Headline," "Ex. Food - East Asia\*," and "Ex. Food - Latin America." Headline begins at about 3 and generally increases to about 7 in late 2008. It generally decreases to about 1 in mid-2009 then generally increases ending at about 5.5. Ex. Food - East Asia begins at about 2 and generally increases to about 4 in late 2008. It generally decreases to about -2 in mid-2009 then generally increases ending at about 2. Ex. Food - Latin American begins at about 4 and generally increases to about 6 in late 2008. It generally decreases to about 4 in late 2009 then generally decreases ending at about 3.

### The Foreign Outlook

(Percent change, annual rate)

2010

2011

	2012						
	H1	Q3	Q4	Q1	Q2	H2	
<b>Real GDP</b>							
Total foreign	5.2	3.4	3.4	4.2	2.2	3.5	3.4
Previous Tealbook	5.2	3.5	3.4	4.2	2.8	3.7	3.6
Advanced foreign economies	3.5	2.3	1.4	2.4	.7	2.3	2.1
Previous Tealbook	3.5	2.3	1.4	2.4	1.4	2.4	2.3
Emerging market economies	7.1	4.7	5.5	6.2	3.9	4.8	4.7
Previous Tealbook	7.1	4.7	5.5	6.2	4.4	5.2	4.9
<b>Consumer Prices</b>							
Total foreign	2.6	2.5	5.3	4.3	3.2	2.4	2.4
Previous Tealbook	2.6	2.4	5.3	4.4	2.9	2.4	2.4
Advanced foreign economies	1.2	1.1	3.5	3.3	2.2	1.0	1.4
Previous Tealbook	1.2	1.1	3.5	3.3	2.4	1.3	1.4
Emerging market economies	3.7	3.5	6.6	5.1	4.0	3.4	3.2
Previous Tealbook	3.7	3.5	6.7	5.2	3.3	3.3	3.1

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

### Figure: Real GDP [Total Foreign]

Line chart, 2008 to 2012. Unit is percent change, annual rate. There are two series, "Current" and "Previous Tealbook." The series begin at about 2.5 and generally decrease together to about -10 in early 2009. They generally increase together to about 5 in late 2009 and remain about constant to the end of the timeline.

### Figure: Real GDP [Emerging Market Economies and Advanced Foreign Economies]

Line chart, 2008 to 2012. Unit is percent change, annual rate. There are four series, "Emerging Market Economies: Current," "Emerging Market Economies: Previous Tealbook," "Advanced Foreign Economies: Current," and "Advanced Foreign Economies: Previous Tealbook." Emerging Market Economies: Current and Previous Tealbook begin at about 5 and generally decrease together to about -10 in early 2009. They generally increase together to about 10 in late 2009 then generally decrease together to about 5 in mid-2011. They remain about constant to the end of the timeline. Advanced Foreign Economies: Current and Previous Tealbook begin at about 0.25 and generally decrease together to about -10 in early 2009. They generally increase together to about 4 in early 2010 then generally decrease together to about 2.5 in early 2011. They remain about constant to the end of the timeline.

### Figure: Consumer Prices [Total Foreign]

Line chart, 2008 to 2012. Unit is percent change, annual rate. There are two series, "Current" and "Previous Tealbook." The series begin at about 5 and generally decrease together to about -1 in early 2009. They generally increase together to about 6 in late 2010 then generally decrease together to about 2 in late 2011. They remain about constant to the end of the timeline.

### Figure: Consumer Prices [Emerging Market Economies and Advanced Foreign Economies]

Line chart, 2008 to 2012. Unit is percent change, annual rate. There are four series, "Emerging Market Economies: Current," "Emerging Market Economies: Previous Tealbook," "Advanced Foreign Economies: Current," and "Advanced Foreign Economies: Previous Tealbook." Emerging Market Economies: Current and Previous Tealbook begin at about 7 and generally decrease together to about 0 in early 2009. They generally increase together to about 6.5 in late 2010 then generally decrease together to about 3 in late 2011. They remain about constant until the end of the timeline. Advanced Foreign Economies: Current and Previous Tealbook begin at about 3 and generally decrease together to about -2 in late 2008. They generally increase together to about 4 in late 2010 then generally decrease together to about 0 in mid-2011. They generally increase together to about 1.5 in late 2011 then remain about constant to the end of the timeline.

Note: Blue shading represents the projection period, which begins in 2011:Q2.

## Evolution of Staff's International Forecast

### Figure: Total Foreign GDP

Line chart, Tealbook Publication Dates 1/22/2009 to 8/3/2011. Unit is percent change, Q4/Q4. There are three series, "2010," "2011," and "2012." 2010 begins at about 3 and generally decreases to about 2 on 3/12/2009. It generally increases ending at about 4.25. 2011 begins at about 4 on 9/16/2009 and generally decreases ending at about 3. 2012 begins at about 3.5 on 9/15/2010 and fluctuates only slightly until it ends.

*Figure: Total Foreign CPI*

Line chart, Tealbook Publication Dates 1/22/2009 to 8/3/2011. Unit is percent change, Q4/Q4. There are three series, "2010," "2011," and "2012." 2010 begins at about 2.0 and generally decreases to about 1.5 on 3/12/2009. It generally increases to about 2.5 on 4/21/2010 then generally decreases to about 2.0 on 8/4/2010. It generally increases ending at about 3.25. 2011 begins at about 1.5 on 9/16/2009 then generally increases ending at about 2.0. 2012 begins at about 2.0 on 9/15/2011 and generally increases ending at about 2.5.

*Figure: U.S. Current Account Balance*

Line chart, Tealbook Publication Dates 1/22/2009 to 8/3/2011. Unit is percent change, Q4/Q4. There are three series, "2010," "2011," and "2012." 2010 begins at about -2.5 and generally decreases to about -4 on 4/22/2009. It fluctuates but generally increases ending at about -3. 2011 begins at about -3 on 9/16/2009 and fluctuates only slightly until it ends. 2012 begins at about -3 on 9/15/2010 then generally increases to about -2 on 6/15/2011. It generally decreases ending at about -2.25.

† Note: Data values for figures are rounded and may not sum to totals. [Return to text](#)

**Last update: February 3, 2017**

---

## August 2011 Tealbook A Tables and Charts<sup>‡</sup>

### Financial Developments

#### Effects of U.S. Fiscal Stresses on U.S. Financial Markets

##### *Figure: U.S. CDS Spreads*

Line chart, January 2010 to August 2, 2011. Unit is basis points. Data are daily. The June 2011 FOMC meeting is marked by a vertical line. There are two series, "5-year" and "1-year." 5-Year begins at about 40 and generally increases to about 60 around March 2010. It generally decreases to about 35 in April 2010 then fluctuates but generally increases ending at about 60. 1-year begins at about 20 and generally increases to about 40 around March 2010. It generally decreases to about 10 around April 2010 then fluctuates but generally increases to about 80 in July 2011. It generally decreases ending at about 40.

Source: Markit.

##### *Figure: Treasury Bill Yields over Projected Breach Date*

Line chart, March 2011 to August 2, 2011. Unit is basis points. Data are daily. The June 2011 FOMC meeting is marked by a vertical line. There are two series, "August 4" and "August 18." August 4 begins at about 15 and generally decreases to about 0 in July. It fluctuates but generally increases to about 25 in August. It generally decreases ending at about 5. August 18 begins at about 15 and generally decreases to about 0 around July. It generally increases to about 20 in August then generally decreases ending at about 5.

Source: Federal Reserve Bank of New York.

##### *Figure: Net Flows to Institutional MMMFs*

Bar chart, January 2010 to July 2011. Unit is billions of dollars. Data are monthly. Approximate data are: January 2010, -70; February 2010, -65; March 2010, -120; April 2010, -90; May 2010, -30; June 2010, -15; July 2010, 10; August 2010, 30; September 2010, -25; October 2010, 15; November 2010, 30; December 2010, -30; January 2011, -60; February 2011, 25; March 2011, -10; April 2011, 30; May 2011, -10; June 2011, -50; July 2011, -120.

Note: MMMFs are money market mutual funds.

Source: Investment Company Institute and iMoneyNet.

##### *Figure: Recent Net Flows to Taxable Institutional MMMFs*

Stacked bar chart, July 5 to August 1. Unit is billions of dollars. Data are daily. There are two series, "Prime" and "Government." Prime begins at about -4 and generally increases to about 7 on July 6. It generally decreases to about -4 on July 10 then generally increases to about 0 on July 13. It generally decreases to about -20 on July 16 then generally increases to about 1 on July 21. It generally decreases to about -30 on July 30 then generally increases ending at about -20. Government begins at about -1 and generally increases to about 3 on July 6. It generally decreases to about 2 on July 10 then generally increases to about 8 on July 12. It generally decreases to about -2 on July 16 then generally increases to about 1 on July 21. It generally decreases to about -20 on July 30 then generally increases ending at about -10.

Note: MMMFs are money market mutual funds.

Source: Investment Company Institute and iMoneyNet.

##### *Figure: Overnight GC Repo Rate*

Line chart, March 2011 to August 2, 2011. Unit is basis points. Data are daily. The June FOMC meeting is marked by a vertical line. The series begins at about 14 and generally increases to about 17 in late April. It generally decreases to about 0 in early April then generally increases to about 16 in mid-April. It generally decreases to about 0 in early May then fluctuates but generally increases to about 10 in mid-June. It generally decreases to about 0 in early July then remains about constant until late July. It generally increases to about 27 in late July then generally decreases ending at about 20.

Note: A GC repo is a repurchase agreement backed by general collateral.

Source: Federal Reserve Bank of New York.

##### *Figure: Bid-Asked Spreads on Overnight GC Repos*

Line chart, March 2011 to July 27, 2011. Unit is basis points. Data are weekly. The June FOMC meeting is marked by a vertical line. The series begins at about 4.9 and fluctuates but generally decreases to about 2.6 in early April. It generally increases to about 4.0 in mid-June then generally decreases to about 2.5 in mid-July. It generally increases ending at about 3.4.

Note: A GC repo is a repurchase agreement backed by general collateral.

Source: Federal Reserve Bank of New York.

## [Box:] The European Fiscal Crisis and U.S. Asset Prices

### *Figure: Unsecured Financial Commercial Paper Outstanding in the U.S. Market*

Line chart, March 2010 to August 2, 2011. Unit is billions of dollars. Data are daily. The June FOMC meeting is marked by a vertical line. There are four series, "United States," "France," "Germany," and "Italy, Spain." United States begins at about 100 and generally decreases to about 90 in September 2010. It generally increases to about 110 in April 2010 then generally decreases ending at about 90. France begins at about 90 and generally decreases to about 50 in July 2010. It generally increases to about 90 in May 2011 then generally decreases ending at about 50. Germany begins at about 50 and generally increases to about 60 in May 2010. It generally decreases to about 40 in October 2010 then generally increases to about 50 in December 2010. It generally decreases ending at about 40. Italy, Spain begins at about 60 and fluctuates but generally decreases ending at about 0.

Source: Federal Reserve Board based on data from the Depository Trust and Clearing Corporation.

### *Figure: 30-Day Spreads on AA-Rated Unsecured Financial CP Issued in the U.S. Market*

Line chart, March 2010 to August 2, 2011. Unit is basis points. Data are daily 5-day moving averages of spreads computed over the AA nonfinancial unsecured rate. There are four series, "United States," "France," "Germany," and "Italy, Spain." United States begins at about 0 and generally increases to about 10 in June 2010. It fluctuates but generally decreases to about -10 in December 2010 then generally increases to about 0 in January 2011. It generally decreases to about -10 in June 2011 then generally increases to about 0 in July 2011. It generally decreases ending at about -5. France begins at about 0 and generally increases to about 30 in June 2010. It generally decreases to about 0 in September 2010 then generally increases to about 20 in October 2010. It generally decreases to about 0 in April 2011 then fluctuates but generally increases ending at about 15. Germany begins at about 0 and generally increases to about 10 in May 2010. It generally decreases to about -10 in November 2010 then fluctuates but generally increases to about 10 in May 2011. It generally decreases to about 0 in June 2011 then generally increases to about 10 in July 2011. It generally decreases ending at about 5. Italy, Spain begins at about 10 then generally increases to about 40 in August 2010. It generally decreases to about 5 in October 2010 then generally increases to about 40 in March 2011. It generally decreases to about 15 in May 2011 then generally increases ending at about 40.

Source: Federal Reserve Board based on data from the Depository Trust and Clearing Corporation.

### *Figure: Covariance of U.S. Stock Return with European CDS Premium*

Line chart, January 2010 to August 2, 2011. Unit is an index. Data are daily average percent change in the CDS premiums on 5-year foreign currency sovereign debt of Portugal, Italy, Ireland, Greece, and Spain. There are two series, "S&P 500 Index Covariance," and "S&P Financials Covariance." S&P 500 Index Covariance begins at about 0.00 and fluctuates but generally decreases to about -0.36 in early May 2010 (marked by a vertical line, "EU/IMF approves € 750 billion package"). It generally increases to about 0 in mid-November 2010 then generally decreases ending at about -0.06. S&P Financials covariance begins at about 0.00 and fluctuates but generally decreases to about -0.48 in early May 2010. It generally increases to about 0.00 in early November 2010 then generally decreases ending at about -0.12.

Note: One-day stock return is used to construct exponentially weighted moving-average covariance with 1-day percent change in the CDS premium, with 75 percent of weight distributed over the most recent 22 days.

Source: Staff calculations.

### *Figure: Covariance of 10-year Treasury Yield with European CDS Premium*

Line chart, January 2010 to August 2, 2011. Unit is an index. Data are daily average percent change in the CDS premiums on 5-year foreign currency sovereign debt of Portugal, Italy, Ireland, Greece, and Spain. The series begins at about 0.000 and remains about constant until late March 2010. It generally decreases to about -0.015 in early May 2010 (marked by a vertical line, "EU/IMF announce € 750 billion package"), then generally increases to about 0.000 in late October 2010. It generally decreases to about -0.005 in late November 2010 (preceded by a vertical line, "EU/IMF announce Ireland package"). It generally increases to about 0.000 in early June 2011 then generally decreases ending at about -0.005.

Note: One-day bond yield is used to construct exponentially weighted moving-average covariance with 1-day percent change in the CDS premium, with 75 percent of weight distributed over the most recent 22 days.

Source: Staff calculations.

## Policy Expectations and Treasury Yields

### *Figure: Selected Interest Rates*

Line chart, June 20 to August 2. Unit is percent. There are two series, "June 2013 Eurodollar" and "10-Year Treasury yield." June 2013 Eurodollar begins at about 1.4 and generally decreases to about 1.25 around Jun 23. It generally increases to about 1.75 on July 1. It fluctuates but generally decreases ending at about 0.9. 10-year Treasury yield begins at about 2.9 and generally increases to about 3.0 on June 23. It generally decreases to about 2.85 around June 24. It generally increases to about 3.2 on July 1. It fluctuates but generally decreases ending at about 2.65.

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, 2011:Q3 to 2013:Q3. Unit is percent. There are four series, "Mean: August 2, 2011," "Mean: June 21, 2011," "Mode: August 2, 2011," and "Mode: June 21, 2011." Mean: August 2, 2011 begins at about 0.1 and remains about constant until 2012:Q4. It generally increases ending at about 0.4. Mean: June 21, 2011 begins at about 0.1 and remains about constant until 2012:Q3. It generally increases ending at about 1.0. Mode: August 2, 2011 begins at about 0.0 and remains about constant to the end of the timeline. Mode: June 21, 2011 begins at about 0.0 and remains about constant until 2011:Q2. It generally increases ending at about 0.5.

Note: Mean is estimated from federal funds and Eurodollar futures. Mode is estimated from distribution of federal funds rate implied by interest rate caps. Mean, but not mode, includes an allowance for term premiums.

Source: Bloomberg and CME Group.

### *Figure: Distribution of the Quarter of First Rate Increase from the Desk's Dealer Survey*

Bar chart, 2011:Q3 to 2013:Q3 or later. Unit is percent. The series is "Recent: 19 respondents." It begins at about 0 and generally increases to about 20 in 2012:Q4. It generally decreases to about 12 in 2013:Q2. It increases ending at about 18. There is a second series presented as a line chart showing "June FOMC: 20 respondents." It begins at about 1 and generally increases to about 20 in 2012:Q1. It generally decreases ending at about 10 in 2013:Q2 or later.

Note: For the June FOMC meeting, the probability reported in the 2013:Q2 bin corresponds to the probability that the first policy rate hike will occur in 2013:Q2 or later.

Source: Desk's Dealer Survey from August 1, 2011.

### *Figure: Long-Term Interest Rate Implied Volatility*

Line chart, January 2010 to August 2, 2011. Unit is percent. Data are daily. The series begins at about 7 and generally decreases to about 5 in March 2010. It generally increases to about 8.25 in May 2010 then fluctuates but generally decreases to about 6 in August 2010. It fluctuates but generally increases to about 9.5 in December 2010 then generally decreases to about 6 in May 2011. It generally increases to about 8 in July 2011 then generally decreases ending at about 7.

Note: Derived from options on 10-year Treasury note futures.

Source: Bloomberg.

### *Figure: Inflation Compensation*

Line chart, 2007 to August 2, 2011. Unit is percent. Data are daily. There are two series, "5 to 10 years ahead" and "Next 5 years" (adjusted for the indexation-lag (carry) effect). 5 to 10 years ahead begins at about 2.5 and generally increases to about 4 in 2008:Q4. It generally decreases to about 2 in 2009:Q1 then generally increases to about 3.5 in 2010:Q1. It generally decreases to about 2 in 2010:Q3 then generally increases ending at about 3.25. Next 5 years begins at about 2.25 and remains about constant until 2008:Q3. It generally decreases to about -2 in 2008:Q4 then fluctuates but generally increases ending at about 2.

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

Source: Barclays PLC and staff estimates.

## Asset Market Developments

### *Figure: Selected Stock Price Indexes*

Line chart, January 2010 to August 2, 2011. Unit is log scale. Data are daily. There are two series, "S&P 500" and "S&P 500 Diversified Financials." S&P 500 begins at about 90 and generally decreases to about 80 in February 2010. It generally increases to about 95 in May 2010 then generally decreases to about 80 in July 2010. It fluctuates but generally increases to about 105 in April 2011 then generally decreases to about 95 in June 2011. It generally increases to about 105 in July 2011 then generally decreases ending at about 95. S&P 500 Diversified Financials begins at about 100 and generally decreases to about 85 in February 2010. It generally increases to about 110 in April 2010 then fluctuates but generally decreases to about 80 in September 2010. It generally increases to about 110 in February 2011 then generally decreases ending at about 85.

Source: Bloomberg.

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

Line chart, 2007 to August 2, 2011. Unit is percent, log scale. Data are daily. The series begins at about 0 and fluctuates but generally increases to about 80 in 2008:Q4. It generally decreases to about 15 in 2010:Q2 then generally increases to about 50 in 2010:Q3. It fluctuates but generally decreases to about 15 in 2011:Q1 then generally increases to about 35 in 2011:Q1. It generally decreases to about 15 in 2011:Q2 then generally increases ending at about 30.

Source: Chicago Board Options Exchange.

### *Figure: Equity Risk Premium*

Line chart, 1990 to August 2, 2011. Unit is percent. Data are monthly. The end of the series are marked with a + which denotes the latest observation using daily interest rates and stock prices and latest earnings data from I/B/E/S. There are two series, "Expected 10-year real equity return" and "Expected real yield on 10-year Treasury" (off-the-run 10-year Treasury yield less Philadelphia Fed 10-year expected inflation). Expected 10-year real equity return begins at about 8 and generally increases to about 10 in 1992. It fluctuates but generally decreases to about 2 in 1999 then fluctuates but generally increases to about 12 in 2008. It generally decreases to about 8 in 2009 then generally increases to about 10 in 2010. It generally decreases ending at about 8. Expected real yield on 10-year Treasury begins at about 4.5 and generally decreases to about 2 in 1994. It generally increases to about 4 in 1994 then generally decreases to about 2 in 1998. It generally increases to about 4 in 2000 then fluctuates but generally decreases ending at about 0.

Source: Thomson Financial.

### *Figure: Corporate Bond Spreads*

Line chart, 2007 to August 2, 2011. Unit is basis points. Data are daily. There are two series, "10-year high-yield" and "10-year BBB." 10-year high-yield begins at about 250 and fluctuates but generally increases to about 1750 in 2009:Q1. It fluctuates but generally decreases ending at about 500. 10-year BBB begins at about 100 and fluctuates but generally increases to about 650 in 2008:Q4. It generally decreases ending at about 250.

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

Source: Merrill Lynch and staff estimates.

### *Figure: Libor over OIS Spreads*

Line chart, from June 2009 to August 3, 2011. Unit is basis points. Data are daily. There are three series, "1-month," "3-month," and "6-month." 1-month begins at about 10 and generally decreases to about 5 in 2010:Q1 then generally increases to about 14 in 2010:Q2. It generally decreases to about 5 in 2010:Q4 then generally increases ending at about 10. 3-month begins at about 45 and generally decreases to about 10 in 2010:Q1. It generally increases to about 35 in 2010:Q3 then generally decreases to about 10 in late 2010:Q3. It generally increases ending at about 20. 6-month begins at about 100 and generally decreases to about 20 in 2010:Q1. It generally increases to about 60 in 2010:Q3 then generally decreases ending at about 30.

Note: OIS is an overnight index swap.

Source: British Bankers' Association and Prebon.

### *Figure: Spreads on 30-Day Commercial Paper*

Line chart, April 2009 to August 2, 2011. Unit is basis points. Data are 5-day moving averages. The end of the series are marked by a + which denotes the latest available single-day observation. There are two series, A2/P2 and ABCP. A2/P2 begins at about 100 and generally decreases to about 10 in February 2010. It generally increases ending at about 25. ABCP begins at about 40 and generally decreases to about 0 in May 2010. It generally increases to about 25 in June 2010 then generally decreases ending at about 10.

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.

Source: Depository Trust & Clearing Corporation.

## Foreign Developments

### *Figure: Euro-Area 10-Year Government Bond Spreads*

Line chart, 2010 to August 3, 2011. Unit is percentage points. Data are daily. There are five series, "Greece," "Portugal," "Spain," "Ireland," and "Italy." Greece begins at about 2 and generally increases to about 10 in early 2010:Q2. It generally decreases to about 4 in mid-2010:Q2. It fluctuates but generally increases to about 16 in early 2011:Q4. It generally decreases ending at about 12. Portugal begins at about 1 and fluctuates but generally increases to about 10 in late 2011:Q3. It generally decreases ending at about 8. Spain begins at about 1 and fluctuates but generally increases ending at 4. Ireland begins at about 1.5 and fluctuates but generally increases to about 12 in early 2011:Q4. It generally decreases ending at about 8. Italy begins at about 1 and fluctuates but generally increases ending at about 4.

Note: Spread over German bunds.

Source: Bloomberg.

### *Figure: Euro-Area Stock Price Indexes*

Line chart, 2010 to August 3, 2011. Unit is an index, January 1, 2010 = 100. Data are daily. There are two series, "DJ Euro" and "DJ Euro Banks." DJ Euro begins at about 100 and generally decreases to about 90 in mid-2010:Q1. It generally increases to about 105 in early 2010:Q2 then generally decreases to about 85 in late 2010:Q2. It fluctuates but generally increases to about 110 in early 2011:Q1 then generally decreases ending at about 90. DJ Euro Banks begins at about 100 and generally decreases to about 80 in mid-2010:Q1. It generally increases to about 100 in early 2010:Q2. It generally decreases to about 70 in late 2010:Q2 then generally increases to about 90 in early 2010:Q3. It generally decreases to about 65 in early 2011:Q1 then generally increases to about 90 in late 2011:Q1. It generally decreases ending at about 60.

Source: Bloomberg.

### *Figure: Stock Price Indexes*

Line chart, 2010 to August 3, 2011. Unit is an index, January 1, 2010 = 100. Data are daily. There are three series, "Topix," "FTSE," and "MSCI Emerging Markets." Topix begins at about 105 and generally decreases to about 100 in late 2010:Q1. It generally increases to about 110 in early 2010:Q2 then generally decreases to about 90 in mid-2010:Q4. It generally increases to about 110 in mid-2011:Q1 then generally decreases to about 85 in late 2011:Q1. It generally increases to about 95 in late 2011:Q1 then generally decreases to about 90 in late 2011:Q3. It generally increases to about 95 in early 2011:Q4 then generally decreases ending at about 90. FTSE begins at about 100 and generally decreases to about 92 in mid-2010:Q1. It generally increases to about 110 in early 2010:Q2. It generally decreases to about 90 in early 2010:Q3 then fluctuates but generally increases to about 110 in late 2011:Q3. It generally decreases ending at about 105. MSCI Emerging Markets begins at about 100 and generally decreases to about 90 in mid-2010:Q1. It generally increases to about 105 in early 2010:Q1 then generally decreases to about 85 in mid-2010:Q2. It fluctuates but generally increases to about 120 in early 2011:Q2 then generally decreases ending at about 115.

Source: Bloomberg.

### *Figure: Nominal 10-Year Government Bond Yields*

Line chart, 2010 to August 3, 2011. Unit is percent. Data are daily. There are three series, "Germany," "United Kingdom," and "Japan." Germany begins at about 3.5 and generally decreases to about 2 in late 2010:Q3. It generally increases to about 3.5 in early 2011:Q2 then generally decreases ending at about 2.5. United Kingdom begins at about 4 and generally decreases to about 3 in late 2010:Q3. It generally increases to about 4 in mid-2011:Q2 then generally decreases ending at about 2.75. Japan begins at about 1.5 and generally decreases to about 1 in early 2010:Q4. It fluctuates but remains about constant to the end of the timeline.

Source: Bloomberg.

### *Figure: Nominal Trade-Weighted Dollar Indexes*

Line chart, 2010 to August 2, 2011. Unit is an index, January 1, 2010 = 100. Data are daily. There are three series, "Broad," "Major," and "OITP" (other important trading partners). Broad begins at about 100 and generally increases to about 105 in late 2010:Q2. It generally decreases to about 95 in early 2010:Q3 then generally increases to about 100 in late 2010:Q4. It fluctuates but generally decreases ending at about 93. Major begins at about 100 and fluctuates but generally increases to about 110 in late 2010:Q2. It fluctuates but generally decreases ending at about 92. OITP begins at about 100 and generally increases to about 103 in 2010:Q1. It generally decreases to about 97 in early 2010:Q2 then generally increases to about 100 in late 2010:Q2. It generally decreases ending at about 93.

Source: Federal Reserve Board and Bloomberg.

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

Bar chart, 2009 to 2011. Unit is billions of dollars, annual rate. There are two series, "Official" and "Private." Approximate values are: 2009, Official 550, Private -25; 2010:H1, Official 250, Private 350; 2010:H2, Official, 555, Private 200; 2011:Q1, Official 150, Private 0; April 2011, Official 500, Private -350; May 2011, Official 350, Private -40; June 2011, Official -25, Private -200.

Note: Private net purchases in 2011:Q1 were \$3.2 billion.

Source: Treasury International Capital data adjusted for staff estimates.

## Business Finance

### *Figure: Selected Components of Net Debt Financing, Nonfinancial Firms*

Stacked bar chart, 2007 to 2011. Unit is billions of dollars. Data are monthly rate. There are three series, "Bonds," "C&I Loans" (period-end basis, seasonally adjusted), and "Commercial paper" (period-end basis, seasonally adjusted). There is a fourth series presented as a line chart that sums the total of the other series. Approximate values are: 2007: Bonds 25, C&I Loans 20, Commercial Paper 0, Total 45; 2008: Bonds 18, C&I Loans 5, Commercial Paper 2, Total 25; 2009: Bonds 35, C&I Loans -23, Commercial Paper -12, Total 0; 2010:H1: Bonds 30, C&I Loans -20, Commercial Paper 10, Total 20; 2010:H2: Bonds 41, C&I Loans 2, Commercial Paper 0, Total 43; 2011:Q1: Bonds 30, C&I Loans 6, Commercial Paper 4, Total 40; 2011:Q2: Bonds 18, C&I Loans 2, Commercial Paper 4, Total 45; July 2011 (estimate): Bonds 18, C&I Loans 2, Commercial Paper 15, Total 35.

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

### *Figure: Institutional Leveraged Loan Issuance*

Bar chart, 2007 to 2011. Unit is billions of dollars. Data are quarterly rate. Approximate values are: 2007: 100; 2008: 25; 2009: 20; 2010:H1: 40; 2010:H2: 60; 2011:Q1: 115; 2011:Q2: 90.

Source: Reuters Loan Pricing Corporation.

### *Figure: Selected Components of Net Equity Issuance, Nonfinancial Firms*

Stacked bar chart, 2007 to 2011. Unit is billions of dollars. Data are monthly rate. There are four series, "Public issuance," "Private issuance," "Repurchases," and "Cash Mergers." There is a fifth series presented as a line chart that sums the total of the others. Approximate values are: 2007: Public Issuance 10, Private Issuance 15, Repurchases -45, Cash Mergers -40, Total -60; 2008: Public Issuance 9, Private Issuance 16, Repurchases -30, Cash Mergers -10, Total -15; 2009: Public Issuance 5, Private Issuance 10, Repurchases -10, Cash Mergers -5, Total 0; 2010:H1: Public Issuance 2, Private Issuance 6, Repurchases -20, Cash Mergers -8, Total -20; 2010:H2: Public Issuance 3, Private Issuance 6, Repurchases -25, Cash Mergers -8, Total -24; 2011:Q1: Public Issuance 1, Private Issuance 6,

Repurchases -32, Cash Mergers -10, Total -35; 2011:Q2 (estimate): Public Issuance 4, Private Issuance 6, Repurchases -35, Cash Mergers -10, Total -35.

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, 2000 to 2011:Q2 (estimate). Unit is dollars per share. Data are quarterly. The series begins at about 14 and generally decreases to about 10 in late 2001. It generally increases to about 24 in mid-2007 then generally decreases to about 5 in late 2008. It generally increases ending at about 24.

Note: Data are seasonally adjusted by Board staff.

Source: Thomson Financial.

### *Figure: Bond Ratings Changes of Nonfinancial Firms*

Bar chart, 1990 to July 2011. Unit is percent of outstandings. Data are annual rate. There are two series, "Upgrades" and "Downgrades." Upgrades begins at about 10 and generally increases to about 18 in 1991. It generally decreases to about 8 in 1994 then generally increases to about 20 in 1995. It generally decreases to about 10 in 1997 then generally increases to about 18 in 1998. It generally decreases to about 0 in 2002 then generally increases to about 10 in 2007. It generally decreases to about 5 in 2008 then generally increases to about 18 in 2011:Q2. It generally decreases ending at about 10. Downgrades begins at about 30 and generally increases to about 40 in 1992. It generally decreases to about 10 in 1998 then generally increases to about 35 in 2002. It generally decreases to about 10 in 2004 then generally increases to about 18 in 2006. It generally decreases to about 0 in 2007 then generally increases to about 18 in 2009. It generally decreases ending at about 0.

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

### *Figure: Delinquency Rates on Commercial Mortgages on Existing Properties*

Line chart, 1996 to 2011. Unit is percent. There are two series, "CMBS" and "At commercial banks" (excluding farmland). CMBS begins at about 0 in 1999 then generally increases to about 2 in 2003. It generally decreases to about 0 in 2008 then generally increases to about 10 in 2010. It generally decreases ending at about 9.5 in June 2011. At commercial banks begins at about 3 and generally decreases to about 1 in 2005. It generally increases to about 6 in 2010 then generally decreases ending at about 5 in 2011:Q1.

Note: CMBS are commercial mortgage-backed securities. All series are seasonally adjusted.

Source: Citigroup; Call Report.

## Household Finance

### *Figure: Mortgage Rate and MBS Yield*

Line chart, 2007 to 2011. Unit is percent. Data are weekly. There are two series, "30-year conforming fixed mortgage rate" and "MBS Yield." 30-year conforming fixed mortgage rate begins at about 6.5 and generally increases to about 6.6 in 2007:Q2. It generally decreases to about 5.5 in 2008:Q1 then generally increases to about 6.5 in 2008:Q3. It fluctuates but generally decreases to about 4.3 in 2010:Q4 then generally increases to about 5.3 in 2011:Q1. It generally decreases to about 4.5 on July 27, 2011. MBS Yield begins at about 5.5 and generally increases to about 6.5 in 2007:Q3. It generally decreases to about 4.6 in 2008:Q1 then generally increases to about 6.0 in 2008:Q4. It generally decreases to about 3.5 in 2009:Q1 then generally increases to about 4.7 in 2009:Q2. It generally decreases to about 3.4 in 2010:Q4 then generally increases to about 4.5 in 2011:Q1. It generally decreases ending at about 3.5 on August 2, 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, 2002 to July 29, 2011. Unit is an index, March 16, 1990 = 100. There are two series, "Purchase Index" and "Refi Index." Purchase index begins at about 300 and generally increases to about 500 in late 2005. It fluctuates but generally decreases ending at about 200. Refi index begins at about 2000 and generally increases to about 11000 in early 2003. It generally decreases to about 2000 in early 2006. It fluctuates but generally increases to about 6000 in early 2009 then generally decreases to about 2000 in mid-2008. It generally increases to about 5500 in mid-2010 then generally decreases to about 2000 in early 2011. It generally increases ending at about 3000.

Note: Seasonally adjusted by FRB staff.

Source: Mortgage Bankers Association.

### *Figure: Prices of Existing Homes*

Line chart, 2005 to 2011. Unit is an index, peaks normalized to 100. Data are monthly. There are three series, "FHFA," "CoreLogic," and "20-city S&P/Case-Shiller." FHFA begins at about 90 and generally increases to about 100 in late 2007. It generally decreases ending at about 80 in May 2011. CoreLogic begins at about 90 and generally increases to about 100 in early 2006. It generally decreases ending at about 70 in June 2011. 20-city S&P/Case-Shiller begins at about 85 and generally increases to about 100 in early 2006. It generally decreases to about 70 in mid-2009 then fluctuates but remains about constant ending in May 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, 2003 to June 2011. Unit is percent of loans. Data are monthly. There is one series, "Transition rate." The series begins at about 1.1 and generally increases to about 1.3 in early 2003. It fluctuates but generally decreases to about 0.8 in late 2005. It generally increases to about 1.7 in late 2008 then fluctuates but generally decreases ending at about 1.2.

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, 2004 to May 2011. Unit is percent change, annual rate. Data are 3-month moving averages. There are two series, "Nonrevolving" and "Revolving." Nonrevolving begins at about 6 and generally decreases to about 4 in late 2004. It generally increases to about 9 in early 2005 then fluctuates but generally decreases to about -2 in early 2009. It fluctuates but generally increases to about 7 in late 2010 then generally decreases ending at about 4. Revolving begins at about 3 and generally decreases to about 1 in late 2004. It generally increases ending at about 8 in late 2004. It generally decreases to about 3 in late 2005 then generally increases to about 10 in late 2007. It generally decreases to -12 in early 2010 then generally increases ending at about 2.

Source: Federal Reserve Board.

### *Figure: Gross Consumer ABS Issuance*

Stacked bar chart, 2006 to 2011. Unit is billions of dollars. Data are monthly rate. There are three series, "Student Loan," "Credit Card," and "Auto." Approximate data are: 2006: Auto 7, Credit card 5, Student Loan 7; 2007: Auto 6, Credit card 8, Student Loan 4; 2008:H1: Auto 5, Credit card 8, Student loan 4; 2008:H2: Auto 1, Credit card 2, Student loan 1; 2009:H1: Auto 7, Credit card 7, Student Loan 3; 2009:H2: Auto 10, Credit card 6, Student Loan 4; 2010:H1: Auto 5, Credit card 1, Student loan 2; 2010:H2: Auto 4, Credit Card 1, Student Loan 2; 2011:Q1: Auto 4, Credit card 1, Student Loan 2; 2011:Q2: Auto 4, Credit Card 2, Student Loan 3; July 2011: Auto 5, Credit Card 0; Student Loan 3.

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

## Commercial Banking and Money

### *Figure: Changes in Bank Credit*

Line chart, 2005 to July 2011 (estimate). Unit is percent. Data are 3-month change, a.r. There are two series, "Total Bank Credit" and "Consumer Loans." Total bank credit begins at about 10 and generally increases to about 13 in 2005:Q1. It generally decreases to about 5 in 2005:Q3 then generally increases to about 12 in 2006:Q3. It generally decreases to about 5 in 2005:Q4 then generally increases to about 14 in 2007:Q4. It generally decreases to about -2 in 2008:Q2 then generally increases to about 10 in 2008:Q4. It generally decreases to about -12 in 2009:Q4 then generally increases to about 2 in 2010:Q4. It generally decreases to about -1 in 2011:Q1 then generally increases ending at about 0. Consumer loans begins at about 0 and generally increases to about 7 in 2005:Q4. It generally decreases to about -1 in 2005:Q4 then generally increases to about 7 in 2006:Q2. It generally decreases to about 0 in 2006:Q3 then generally increases to about 8 in 2008:Q3. It fluctuates but generally decreases to about -8 in 2009:Q4 then generally increases ending at about 5.

Source: Federal Reserve Board, Statistical Release H.8, "Assets and Liabilities of Commercial Banks in the United States."

### *Figure: Changes in Standards and Demand for Bank Loans*

Line chart, 1990 to July 2011. Unit is an index. Data are quarterly. There are two series, "Standards" and "Demand." Standards begins at about 0.6 and generally decreases to about -0.2 in 1993:Q3. It fluctuates but generally increases to about 0.4 in 2001:Q1 then generally decreases to about -0.2. It generally increases to about 1.0 in 2009:Q1 then generally decreases ending at about -0.2. Demand begins at about -0.2 and generally increases to about 0.3 in 1994:Q4. It generally decreases to about -0.1 in 1995:Q1 then fluctuates but generally increases to about 0.4 in 1998:Q4. It generally decreases to about -0.6 in 2001:Q1 then generally increases to about 0.4 in 2005:Q4. It generally decreases to about -0.6 in 2008:Q4 then generally increases ending at about 0.1.

Note: A composite index of changes in standards or loan demand that represents the net percentage of loans on respondents' balance sheets that were in categories for which banks reported tighter lending standards or stronger loan demand over the past 3 months.

Source: Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices.

### *Figure: Change in Spreads on C&I Loans*

Line chart, 1990 to July 2011. Unit is net percent. Data are quarterly. There are two series, "Large and middle-market firms" and "Small firms." Large and middle-market firms begins at about 10 and generally increases to about 60 in 1991:Q1. It generally decreases to about -60 in 1994:Q1 then generally increases to about 60 in 2002:Q1. It generally decreases to about -80 in 2005:Q1 then generally increases to about 100 in 2008:Q4 then generally decreases ending at about -60. Small firms begins at about 5 and generally increases to about 40 in 1991:Q1. It generally decreases to about -40 in 1997:Q4 then generally increases to about 40 in 2002:Q1. It generally decreases to about -60 in 2005:Q2 then generally increases to about 95 in 2009:Q1. It generally decreases ending at about -50.

Note: Net percent of respondents that widened spreads over the past 3 months.

Source: Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices.

### Figure: Level of Standards on Bank Loans

Stacked bar chart. Unit is percent of respondents. There are seven series, "Slightly easy," "Easy," "Easiest," "Middle," "Tightest," "Tight," and "Slightly Tight." Approximate values are: Small C&I: Slightly easy 15, Middle 65, slightly tight 5, tight 15; Construction and land development: Easiest 1, middle 49, slightly tight 12, tight 25, tightest 13; Credit Card: Middle 9, easiest 1, tight 90.

Note: Banks were asked to describe their current level of standards in relation to the range of standards at their bank between 2005 and the present. Responses weighted by survey respondents' holdings of relevant loan types, as reported on the March 31, 2011, Call Report.

Source: Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices.

### 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	-21.9	-9.0	7.7
2011:Q2	6.4	10.0	-16.9	-4.6	12.3
June	12.2	17.5	-21.0	9.1	7.8
July(e)	23.5	33.9	-22.0	2.9	6.6

Note: Retail MMMFs are retail money market mutual funds.

e Estimate. [Return to table](#)

Source: Federal Reserve Board.

### Figure: Level of Liquid Deposits

Line chart, 2008 to July 25, 2011. Unit is trillions of dollars. Data are weekly. The June 2011 FOMC meeting is marked by a vertical line. The series begins at about 4.5 and generally increases ending at about 6.9.

Note: Seasonally adjusted.

Source: Federal Reserve Board, Statistical Release H.6, "Money Stock Measures."

## [Box:] Balance Sheet Developments over the Intermeeting Period

### Federal Reserve Balance Sheet

Billions of dollars

	Change since last FOMC	Current (08/01/11)
<b>Total assets</b>	<b>15</b>	<b>2,870</b>
Selected assets:		
Liquidity programs for financial firms	+0	+0
Primary, secondary, and seasonal credit	+0	+0
Foreign central bank liquidity swaps	0	0
Term Asset-Backed Securities Loan Facility (TALF)	-1	12
Net portfolio holdings of Maiden Lane LLCs	-8	53
Maiden Lane	-3	21
Maiden Lane II	-2	10
Maiden Lane III	-3	21
Securities held outright*	21	2,651
U.S. Treasury securities	44	1,641
Agency debt securities	-6	112
Agency mortgage-backed securities	-17	897
<b>Total liabilities</b>	<b>17</b>	<b>2,819</b>
Selected liabilities:		

Federal Reserve notes in circulation	9	990
Reverse repurchase agreements	8	70
Foreign official and international accounts	8	70
Others	0	0
Reserve balances of depository institutions**	23	1,612
Term deposits held by depository institutions	+0	5
U.S. Treasury, General Account	68	67
U.S. Treasury, Supplementary Financing Account	-5	0
Other deposits	54	55
<b>Total capital</b>	<b>1</b>	<b>52</b>

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

\* Par value. [Return to table](#)

\*\* Includes required clearing balances and overdrafts. Excludes as-of adjustments. [Return to table](#)

## Appendix: Senior Loan Officer Opinion Survey on Bank Lending Practices

### *Measures of Supply and Demand for Commercial and Industrial Loans, by Size of Firm Seeking Loan*

#### **Figure: Net Percentage of Domestic Respondents Tightening Standards for Commercial and Industrial Loans**

Line chart, 1990 to 2011. Unit is percent. The April 2011 survey is marked by a vertical line. There are two series, "Loans to large and medium-sized firms" and "Loans to small firms." Loans to large and medium-sized firms begins at about 60 and generally decreases to about -20 in 1993:Q3. It fluctuates but generally increases to about 60 in 2001:Q1. It generally decreases to about -20 in 2004:Q2 then generally increases to about 85 in 2009:Q1. It generally decreases ending at about -20. Loans to small firms begins at about 75 in 1990:Q2 and generally decreases to about -20 in 1993:Q3. It generally increases to about 40 in 2001:Q1 then generally decreases to about -20 in 2005:Q2. It generally increases to about 75 in 2009:Q1 then generally decreases ending at about -10.

#### **Figure: Net Percentage of Domestic Respondents Increasing Spreads of Loan Rates over Banks' Cost of Funds**

Line chart, 1990 to 2011. Unit is percent. The April 2011 survey is marked by a vertical line. There are two series, "Loans to large and medium-sized firms" and "Loans to small firms." Loans to large and medium sized firms begins at about 10 and generally increases to about 60 in 1991:Q1. It generally decreases to about -60 in 1993:Q4. It fluctuates but generally increases to about 60 in 2002:Q1 then generally decreases to about -75 in 2005:Q2. It generally increases to about 100 in 2008:Q4 then generally decreases ending at about -60. Loans to small firms begins at about 10 and generally increases to about 40 in 1991:Q1. It generally decreases to about -40 in 1997:Q4 then generally increases to about 40 in 2001:Q4 then generally decreases to about -60 in 2005:Q2. It generally increases to about 95 in 2008:Q4 then generally decreases ending at about -40.

#### **Figure: Net Percentage of Domestic Respondents Reporting Stronger Demand for Commercial and Industrial Loans**

Line chart, 1991 to 2011. Unit is percent. The April 2011 survey is marked by a vertical line. There are two series, "Loans to large and medium-sized firms" and "Loans to small firms." Loans to large and medium-sized firms begins at about -30 and generally increases to about 35 in 1994:Q2. It fluctuates but generally decreases to about -75 in 2001:Q4 then generally increases to about 40 in 2005:Q1. It generally decreases to about -60 in 2009:Q1 then generally increases to about 30 in 2011:Q1. It generally decreases ending at about 20. Loans to small firms begins at about -30 and generally increases to about 35 in 1994:Q2. It generally decreases to about -50 in 2001:Q4 then generally increases to about 40 in 2004:Q1. It generally decreases to about -60 in 2009:Q2. It generally increases ending at about 5.

### *Measures of Supply and Demand for Commercial Real Estate Loans*

#### **Figure: Net Percentage of Domestic Respondents Tightening Standards for Commercial Real Estate Loans**

Line chart, 1990 to 2011. Unit is percent. The April 2011 survey is marked by a vertical line. The series begins at about 70 and generally decreases to about -5 in 1992:Q2. It generally increases to about 45 in 1999:Q1 then generally decreases to about 10 in 1999:Q2. It generally increases to about 45 in 2002:Q1 then generally decreases to about -20 in 2005:Q1. It generally increases to about 90 in 2009:Q1 then generally decreases ending at about -5.

#### **Figure: Net Percentage of Domestic Respondents Reporting Stronger Demand for Commercial Real Estate Loans**

Line chart, 1995 to 2011. Unit is percent. The April 2011 survey is marked by a vertical line. The series begins at about 10 in 1995:Q2 and generally increases to about 25 in 1995:Q4. It fluctuates but generally decreases to about -55 in 2001:Q4 then generally increases to about 20 in 2005:Q1. It generally decreases to about -65 in 2009:Q2 then generally increases to about 35 in 2011:Q2. It generally decreases ending at about 20.

### *Business Lending*

#### **Figure: Level of Standards on Commercial and Industrial Loans**

Stacked bar chart. Unit is percent of respondents. There are seven series, "Slightly Easy," "Easy," "Easiest," "Middle," "Tightest," "Tight," and "Slightly tight." Approximate values are: Syndicated investment-grade: Easy 5, slightly easy 15, middle 65, slightly tight 10, tight 5; Syndicated non-investment-grade: easy 5, slightly easy 15, middle 50, slightly tight 25, tight 5; Nonsyndicated large: Easy 1, Slightly easy 15, middle 60, slightly tight 20, tight 4; Nonsyndicated small: Easy 1, slightly easy 15, middle 65, slightly tight 2, tight 17.

#### **Figure: Level of Standards on Commercial Real Estate Loans**

Stacked bar chart. Unit is percent of respondents. There are seven series, "Slightly Easy," "Easy," "Easiest," "Middle," "Tightest," "Tight," and "Slightly tight." Approximate values are: Construction and land development: easy 2, slightly easy 1, middle 50, slightly tight 11, tight 25, tightest 11; Nonfarm residential: easy 1, slightly easy 4, middle 45, slightly tight 13, tight 25, tightest 12; Multifamily: easy 2, slightly easy 3, middle 30, slightly tight 20, tight 45.

Note: Banks were asked to describe their current level of standards in relation to the range of standards at their bank between 2005 and the present. Responses weighted by survey respondents' holdings of relevant loan types, as reported on the March 31, 2011, Call Report.

### *Measures of Supply and Demand for Residential Mortgage Loans*

#### **Figure: Net Percentage of Domestic Respondents Tightening Standards for Residential Mortgage Loans**

Line chart, 1990 to 2007:Q1. Unit is percent. There is one series, "All residential." The series begins at about 10 and generally increases to about 35 in 1991:Q1. It generally decreases to about -15 in 1993:Q4 then generally increases to about 15 in 2003:Q1. It fluctuates but generally decreases to about -10 in 2006:Q4 then generally increases ending at about 20.

There is a second panel, a line chart from 2007:Q2 to 2011:Q3. Unit is percent. There are three series, "Prime," "Nontraditional," and "Subprime." Prime begins at about 18 and generally increases to about 75 in 2008:Q3 then generally decreases to about -10 in 2010:Q3. It generally increases to about 10 in 2010:Q4 then generally decreases ending at about 1. Nontraditional begins at about 40 and generally increases to about 90 in 2009:Q1. It generally decreases to about 5 in 2010:Q1 then generally increases to about 15 in 2011:Q1. It generally decreases ending at about 1. Subprime begins at about 55 and generally increases to about 100 in 2009:Q1. It generally decreases ending at about 45 in 2009:Q2.

Note: For data starting in 2007:Q2, changes in standards for prime, nontraditional, and subprime mortgage loans are reported separately. Series are not reported when the number of respondents is three or fewer.

#### **Figure: Net Percentage of Domestic Respondents Reporting Stronger Demand for Residential Mortgage Loans**

Line chart, 1990 to 2007:Q1. Unit is percent. There is one series, "All residential." The series begins at about -60 and generally increases to about 60 in 1991:Q1. It fluctuates but generally decreases to about -80 in 1995:Q1. It fluctuates but generally increases to about 60 in 1998:Q3 then generally decreases to about -70 in 2000:Q1. It fluctuates but generally increases to about 45 in 2003:Q4 then generally decreases to about -40 in 2004:Q1. It generally increases to about 20 in 2005:Q4 then generally decreases to about -60 in 2006:Q4. It generally increases ending at about -35.

There is a second panel, a line chart from 2007:Q2 to 2011:Q3. Unit is percent. There are three series, "Prime," "Nontraditional," and "Subprime." Prime begins at about -20 and generally increases to about -10 in 2007:Q4. It generally decreases to about -60 in 2008:Q1 then generally increases to about -25 in 2008:Q2. It generally decreases to about -55 in 2008:Q4 then generally increases to about 40 in 2009:Q1. It generally decreases to about -35 in 2011:Q2 then generally increases ending at about 0. Nontraditional begins at about -20 and generally decreases to about -75 in 2007:Q4. It generally increases to about -25 in 2008:Q2 then generally decreases to about -75 in 2008:Q4. It fluctuates but generally increases to about 0 in 2010:Q4. It generally decreases to about -20 in 2011:Q2 then generally increases ending at about -10. Subprime begins at about -20 and generally decreases to about -70 in 2008:Q1. It generally increases to about -25 in 2008:Q3. It generally decreases to about -100 in 2008:Q4 then generally increases ending at about -55 in 2009:Q1.

Note: For data starting in 2007:Q2, changes in demand for prime, nontraditional, and subprime mortgage loans are reported separately. Series are not reported when the number of respondents is three or fewer.

**Figure: Net Percentage of Domestic Respondents Tightening Standards for Consumer Loans**

Line chart, 1996 to 2011:Q1. Unit is percent. There are two series, "Credit Card Loans" and "Other Consumer Loans." Credit card loans begins at about 20 and generally increases to about 40 in 1996:Q4. It generally decreases to about 0 in 2000:Q4 then generally increases to about 20 in 2001:Q1. It generally decreases to about -15 in 2007:Q2 then generally increases to about 60 in 2008:Q2. It generally decreases ending at about -10. Other consumer loans begins at about 10 and generally decreases to about 0 in 1999:Q1. It generally increases to about 20 in 2001:Q4 then generally decreases to about -10 in 2005:Q2. It generally increases to about 70 in 2008:Q1 then generally decreases to about -15 in 2010:Q3. It generally increases ending at about 0.

There is a second panel, a line chart from 2011:Q2 to 2011:Q3. Unit is percent. There are three series, "Credit card loans," "Auto Loans," and "Other consumer loans." Credit card loans begins at about -20 and generally increases ending at about -10. Auto loans begins at about -15 and generally decreases ending at about -20. Other consumer loans begins at about -5 and generally decreases ending at about -10.

Note: For data starting in 2011:Q2, changes in standards for auto loans and consumer loans excluding credit card and auto loans are reported separately. In 2011:Q2 only, new and used auto loans are reported separately and equally weighted to calculate the auto loans series.

**Figure: Net Percentage of Domestic Respondents Reporting Increased Willingness to Make Consumer Installment Loans**

Line chart, 1990 to 2011. Unit is percent. The series begins at about 10 and generally decreases to about -15 in 1991:Q1. It generally increases to about 25 in 1994:Q1 then generally decreases to about -5 in 1996:Q2. It generally increases to about 15 in 1999:Q3 then generally decreases to about -10 in 2001:Q1. It generally increases to about 20 in 2005:Q4 then generally decreases to about -60 in 2008:Q4. It generally increases ending at about 30.

**Figure: Net Percentage of Domestic Respondents Reporting Stronger Demand for Consumer Loans**

Line chart, 1991 to 2011:Q1. Unit is percent. There is one series, "All consumer loans." The series begins at about -40 and generally increases to about 40 in 1994:Q1. It fluctuates but generally decreases to about -40 in 2001:Q1. It fluctuates but generally increases to about 40 in 2003:Q3 then fluctuates but generally decreases to about -60 in 2009:Q1. It generally increases ending at about 10.

There is a second panel, a line chart from 2011:Q2 to 2011:Q3. Unit is percent. There are three series, "Credit card loans," "Auto Loans," and "Other Consumer Loans." Credit card loans begins at about -1 and generally increases ending at about 2. Auto loans begins at about 25 and generally decreases ending at about 15. Other consumer loans begins at about 0 and remains about constant to the end of the timeline.

Note: For data starting in 2011:Q2, changes in demand for credit card loans, auto loans, and consumer loans excluding credit card and auto loans are reported separately.

*Household Lending*

**Figure: Level of Standards on Residential Real Estate Loans**

Stacked bar chart. Unit is percent of respondents. There are seven series, "Slightly Easy," "Easy," "Easiest," "Middle," "Tightest," "Tight," and "Slightly tight." Approximate values are: Prime conforming: easy 5, middle 10, slightly tight 50, tight 15, tightest 30; Prime Jumbo: easy 5, middle 7, slightly tight 48, tight 10, tightest 30; Nontraditional: easy 5, slightly easy 5, middle 10, slightly tight 15, tight 30, tightest 38; Home equity lines of credit: easy 3, easy 2, slightly 15, tight 55, tightest 20.

**Figure: Level of Standards on Consumer Loans**

Stacked bar chart. Unit is percent of respondents. There are seven series, "Slightly Easy," "Easy," "Easiest," "Middle," "Tightest," "Tight," and "Slightly tight." Approximate values are: Credit card: middle 18, slightly easy 2, tight 80; Auto: easy 20, middle 25, slightly tight 5, tight 50; Other consumer: easy 8, middle 2, slightly tight 15, tight 75.

Note: Banks were asked to describe their current level of standards in relation to the range of standards at their bank between 2005 and the present. Responses weighted by survey respondents' holdings of relevant loan types, as reported on the March 31, 2011, Call Report.

† Note: Data values for figures are rounded and may not sum to totals. [Return to text](#)

### Risks and Uncertainty

#### Alternative Scenarios

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

Measure and scenario	2011		2012	2013	2014-15
	H1	H2			
<i>Real GDP</i>					
Extended Tealbook baseline	.9	2.7	3.0	3.7	4.0
More-persistent spending weakness	.9	2.5	2.5	2.6	3.4
with supply-side corrosion	.9	2.3	2.2	2.3	3.1
Greater supply-side damage	.9	2.4	2.4	2.8	3.1
Faster snapback	.9	3.3	3.8	4.2	3.3
Very severe financial stress in Europe	.9	1.4	.0	2.9	4.6
<i>Unemployment rate<sup>1</sup></i>					
Extended Tealbook baseline	9.1	9.2	8.5	7.5	5.7
More-persistent spending weakness	9.1	9.2	8.7	8.2	7.1
with supply-side corrosion	9.1	9.3	8.8	8.5	8.0
Greater supply-side damage	9.1	9.1	8.3	7.5	6.5
Faster snapback	9.1	9.1	8.0	6.6	5.2
Very severe financial stress in Europe	9.1	9.4	9.8	9.3	7.0
<i>Total PCE prices</i>					
Extended Tealbook baseline	3.5	1.3	1.5	1.4	1.6
More-persistent spending weakness	3.5	1.3	1.5	1.3	1.3
with supply-side corrosion	3.5	1.3	1.5	1.4	1.5
Greater supply-side damage	3.5	1.4	1.7	1.7	1.9
Faster snapback	3.5	1.3	1.5	1.5	2.0
Very severe financial stress in Europe	3.5	-.3	-.2	.8	1.6
<i>Core PCE prices</i>					
Extended Tealbook baseline	1.8	1.8	1.5	1.4	1.5
More-persistent spending weakness	1.8	1.8	1.5	1.3	1.2
with supply-side corrosion	1.8	1.8	1.5	1.4	1.4
Greater supply-side damage	1.8	1.9	1.7	1.7	1.8
Faster snapback	1.8	1.8	1.5	1.5	1.9
Very severe financial stress in Europe	1.8	1.2	.3	.8	1.4
<i>Federal funds rate<sup>1</sup></i>					
Extended Tealbook baseline	.1	.1	.1	.7	3.2
More-persistent spending weakness	.1	.1	.1	.1	.7
with supply-side corrosion	.1	.1	.1	.1	1.0
Greater supply-side damage	.1	.1	.2	1.7	3.6
Faster snapback	.1	.4	1.1	2.1	3.5
Very severe financial stress in Europe	.1	.1	.1	.1	2.2

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, 2008 to 2015. Unit is 4-quarter percent change. There are six series, "Extended Tealbook baseline," "More-persistent spending weakness," "More-persistent spending weakness with supply-side corrosion," "Greater supply-side damage," "Faster snapback," and "Very severe financial stress in Europe." Extended Tealbook baseline begins at about 2 and generally decreases to about -5 in 2009:Q2. It generally increases to about 3.5 in 2010:Q4 then generally decreases to about 2 in 2011:Q2. It generally increases to about 4.5 in 2015:Q2 then generally decreases ending at about 4. More-persistent spending weakness begins at about 2 in 2011:Q1 and generally increases ending at about 3.5. More-persistent spending weakness with supply-side corrosion begins at about 2 in 2011:Q1 and generally increases ending at about 3.25. Greater supply-side damage begins at about 2 in 2011:Q1 and fluctuates but generally decreases ending at about 3. Faster snapback begins at about 2 in 2011:Q1 and generally increases to about 4.5 in 2013:Q2. It generally decreases ending at about 4.5. Very severe financial stress in Europe begins at about 2 in 2011:Q1 and generally decreases to about 0 in 2012:Q3. It generally increases to about 5 in 2014:Q1 then generally decreases ending at about 4.5. 70-percent interval is presented as a dark gray shaded range that begins at about 2 and generally increases ending at about [2, 6.25]. 90-percent interval is presented as a light gray shaded range that begins at about 2 and increases ending at about [1, 7.5].

#### **Figure: Unemployment Rate**

Line chart, 2008 to 2015. Unit is percent. There are six series, "Extended Tealbook baseline," "More-persistent spending weakness," "More-persistent spending weakness with supply-side corrosion," "Greater supply-side damage," "Faster snapback," and "Very severe financial stress in Europe." Extended Tealbook baseline begins at about 5.0 and generally increases to about 10.0. It fluctuates but generally decreases ending at about 5.75. More-persistent spending weakness begins at about 9.0 in 2011:Q3 and generally decreases ending at about 7.0. More-persistent spending weakness with supply-side corrosion begins at about 9.0 in 2011:Q3 and generally decreases ending at about 8.0. Greater supply-side damage begins at about 9.0 in 2011:Q3 and generally decreases ending at about 6.5. Faster snapback begins at about 9.0 in 2011:Q3 and generally decreases ending at about 5.25. Very severe financial stress in Europe begins at about 9.0 in 2011:Q3 and generally increases to about 10.0 in 2013:Q2. It generally decreases ending at about 7.0. 70 percent interval is presented as a dark gray range that starts at about 9.0 and generally decreases ending at about [4.75, 7.0]. 90-percent interval is presented as a light gray range that begins at about 9.0 and generally decreases ending at about [4.0, 8.0].

#### **Figure: PCE Prices excluding Food and Energy**

Line chart, 2008 to 2015. Unit is 4-quarter percent change. There are six series, "Extended Tealbook baseline," "More-persistent spending weakness," "More-persistent spending weakness with supply-side corrosion," "Greater supply-side damage," "Faster snapback," and "Very severe financial stress in Europe." Extended Tealbook baseline begins at about 2.25 and generally decreases to about 1.5 in 2009:Q4. It generally increases to about 1.75 in 2012:Q1 then generally decreases to about 1.5 in 2013:Q1. It generally increases ending at about 1.6. More-persistent spending weakness begins at about 1.25 in 2011:Q2 and generally increases to about 1.8 in 2012:Q3. It generally decreases ending at about 1.25. More-persistent spending weakness with supply-side corrosion begins at about 1.25 in 2011:Q2 and generally increases to about 1.75 in 2012:Q2. It generally decreases to about 1.5 in 2013:Q1 then remains constant until the end of the timeline. Greater supply-side damage begins at about 1.25 in 2011:Q2 and generally increases to about 1.8 in 2012:Q1. It generally decreases to about 1.6 in 2012:Q3. It generally increases ending at about 1.8. Faster snapback begins at about 1.25 in 2011:Q2 and generally increases to about 1.8 in 2012:Q1. It generally decreases to about 1.5 in 2013:Q1. It generally increases ending at about 2.0. Very severe financial stress in Europe begins about 1.25 in 2011:Q2 and generally increases to about 1.5 in 2011:Q4. It generally decreases to about 0.75 in 2012:Q4 then generally increases ending at about 1.6. 70-percent interval is presented as a dark gray range that begins at about 1.25 and generally increases ending at about [0.5, 2.5]. 90-percent interval is presented as a light gray range that begins at about 1.25 and generally increases ending at about [0.0, 3.0].

#### **Figure: Federal Funds Rate**

Line chart, 2008 to 2015. Unit is percent. There are six series, "Extended Tealbook baseline," "More-persistent spending weakness," "More-persistent spending weakness with supply-side corrosion," "Greater supply-side damage," "Faster snapback," and "Very severe financial stress in Europe." Extended Tealbook baseline begins at about 3 and generally decreases to about 0 in 2009:Q1. It remains about constant until 2013:Q2 then generally increases ending at about 3.25. More-persistent spending weakness begins at about 0 in 2011:Q2 and remains about constant until 2015:Q1. It generally increases ending at about 0.75. More-persistent spending weakness with supply-side corrosion begins at about 0 in 2011:Q2 and remains about constant until 2014:Q4. It generally increases ending at about 1. Greater supply-side damage begins at about 0 in 2011:Q2 and remains about constant until 2012:Q4. It generally increases ending at about 3.5. Faster snapback begins at about 0 in 2011:Q2 and generally increases ending at about 3.5. Very severe financial stress in Europe begins at about 0 in 2011:Q2 and remains about constant until 2014:Q3. It generally increases ending at about 2. 70-percent interval is presented as a dark gray range that begins at about 0 and generally increases ending at about [1, 5]. 90-percent interval is presented as a light gray range that begins at about 0 and generally increases ending at about [0, 6.25].

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

Measure	2011	2012	2013	2014	2015
---------	------	------	------	------	------

<i>Real GDP (percent change, Q4 to Q4)</i>					
Projection	1.8	3.0	3.7	4.0	3.9
Confidence interval					
Tealbook forecast errors	.9-2.6	1.1-4.8	2.0-5.5	...	...
FRB/US stochastic simulations	.9-2.7	1.2-4.6	1.6-5.2	1.9-6.0	2.0-6.3
<i>Civilian unemployment rate (percent, Q4)</i>					
Projection	9.2	8.5	7.5	6.5	5.7
Confidence interval					
Tealbook forecast errors	8.8-9.5	7.7-9.3	6.1-8.9	...	...
FRB/US stochastic simulations	8.8-9.5	7.7-9.4	6.6-8.7	5.5-7.8	4.7-7.0
<i>PCE prices, total (percent change, Q4 to Q4)</i>					
Projection	2.4	1.5	1.4	1.5	1.6
Confidence interval					
Tealbook forecast errors	1.9-2.9	.4-2.6	.2-2.6	...	...
FRB/US stochastic simulations	1.8-3.1	.4-2.7	.1-2.5	.1-2.8	.2-2.8
<i>PCE prices excluding food and energy (percent change, Q4 to Q4)</i>					
Projection	1.8	1.5	1.4	1.5	1.6
Confidence interval					
Tealbook forecast errors	1.5-2.1	.8-2.2	.3-2.5	...	...
FRB/US stochastic simulations	1.4-2.2	.7-2.3	.5-2.2	.5-2.4	.6-2.5
<i>Federal funds rate (percent, Q4)</i>					
Projection	.1	.1	.7	1.7	3.2
Confidence interval					
FRB/US stochastic simulations	.1-.6	.1-1.9	.1-3.0	.2-3.6	1.1-5.1

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

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

... Not applicable. The Tealbook forecast horizon has typically extended about 2 years. [Return to table](#)

## Tealbook Forecast Compared with Blue Chip

(Blue Chip survey released July 10, 2011)

### *Figure: Real GDP*

Line chart, 2008 to 2012. Unit is percent change, annual rate. There are two series, "Blue Chip consensus" and "Staff forecast." The series begin at about -2 and generally increase together to about 2 in 2008:Q3. They generally decrease together to about -10 in 2008:Q4. They generally increase together to about 4 in 2009:Q4 then generally decrease together to about 0 in 2011:Q1. Blue chip consensus generally increases to about 3.5 in 2011:Q3 and fluctuates but remains about constant to the end of the timeline. Staff forecast generally increases to about 3 in 2011:Q3 then generally decreases to about 2 in 2012:Q1. It generally increases ending at about 3.5. There is a red shaded range that begins at about 2 in 2011:Q2 and generally increases ending at about [2.5, 4].

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

### *Figure: Real PCE*

Line chart, 2008 to 2012. Unit is percent change, annual rate. There are two series, "Blue Chip consensus" and "Staff forecast." The series begin at about -1 and generally increase together to about 0 in 2008:Q2. They generally decrease together to about -5.5 in 2008:Q4 then generally increase together to about 2 in 2009:Q3. They generally decrease together to about .5 in 2009:Q4 then generally increase together to about 4 in 2010:Q4. They generally decrease together to about 0 in 2011:Q2. Blue Chip consensus generally increases to about 3 in 2011:Q2 then fluctuates but remains about constant to the end of the timeline. Staff forecast generally increases ending at about 3. There is a red shaded range that begins at about 0 and generally increases to about [2, 4] in 2011:Q3. It generally decreases to about [1.5, 3] in 2012:Q1 then generally increases ending at about [2.25, 3.75].

### *Figure: Unemployment Rate*

Line chart, 2008 to 2012. Unit is percent. There are two series, "Blue Chip consensus" and "Staff forecast." The series begin at about 5 and generally increase together to about 10 in 2009:Q4. They generally decrease together to about 8.75 in 2011:Q1. Blue Chip consensus generally decreases ending at about 8. Staff forecast generally increases to about 9 in 2011:Q3 then generally decreases ending at about 8.5. There is a red shaded range that begins at about 9 and generally decreases ending at about [7.5, 8.5].

*Figure: Consumer Price Index*

Line chart, 2008 to 2012. Unit is percent change, annual rate. There are two series, "Blue Chip consensus" and "Staff forecast." The series begin at about 4 and generally increase to about 6.25 in 2008:Q3. They generally decrease together to about -10 in 2008:Q4 then generally increase together to about 4 in 2009:Q4. They generally decrease together to about -0.5 in 2010:Q1 then generally increase together to about 5 in 2011:Q1. Blue Chip consensus generally decreases to about 2 in 2011:Q3 and remains about constant to the end of the timeline. Staff forecast generally decreases to about 1 in 2011:Q4 then generally increases to about 2 in 2012:Q2. It remains about constant to the end of the timeline. There is a red shaded range that begins at about 4 and generally decreases to about [0, 3] in 2011:Q3. It remains about constant to the end of the timeline.

*Figure: Treasury Bill Rate*

Line chart, 2008 to 2012. Unit is percent. There are two series, "Blue Chip consensus" and "Staff forecast." The series begin at about 2 and generally decrease together to about 0.2 in 2008:Q4. Blue Chip consensus remains about constant until 2011:Q2 then generally increases ending at about 1.5. Staff forecast remains about constant until the end of the timeline. There is a red shaded range that begins at about 0 and generally increases ending at about [0.5, 2.5].

*Figure: 10-Year Treasury Yield*

Line chart, 2008 to 2012. Unit is percent. There are two series, "Blue Chip consensus" and "Staff forecast." The series begin at about 3.75 and generally increase together to about 4.0 in 2008:Q2. They generally decrease together to about 2.6 in 2009:Q1 then generally increase together to about 3.5 in 2010:Q1. They generally decrease together to about 2.75 in 2010:Q3 then generally increase together to about 3.5 in 2011:Q1. Blue chip consensus generally decreases to about 3.25 in 2011:Q2 then generally increases ending at about 4.25. Staff forecast generally decreases to about 3.0 in 2011:Q4 then generally increases ending at about 3.75. There is a red shaded range that begins at about 3.0 in 2011:Q2 and generally increases ending at about [3.25, 5.0].

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**

---

# Accessible Material

## August 2011 Tealbook A Tables and Charts

### Greensheets

#### Changes in GDP, Prices, and Unemployment

(Percent, annual rate except as noted)

Interval	Nominal GDP		Real GDP		PCE price index		Core PCE price index		Unemployment rate <sup>1</sup>	
	06/15/11	08/03/11	06/15/11	08/03/11	06/15/11	08/03/11	06/15/11	08/03/11	06/15/11	08/03/11
<i>Quarterly</i>										
2010: Q1	4.8	5.5	3.7	3.9	2.1	1.9	1.2	1.1	9.7	9.7
Q2	3.7	5.4	1.7	3.8	.0	.3	1.0	1.3	9.6	9.6
Q3	4.6	3.9	2.6	2.5	.8	1.0	.5	.8	9.6	9.6
Q4	3.5	4.2	3.1	2.3	1.7	1.9	.4	.7	9.6	9.6
2011: Q1	4.1	3.1	2.1	.4	3.8	3.9	1.4	1.6	8.9	8.9
Q2	5.8	3.9	1.9	1.4	3.4	3.1	2.2	2.1	9.0	9.1
Q3	5.6	5.1	3.9	2.9	.8	1.5	1.7	1.9	9.0	9.2
Q4	4.3	3.6	2.9	2.4	1.4	1.1	1.4	1.7	8.9	9.2
2012: Q1	4.7	3.2	3.1	2.4	1.4	1.6	1.5	1.6	8.8	9.1
Q2	4.8	5.9	3.3	2.9	1.5	1.5	1.5	1.5	8.6	8.9
Q3	5.2	4.6	3.7	3.2	1.5	1.4	1.5	1.4	8.4	8.7
Q4	5.4	4.6	3.9	3.4	1.5	1.4	1.5	1.4	8.1	8.5
<i>Two-quarter<sup>2</sup></i>										
2010: Q2	4.3	5.5	2.7	3.9	1.0	1.1	1.1	1.2	-4	-4
Q4	4.1	4.0	2.8	2.4	1.2	1.5	.5	.7	.0	.0
2011: Q2	4.9	3.5	2.0	.9	3.6	3.5	1.8	1.8	-6	-5
Q4	4.9	4.4	3.4	2.7	1.1	1.3	1.5	1.8	-1	.1
2012: Q2	4.8	4.5	3.2	2.6	1.5	1.5	1.5	1.6	-3	-3
Q4	5.3	4.6	3.8	3.3	1.5	1.4	1.5	1.4	-5	-4
<i>Four-quarter<sup>3</sup></i>										
2009:Q4	.6	.0	.2	-.5	1.5	1.5	1.7	1.7	3.1	3.1
2010:Q4	4.2	4.7	2.8	3.1	1.1	1.3	.8	1.0	-4	-4
2011:Q4	4.9	3.9	2.7	1.8	2.3	2.4	1.7	1.8	-7	-4
2012:Q4	5.1	4.5	3.5	3.0	1.5	1.5	1.5	1.5	-8	-7
<i>Annual</i>										
2009	-1.7	-2.5	-2.6	-3.5	.2	.2	1.5	1.6	9.3	9.3
2010	3.8	4.2	2.9	3.0	1.7	1.8	1.3	1.4	9.6	9.6
2011	4.5	4.0	2.6	1.9	2.2	2.3	1.3	1.4	9.0	9.1
2012	5.0	4.3	3.3	2.7	1.5	1.5	1.5	1.6	8.5	8.8

1. Level, except for two-quarter and four-quarter intervals. [Return to table](#)

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

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

#### Changes in Real Gross Domestic Product and Related Items

(Percent, annual rate except as noted)

Item	2010				2011				2012				2010 <sup>1</sup>	2011 <sup>1</sup>	2012 <sup>1</sup>
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real GDP	3.9	3.8	2.5	2.3	.4	1.4	2.9	2.4	2.4	2.9	3.2	3.4	3.1	1.8	3.0
<i>Previous Tealbook</i>	3.7	1.7	2.6	3.1	2.1	1.9	3.9	2.9	3.1	3.3	3.7	3.9	2.8	2.7	3.5
Final sales	.8	3.0	1.7	4.2	.0	1.3	1.5	3.1	2.6	2.8	3.0	3.3	2.4	1.5	2.9
<i>Previous Tealbook</i>	1.1	.9	.9	6.7	.8	2.5	2.6	3.5	3.2	3.2	3.1	3.4	2.4	2.4	3.2
Priv. dom. final purch.	2.5	5.1	2.6	4.1	2.0	1.1	1.9	2.2	2.0	2.6	3.1	3.4	3.6	1.8	2.8
<i>Previous Tealbook</i>	2.1	4.4	2.3	4.4	2.2	2.1	3.4	3.0	2.6	3.1	3.5	3.7	3.3	2.7	3.2
Personal cons. expend.	2.7	2.9	2.6	3.6	2.1	.1	1.6	1.9	1.9	2.4	2.8	3.0	3.0	1.4	2.5
<i>Previous Tealbook</i>	1.9	2.2	2.4	4.0	2.3	1.5	2.6	2.4	2.5	2.7	2.9	3.1	2.6	2.2	2.8
Durables	9.9	7.8	8.8	17.2	11.7	-4.4	5.0	7.2	5.7	8.3	9.6	9.5	10.9	4.7	8.3
Nondurables	4.8	1.9	3.0	4.3	1.6	.1	.2	.9	.9	1.1	1.3	1.5	3.5	.7	1.2
Services	1.0	2.5	1.6	1.3	.8	.8	1.5	1.4	1.7	1.9	2.2	2.5	1.6	1.1	2.1
Residential investment	-15.3	22.8	-27.7	2.5	-2.4	3.5	3.1	.5	3.1	4.2	8.4	8.8	-6.3	1.1	6.1
<i>Previous Tealbook</i>	-12.3	25.7	-27.3	3.3	-2.9	1.3	1.6	2.7	3.0	5.5	7.3	8.3	-4.6	.7	6.0
Business fixed invest.	6.0	18.6	11.3	8.7	2.1	8.1	4.0	4.5	2.6	3.0	4.3	5.0	11.1	4.7	3.7
<i>Previous Tealbook</i>	7.8	17.2	10.0	7.7	2.9	6.8	9.5	7.2	3.7	5.6	6.9	6.8	10.6	6.6	5.7
Equipment & software	21.7	23.2	14.1	8.1	8.7	5.6	6.3	6.3	4.4	4.6	6.2	7.1	16.6	6.7	5.6
<i>Previous Tealbook</i>	20.4	24.8	15.4	7.7	10.1	7.0	13.2	9.5	5.6	7.8	9.3	9.2	16.9	10.0	8.0
Nonres. structures	-24.7	7.5	4.2	10.5	-14.3	15.2	-2.0	-.2	-2.2	-1.2	-1.0	-1.0	-1.8	-.9	-1.3
<i>Previous Tealbook</i>	-17.8	-.5	-3.5	7.6	-15.2	6.1	-.6	.7	-1.8	-.7	-.3	-.3	-4.0	-2.6	-.8
Net exports <sup>2</sup>	-377	-437	-459	-414	-424	-406	-405	-366	-332	-307	-290	-271	-422	-400	-300
<i>Previous Tealbook<sup>2</sup></i>	-338	-449	-505	-398	-393	-364	-374	-338	-305	-283	-273	-258	-422	-367	-279
Exports	7.2	10.0	10.0	7.8	7.9	6.0	10.2	9.8	9.6	9.1	8.8	8.7	8.8	8.4	9.0
Imports	12.5	21.6	12.3	-2.3	8.3	1.3	8.1	.7	1.5	3.2	4.4	4.1	10.7	4.6	3.3
Gov't. cons. & invest.	-1.2	3.7	1.0	-2.8	-5.9	-.8	-.3	.1	-.7	-.5	-.4	-.2	.1	-1.8	-.5
<i>Previous Tealbook</i>	-1.6	3.9	3.9	-1.7	-5.6	-.5	1.1	-.4	-.3	-.3	-.2	-.2	1.1	-1.4	-.2
Federal	2.8	8.8	3.2	-3.0	-9.4	2.2	1.9	1.4	-1.1	-.8	-.9	-.8	2.9	-1.1	-.9
Defense	.5	6.0	5.7	-5.9	-12.6	7.3	5.7	-.1	-.7	.1	-.1	.0	1.5	-.2	-.1
Nondefense	7.8	14.7	-1.8	3.1	-2.7	-7.3	-5.6	4.4	-1.9	-2.6	-2.6	-2.6	5.7	-2.9	-2.4
State & local	-3.9	.4	-.5	-2.7	-3.4	-2.9	-1.8	-.8	-.5	-.3	-.1	.2	-1.7	-2.2	-.2
Change in bus. inventories <sup>2</sup>	40	65	92	38	49	53	99	80	74	78	83	85	59	70	80
<i>Previous Tealbook<sup>2</sup></i>	44	69	121	16	57	38	76	58	57	60	78	93	63	57	72
Nonfarm <sup>2</sup>	35	64	99	45	60	63	102	83	74	77	82	84	61	77	79
Farm <sup>2</sup>	5	1	-6	-5	-8	-9	-2	-2	1	1	1	1	-1	-5	1

1. Change from fourth quarter of previous year to fourth quarter of year indicated. [Return to table](#)

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

## Changes in Real Gross Domestic Product and Related Items

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

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Real GDP	2.9	2.8	2.4	2.2	-3.3	-.5	3.1	1.8	3.0
<i>Previous Tealbook</i>	3.1	2.7	2.4	2.3	-2.8	.2	2.8	2.7	3.5
Final sales	2.6	2.7	2.8	2.4	-2.6	-.8	2.4	1.5	2.9
<i>Previous Tealbook</i>	2.8	2.7	2.8	2.5	-1.9	-.3	2.4	2.4	3.2
Priv. dom. final purch.	4.0	3.2	2.4	1.2	-4.5	-2.5	3.6	1.8	2.8

<i>Previous Tealbook</i>	4.2	3.1	2.5	1.3	-3.8	-2.0	3.3	2.7	3.2
Personal cons. expend.	3.3	2.8	3.2	1.7	-2.5	-.2	3.0	1.4	2.5
<i>Previous Tealbook</i>	3.5	2.7	3.3	1.7	-1.9	.2	2.6	2.2	2.8
Durables	5.9	2.8	7.0	4.6	-13.0	3.0	10.9	4.7	8.3
Nondurables	2.7	3.1	2.9	.8	-3.1	.6	3.5	.7	1.2
Services	3.0	2.7	2.6	1.4	-.5	-.9	1.6	1.1	2.1
Residential investment	6.6	5.3	-15.7	-20.7	-24.4	-12.9	-6.3	1.1	6.1
<i>Previous Tealbook</i>	6.6	5.3	-15.7	-20.7	-24.6	-13.4	-4.6	.7	6.0
Business fixed invest.	7.0	4.5	7.8	7.9	-9.4	-14.4	11.1	4.7	3.7
<i>Previous Tealbook</i>	7.0	4.4	7.8	8.2	-8.3	-12.7	10.6	6.6	5.7
Equipment & software	8.8	6.2	6.0	3.9	-13.6	-5.8	16.6	6.7	5.6
<i>Previous Tealbook</i>	8.8	6.1	6.0	4.3	-11.8	-4.9	16.9	10.0	8.0
Nonres. structures	1.7	-.1	13.0	17.3	-1.2	-29.3	-1.8	-.9	-1.3
<i>Previous Tealbook</i>	1.7	-.1	13.0	17.3	-1.5	-26.5	-4.0	-2.6	-.8
Net exports <sup>1</sup>	-688	-723	-729	-649	-495	-359	-422	-400	-300
<i>Previous Tealbook<sup>1</sup></i>	-688	-723	-729	-655	-504	-363	-422	-367	-279
Exports	7.2	6.7	10.2	10.1	-2.5	-.1	8.8	8.4	9.0
Imports	11.0	5.2	4.1	.8	-5.9	-6.5	10.7	4.6	3.3
Gov't. cons. & invest.	.6	.7	1.5	1.9	2.7	1.1	.1	-1.8	-.5
<i>Previous Tealbook</i>	.6	.7	1.5	1.9	3.1	.8	1.1	-1.4	-.2
Federal	2.3	1.2	2.2	3.1	8.8	4.6	2.9	-1.1	-.9
Defense	2.4	.4	4.4	2.6	9.8	3.5	1.5	-.2	-.1
Nondefense	2.3	2.6	-2.3	4.2	6.8	6.9	5.7	-2.9	-2.4
State & local	-.4	.4	1.2	1.2	-.9	-1.1	-1.7	-2.2	-.2
Change in bus. inventories <sup>1</sup>	66	50	59	28	-36	-145	59	70	80
<i>Previous Tealbook<sup>1</sup></i>	66	50	59	28	-38	-113	63	57	72
Nonfarm <sup>1</sup>	58	50	63	29	-38	-144	61	77	79
Farm <sup>1</sup>	8	0	-4	-1	1	-1	-1	-5	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	2010				2011				2012				2010 <sup>1</sup>	2011 <sup>1</sup>	2012 <sup>1</sup>
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real GDP	3.9	3.8	2.5	2.3	.4	1.4	2.9	2.4	2.4	2.9	3.2	3.4	3.1	1.8	3.0
<i>Previous Tealbook</i>	3.7	1.7	2.6	3.1	2.1	1.9	3.9	2.9	3.1	3.3	3.7	3.9	2.8	2.7	3.5
Final sales	.8	3.0	1.7	4.2	.0	1.3	1.5	3.0	2.6	2.8	3.0	3.3	2.4	1.5	2.9
<i>Previous Tealbook</i>	1.1	.9	.9	6.5	.8	2.5	2.7	3.5	3.2	3.2	3.1	3.4	2.4	2.4	3.2
Priv. dom. final purch.	2.1	4.2	2.1	3.4	1.6	.9	1.6	1.8	1.7	2.1	2.6	2.8	3.0	1.5	2.3
<i>Previous Tealbook</i>	1.7	3.6	1.9	3.6	1.8	1.7	2.8	2.5	2.2	2.6	2.9	3.0	2.7	2.2	2.7
Personal cons. expend.	1.9	2.1	1.9	2.5	1.5	.1	1.2	1.4	1.4	1.7	2.0	2.1	2.1	1.0	1.8
<i>Previous Tealbook</i>	1.3	1.5	1.7	2.8	1.6	1.0	1.9	1.7	1.7	1.9	2.0	2.2	1.9	1.6	2.0
Durables	.7	.6	.6	1.2	.9	-.3	.4	.5	.4	.6	.7	.7	.8	.4	.6
Nondurables	.8	.3	.5	.7	.3	.0	.0	.2	.2	.2	.2	.3	.6	.1	.2
Services	.5	1.2	.8	.6	.4	.4	.7	.7	.8	.9	1.0	1.2	.8	.5	1.0



Output per hour	4.7	1.2	2.1	2.2	-.5	-.9	2.3	.9	1.1	1.6	2.0	2.1	2.5	.5	1.7
<i>Previous Tealbook</i>	4.6	-1.7	2.3	2.9	2.2	-.8	2.4	1.5	1.8	1.6	1.7	1.9	2.0	1.3	1.7
Compensation per hour	1.6	2.7	1.8	.7	4.3	1.2	1.3	2.0	2.4	2.2	2.2	2.3	1.7	2.2	2.3
<i>Previous Tealbook</i>	-.2	3.1	2.5	.1	2.5	1.7	2.1	2.2	2.6	2.4	2.4	2.5	1.4	2.1	2.5
Unit labor costs	-3.0	1.4	-.3	-1.5	4.9	2.1	-1.0	1.1	1.2	.6	.3	.2	-.9	1.7	.6
<i>Previous Tealbook</i>	-4.6	4.9	.1	-2.7	.3	2.5	-.3	.6	.8	.9	.7	.7	-.6	.8	.7
Core goods imports chain-wt. price index <sup>3</sup>	3.9	3.1	-.6	4.3	8.3	6.3	3.1	2.0	1.4	1.5	1.6	1.5	2.6	4.9	1.5
<i>Previous Tealbook</i> <sup>3</sup>	4.2	3.1	-.8	4.3	8.1	7.2	3.5	1.5	1.4	1.5	1.5	1.5	2.7	5.0	1.4

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	2004	2005	2006	2007	2008	2009	2010	2011	2012
GDP chain-wt. price index	3.2	3.5	2.9	2.6	2.1	.7	1.6	2.0	1.5
<i>Previous Tealbook</i>	3.2	3.5	2.9	2.6	2.1	.5	1.3	2.2	1.5
PCE chain-wt. price index	3.0	3.2	1.9	3.5	1.7	1.5	1.3	2.4	1.5
<i>Previous Tealbook</i>	3.0	3.3	1.9	3.5	1.7	1.5	1.1	2.3	1.5
Energy	18.6	21.5	-.3.7	19.3	-.8.8	2.6	6.2	9.3	1.4
<i>Previous Tealbook</i>	18.6	21.5	-.3.7	19.4	-.9.0	2.7	5.9	9.6	1.0
Food	2.7	1.5	1.7	4.7	7.0	-1.7	1.3	4.3	1.4
<i>Previous Tealbook</i>	2.7	1.5	1.7	4.8	6.9	-1.6	1.3	4.5	1.4
Ex. food & energy	2.2	2.3	2.3	2.4	2.0	1.7	1.0	1.8	1.5
<i>Previous Tealbook</i>	2.2	2.3	2.3	2.4	2.0	1.7	.8	1.7	1.5
Ex. food & energy, market based	1.9	2.0	2.2	2.1	2.2	1.7	.7	1.9	1.4
<i>Previous Tealbook</i>	1.9	2.1	2.2	2.2	2.2	1.7	.8	1.6	1.4
CPI	3.4	3.7	2.0	4.0	1.6	1.5	1.2	3.0	1.6
<i>Previous Tealbook</i>	3.4	3.7	2.0	4.0	1.6	1.5	1.2	2.8	1.5
Ex. food & energy	2.2	2.1	2.7	2.3	2.0	1.7	.6	2.2	1.6
<i>Previous Tealbook</i>	2.2	2.1	2.7	2.3	2.0	1.7	.6	1.8	1.6
ECl, hourly compensation <sup>1</sup>	3.8	2.9	3.2	3.0	2.4	1.2	2.1	2.5	2.5
<i>Previous Tealbook</i> <sup>1</sup>	3.8	2.9	3.2	3.0	2.4	1.2	2.1	2.2	2.6
Nonfarm business sector									
Output per hour	1.3	1.6	.8	2.5	-1.2	5.3	2.5	.5	1.7
<i>Previous Tealbook</i>	1.5	1.4	.9	2.6	-.4	6.5	2.0	1.3	1.7
Compensation per hour	3.3	3.5	4.5	3.6	2.2	2.0	1.7	2.2	2.3
<i>Previous Tealbook</i>	3.3	3.5	4.5	3.6	2.3	2.8	1.4	2.1	2.5
Unit labor costs	2.0	1.9	3.6	1.1	3.4	-3.1	-.9	1.7	.6
<i>Previous Tealbook</i>	1.9	2.0	3.5	.9	2.7	-3.5	-.6	.8	.7
Core goods imports chain-wt. price index <sup>2</sup>	3.6	2.2	2.5	2.9	3.7	-1.7	2.6	4.9	1.5
<i>Previous Tealbook</i> <sup>2</sup>	3.6	2.2	2.5	2.9	3.5	-1.9	2.7	5.0	1.4

1. Private-industry workers. [Return to table](#)

2. Core goods imports exclude computers, semiconductors, oil, and natural gas. [Return to table](#)

## Other Macroeconomic Indicators



Nonfarm payroll employment <sup>1</sup>	2.0	2.4	2.1	1.2	-2.8	-5.6	.7	1.4	2.1
Unemployment rate <sup>2</sup>	5.4	5.0	4.5	4.8	6.9	10.0	9.6	9.2	8.5
<i>Previous Tealbook</i> <sup>2</sup>	5.4	5.0	4.5	4.8	6.9	10.0	9.6	8.9	8.1
NAIRU <sup>2</sup>	5.0	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0
<i>Previous Tealbook</i> <sup>2</sup>	5.0	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0
GDP gap <sup>3</sup>	-.5	.1	.1	-.1	-5.4	-6.9	-5.6	-5.9	-5.2
<i>Previous Tealbook</i> <sup>3</sup>	-.4	.1	.1	.1	-4.8	-6.4	-5.7	-5.2	-4.2
Industrial production <sup>4</sup>	3.1	2.3	2.3	2.5	-9.1	-5.5	6.2	3.9	3.3
<i>Previous Tealbook</i> <sup>4</sup>	3.1	2.3	2.3	2.5	-9.1	-5.5	6.2	4.5	3.7
Manufacturing industr. prod. <sup>4</sup>	3.7	3.4	2.0	2.8	-11.8	-6.1	6.1	4.2	3.8
<i>Previous Tealbook</i> <sup>4</sup>	3.7	3.4	2.0	2.8	-11.8	-6.1	6.1	5.2	4.2
Capacity utilization rate - mfg. <sup>2</sup>	77.3	78.5	78.4	79.0	70.1	67.7	73.3	75.8	77.7
<i>Previous Tealbook</i> <sup>2</sup>	77.3	78.5	78.4	79.0	70.1	67.7	73.3	76.5	78.5
Housing starts <sup>5</sup>	2.0	2.1	1.8	1.4	.9	.6	.6	.6	.7
Light motor vehicle sales <sup>5</sup>	16.8	16.9	16.5	16.1	13.1	10.3	11.5	12.8	13.8
<i>Income and saving</i>									
Nominal GDP <sup>4</sup>	6.2	6.4	5.3	4.9	-1.2	.0	4.7	3.9	4.5
Real disposable pers. income <sup>4</sup>	3.5	.6	4.6	1.6	1.0	-2.4	3.5	1.6	2.6
<i>Previous Tealbook</i> <sup>4</sup>	3.5	.6	4.6	1.5	1.0	.4	2.2	2.0	2.8
Personal saving rate <sup>2</sup>	3.8	1.6	2.8	2.5	6.2	4.3	5.2	5.4	5.3
<i>Previous Tealbook</i> <sup>2</sup>	3.6	1.5	2.5	2.1	5.2	5.5	5.4	5.3	5.2
Corporate profits <sup>6</sup>	21.9	19.6	3.7	-8.1	-33.5	61.8	18.2	5.6	1.3
Profit share of GNP <sup>2</sup>	10.5	11.8	11.6	10.1	6.8	11.0	12.4	12.6	12.2
Net federal saving <sup>7</sup>	-379	-283	-204	-245	-613	-1218	-1274	-1233	-1022
Net state & local saving <sup>7</sup>	-8	26	51	12	-72	-78	-25	-64	-61
Gross national saving rate <sup>2</sup>	14.5	15.6	16.5	13.9	12.6	11.3	12.3	12.9	13.6
Net national saving rate <sup>2</sup>	2.9	3.6	4.4	1.7	-6	-1.9	-.4	.4	1.2

1. Change, millions. [Return to table](#)

2. Percent; values are for the fourth quarter of the year indicated. [Return to table](#)

3. Percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential. Values are for the fourth quarter of the year indicated. [Return to table](#)

4. Percent change. [Return to table](#)

5. Level, millions; values are annual averages. [Return to table](#)

6. Percent change, with inventory valuation and capital consumption adjustments. [Return to table](#)

7. Billions of dollars; values are annual averages. [Return to table](#)

## Staff Projections of Federal Sector Accounts and Related Items

(Billions of dollars except as noted)

Item	Fiscal year				2010				2011				2012			
	2009 <sup>a</sup>	2010 <sup>a</sup>	2011	2012	Q1 <sup>a</sup>	Q2 <sup>a</sup>	Q3 <sup>a</sup>	Q4 <sup>a</sup>	Q1 <sup>a</sup>	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Unified budget</b>					Not seasonally adjusted											
Receipts <sup>1</sup>	2105	2163	2323	2535	466	643	565	532	488	714	589	558	547	773	658	636
Outlays <sup>1</sup>	3518	3456	3629	3673	795	930	855	901	949	855	925	930	971	908	864	954
Surplus/deficit <sup>1</sup>	-1413	-1293	-1306	-1138	-329	-287	-290	-369	-460	-141	-336	-373	-425	-135	-206	-318

<i>Previous Tealbook</i>	-1413	-1293	-1333	-1128	-329	-287	-290	-369	-460	-168	-336	-362	-425	-143	-198	-322
On-budget	-1550	-1370	-1342	-1177	-359	-351	-267	-390	-451	-202	-299	-390	-414	-189	-185	-352
Off-budget	137	77	36	39	30	64	-23	21	-10	61	-37	17	-11	54	-21	34
<b>Means of financing</b>																
Borrowing	1743	1474	1129	1318	478	344	390	368	260	93	408	333	575	175	236	323
Cash decrease	96	-35	200	-140	-25	-71	-20	-33	225	-19	27	20	-130	-20	-10	15
Other <sup>2</sup>	-427	-146	-23	-40	-124	14	-80	34	-24	67	-100	20	-20	-20	-20	-20
Cash operating balance, end of period	275	310	110	250	219	290	310	343	118	137	110	90	220	240	250	235
<b>NIPA federal sector</b>																
					Seasonally adjusted annual rates											
Receipts	2280	2379	2533	2780	2365	2408	2475	2471	2523	2563	2576	2602	2794	2842	2881	2918
Expenditures	3346	3648	3780	3863	3637	3686	3733	3758	3729	3826	3805	3836	3863	3867	3886	3906
Consumption expenditures	972	1042	1071	1101	1034	1056	1067	1060	1059	1078	1086	1095	1101	1103	1105	1107
Defense	656	697	716	745	691	702	713	703	701	723	735	738	744	747	750	753
Nondefense	316	346	355	356	343	354	354	357	358	354	351	357	357	356	355	354
Other spending	2374	2606	2709	2762	2603	2630	2666	2698	2670	2749	2719	2741	2762	2764	2781	2799
Current account surplus	-1066	-1269	-1246	-1083	-1272	-1278	-1258	-1287	-1206	-1263	-1229	-1234	-1068	-1024	-1006	-988
Gross investment	156	165	164	162	161	169	171	175	161	159	162	163	162	162	163	163
Gross saving less gross investment <sup>3</sup>	-1098	-1305	-1275	-1102	-1305	-1317	-1298	-1330	-1232	-1286	-1253	-1256	-1088	-1042	-1022	-1003
<b>Fiscal indicators<sup>4</sup></b>																
High-employment (HEB) surplus/deficit	-757	-937	-935	-755	-920	-966	-956	-994	-896	-939	-909	-906	-733	-695	-685	-681
Change in HEB, percent of potential GDP	1.7	1.1	-.2	-1.3	.1	.2	-.1	.2	-.7	.2	-.2	-.1	-1.1	-.3	-.1	-.1
Fiscal impetus (FI), percent of GDP	1.3	0.5	-0.1	-1.1	1.2	1.0	0.3	-0.4	-0.5	0.3	0.1	-0.2	-1.5	-1.0	-1.0	-0.8
<i>Previous Tealbook</i>	1.2	0.6	-0.0	-1.1	1.0	1.0	0.6	-0.2	-0.3	0.2	0.3	-0.3	-1.5	-1.0	-1.0	-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 <sup>1</sup>	Total	Households			Business	State and local governments	Federal government	Memo: Nominal GDP
		Total	Home mortgages	Consumer credit				
<b>Year</b>								
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	3.0	-1.7	-1.5	-4.4	-2.7	4.9	22.7	.0
2010	4.2	-1.9	-2.8	-1.8	.3	4.5	20.2	4.7
2011	3.8	-.5	-2.0	4.0	3.2	-.3	11.7	3.9
2012	5.4	1.5	-.2	7.0	3.8	3.8	12.5	4.5
2013	4.8	2.1	.1	8.4	4.5	3.7	8.6	5.3
<b>Quarter</b>								
2010: 1	3.7	-3.0	-5.2	-4.1	-4	5.7	20.5	5.5

	2	4.4	-2.2	-2.2	-3.1	-1.3		-1.4	24.4	5.4
	3	3.9	-2.0	-2.6	-1.9	1.1		5.4	16.0	3.9
	4	4.6	-.6	-1.1	2.0	1.9		7.9	14.6	4.2
2011:	1	2.1	-2.0	-3.4	2.3	3.2		-2.9	7.8	3.1
	2	3.3	-.5	-2.0	4.0	3.6		-5.2	10.4	3.9
	3	4.9	.0	-1.4	4.5	2.6		1.4	15.0	5.1
	4	4.6	.3	-1.2	5.1	3.0		5.4	11.6	3.6
2012:	1	6.9	.9	-.6	5.8	3.2		3.8	19.0	3.2
	2	5.3	1.3	-.3	6.4	3.7		3.8	12.0	5.9
	3	4.0	1.7	.0	7.3	3.8		3.7	6.9	4.6
	4	5.1	2.0	.1	8.0	4.2		3.7	9.9	4.6
2013:	1	5.3	2.0	.1	8.2	4.3		3.7	10.4	4.2
	2	4.9	2.1	.1	8.2	4.3		3.6	9.0	6.6
	3	3.8	2.1	.1	8.0	4.4		3.6	5.2	5.2
	4	4.9	2.1	.1	8.0	4.4		3.6	8.8	5.1

Note: Quarterly data are at seasonally adjusted annual rates.

1. Data after 2011:Q1 are staff projections. Changes are measured from end of the preceding period to end of period indicated except for annual nominal GDP growth, which is calculated from Q4 to Q4. [Return to table](#)

## Flow of Funds Projections: Highlights

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

Category	2010	2011	2012	2013	2011		2012				2013			
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<i>Domestic nonfinancial sectors</i>														
Net funds raised														
Total	1180.7	956.2	1684.2	1569.3	1404.4	1297.7	2243.6	1691.0	1183.9	1618.3	1775.6	1654.8	1186.8	1660.0
Net equity issuance	-277.9	-398.9	-340.0	-340.0	-392.0	-392.0	-320.0	-320.0	-360.0	-360.0	-320.0	-320.0	-360.0	-360.0
Net debt issuance	1458.6	1355.1	2024.2	1909.3	1796.4	1689.7	2563.6	2011.0	1543.9	1978.3	2095.6	1974.8	1546.8	2020.0
Borrowing indicators														
Debt (percent of GDP) <sup>1</sup>	243.4	243.3	244.0	244.1	242.0	242.7	244.2	244.4	244.5	244.5	245.2	244.4	243.9	243.5
Borrowing (percent of GDP)	10.0	9.0	12.8	11.5	11.8	11.0	16.6	12.8	9.7	12.3	12.9	12.0	9.3	12.0
Households														
Net borrowing <sup>2</sup>	-262.7	-73.3	199.9	282.5	5.7	45.2	125.1	175.8	232.6	266.2	276.9	282.5	282.5	288.0
Home mortgages	-285.6	-199.6	-19.7	9.8	-138.9	-118.6	-59.1	-29.5	0.0	9.8	9.8	9.8	9.8	9.8
Consumer credit	-44.2	97.9	178.3	226.4	110.7	127.0	146.4	164.0	190.3	212.5	222.3	226.9	225.9	230.5
Debt/DPI (percent) <sup>3</sup>	120.7	114.8	111.3	107.9	114.0	112.8	112.6	111.6	110.7	109.8	108.9	108.3	107.6	106.8
Business														
Financing gap <sup>4</sup>	-163.2	-105.8	-12.1	82.6	-89.0	-109.3	-27.6	-42.5	-8.2	29.7	85.4	58.7	73.4	112.9
Net equity issuance	-277.9	-398.9	-340.0	-340.0	-392.0	-392.0	-320.0	-320.0	-360.0	-360.0	-320.0	-320.0	-360.0	-360.0
Credit market borrowing	35.7	342.3	422.4	516.8	287.9	335.9	354.7	419.3	437.0	478.8	500.5	509.6	525.6	531.3
State and local governments														
Net borrowing	105.4	-8.6	93.7	93.7	33.7	129.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7
Current surplus <sup>5</sup>	245.0	176.9	176.7	202.3	160.7	159.2	167.6	171.1	182.2	185.7	201.1	200.1	203.7	204.4
Federal government														
Net borrowing	1580.2	1093.9	1308.2	1016.3	1469.1	1178.9	1990.1	1322.2	780.6	1139.6	1224.4	1088.9	644.9	1106.9
Net borrowing (n.s.a.)	1580.2	1093.9	1308.2	1016.3	408.3	332.7	574.5	174.6	236.2	322.9	383.1	116.2	202.2	314.7
Unified deficit (n.s.a.)	1275.1	1309.7	1083.2	936.3	335.6	372.5	424.6	134.6	206.2	317.9	378.1	76.2	172.2	309.7

Depository institutions														
Funds supplied	-192.7	-28.9	265.9	315.1	211.7	226.9	260.1	259.7	263.0	280.6	285.9	307.5	328.3	338.6

Note: Data after 2011:Q1 are staff projections.

1. Average debt levels in the period (computed as the average of period-end debt positions) divided by nominal GDP. [Return to table](#)
  2. Includes change in liabilities not shown in home mortgages and consumer credit. [Return to table](#)
  3. Average debt levels in the period (computed as the average of period-end debt positions) divided by disposable personal income. [Return to table](#)
  4. For corporations, excess of capital expenditures over U.S. internal funds. [Return to table](#)
  5. NIPA state and local government saving plus consumption of fixed capital and net capital transfers. [Return to table](#)
- n.s.a. Not seasonally adjusted. [Return to table](#)

## Foreign Real GDP and Consumer Prices: Selected Countries

(Quarterly percent changes at an annual rate)

Measure and country	Projected											
	2010				2011				2012			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Real GDP<sup>1</sup></b>												
Total foreign	5.3	5.1	3.4	3.4	4.2	2.2	3.7	3.4	3.3	3.3	3.4	3.4
<i>Previous Tealbook</i>	5.3	5.1	3.5	3.4	4.2	2.8	3.9	3.6	3.5	3.5	3.6	3.6
Advanced foreign economies	4.2	2.8	2.3	1.4	2.4	.7	2.5	2.2	2.1	2.1	2.1	2.2
Canada	5.6	2.3	2.5	3.1	3.9	.7	2.9	2.3	2.2	2.3	2.3	2.3
Japan	9.4	-.0	3.6	-2.9	-3.5	-3.0	4.6	4.6	3.3	2.6	2.3	2.1
United Kingdom	1.4	4.3	2.5	-2.0	1.9	.7	2.6	2.1	2.1	2.1	2.2	2.3
Euro area	1.4	3.8	1.6	1.1	3.4	1.5	1.1	1.1	1.2	1.4	1.6	1.8
Germany	2.1	8.7	3.2	1.5	6.1	1.9	1.5	1.5	1.8	2.0	2.2	2.5
Emerging market economies	6.5	7.6	4.7	5.5	6.2	3.9	5.0	4.7	4.7	4.7	4.8	4.8
Asia	10.5	7.1	6.5	5.8	8.6	4.7	5.8	5.4	5.7	5.8	5.8	5.9
Korea	8.6	5.7	2.6	2.0	5.4	3.4	3.7	3.7	3.7	3.9	4.0	4.0
China	9.3	8.9	10.1	10.0	8.7	9.1	8.1	8.3	8.3	8.4	8.3	8.3
Latin America	2.4	8.6	2.6	4.5	3.8	2.9	4.2	3.9	3.5	3.5	3.5	3.5
Mexico	1.3	8.4	2.8	4.6	2.1	2.4	4.3	4.0	3.6	3.6	3.6	3.6
Brazil	8.9	6.4	1.8	3.2	5.4	3.6	3.4	3.4	3.4	3.4	3.4	3.4
<b>Consumer prices<sup>2</sup></b>												
Total foreign	3.3	1.9	2.5	5.3	4.3	3.2	2.5	2.2	2.4	2.3	2.4	2.4
<i>Previous Tealbook</i>	3.4	1.8	2.4	5.3	4.4	2.9	2.4	2.4	2.4	2.3	2.4	2.4
Advanced foreign economies	2.0	.5	1.1	3.5	3.3	2.2	.5	1.5	1.4	1.3	1.4	1.5
Canada	2.2	-.1	2.4	4.4	3.6	3.0	.4	2.0	2.2	1.9	1.9	1.9
Japan	.7	-1.2	-1.3	2.3	.4	-3	-.7	-.5	-.4	-.4	-.3	-.3
United Kingdom	4.7	2.5	1.9	4.6	7.4	3.6	1.7	3.9	2.8	1.7	1.9	3.1
Euro Area	1.9	1.7	1.2	3.3	3.7	2.8	.9	1.6	1.5	1.5	1.6	1.6
Germany	1.4	.8	.9	3.3	3.8	2.1	1.1	1.7	1.7	1.7	1.8	1.8
Emerging market economies	4.4	2.9	3.5	6.6	5.1	4.0	4.0	2.8	3.2	3.1	3.1	3.1
Asia	3.5	2.9	3.7	7.3	5.4	4.7	4.4	2.3	2.9	2.8	2.8	2.8
Korea	2.5	3.0	3.8	5.2	5.7	2.2	3.9	3.2	2.9	2.9	2.9	2.9
China	2.9	3.2	4.1	8.6	4.6	5.8	4.9	1.7	2.8	2.7	2.7	2.7
Latin America	6.9	3.0	2.9	5.0	4.3	2.5	3.3	3.9	3.9	3.9	3.9	3.9
Mexico	6.9	2.5	2.9	4.8	3.6	1.8	3.0	3.7	3.7	3.7	3.7	3.7
Brazil	7.4	5.9	1.1	7.4	9.5	7.5	4.5	5.3	5.3	5.1	4.9	4.9



	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	<i>Billions of dollars, s.a.a.r.</i>											
<b>U.S. current account balance</b>	<b>-473.2</b>	<b>-481.2</b>	<b>-480.5</b>	<b>-448.7</b>	<b>-477.1</b>	<b>-469.3</b>	<b>-448.7</b>	<b>-428.1</b>	<b>-431.4</b>	<b>-356.8</b>	<b>-354.6</b>	<b>-360.6</b>
<i>Previous Tealbook</i>	-457.8	-483.0	-495.9	-461.5	-528.9	-444.8	-443.3	-392.2	-366.8	-334.6	-333.9	-326.1
Current account as percent of GDP	-3.3	-3.3	-3.3	-3.0	-3.2	-3.1	-3.0	-2.8	-2.8	-2.3	-2.2	-2.2
<i>Previous Tealbook</i>	-3.2	-3.3	-3.4	-3.1	-3.5	-2.9	-2.9	-2.5	-2.3	-2.1	-2.1	-2.0
Net goods & services	-478.6	-522.1	-524.5	-475.0	-563.2	-574.2	-553.7	-512.3	-518.1	-439.0	-426.8	-418.6
Investment income, net	154.7	181.9	192.3	168.9	228.1	253.2	249.6	231.0	231.9	223.5	216.9	204.8
Direct, net	266.2	290.3	296.8	269.4	324.7	358.2	343.5	318.3	319.9	321.4	323.8	325.7
Portfolio, net	-111.4	-108.3	-104.5	-100.5	-96.6	-104.9	-93.8	-87.4	-88.0	-97.9	-106.9	-121.0
Other income and transfers, net	-149.3	-141.1	-148.3	-142.6	-142.0	-148.3	-144.7	-146.8	-145.3	-141.4	-144.7	-146.8

#### Annual Data

	2004	2005	2006	2007	2008	2009	2010	Projected		
									2011	2012
	<i>Billions of dollars</i>									
<b>U.S. current account balance</b>	<b>-628.5</b>	<b>-745.8</b>	<b>-800.6</b>	<b>-710.3</b>	<b>-677.1</b>	<b>-376.6</b>	<b>-470.9</b>	<b>-455.8</b>	<b>-375.9</b>	
<i>Previous Tealbook</i>	-626.5	-742.0	-796.7	-712.7	-668.4	-384.8	-474.5	-452.3	-340.4	
Current account as percent of GDP	-5.3	-5.9	-6.0	-5.1	-4.7	-2.7	-3.2	-3.0	-2.4	
<i>Previous Tealbook</i>	-5.3	-5.9	-5.9	-5.1	-4.6	-2.7	-3.2	-3.0	-2.1	
Net goods & services	-605.4	-708.6	-753.3	-696.7	-698.3	-381.3	-500.0	-550.8	-450.6	
Investment income, net	73.4	78.7	54.7	111.1	157.8	137.1	174.5	240.5	219.3	
Direct, net	150.9	173.2	174.0	244.6	284.3	262.2	280.6	336.2	322.7	
Portfolio, net	-77.5	-94.5	-119.4	-133.5	-126.5	-125.1	-106.2	-95.7	-103.5	
Other income and transfers, net	-96.5	-115.9	-102.0	-124.7	-136.6	-132.3	-145.3	-145.4	-144.5	

Last update: February 3, 2017

### Monetary Policy Strategies

#### Equilibrium Real Federal Funds Rate

*Figure: Short-Run Estimates with Confidence Intervals*

Line chart, by percent, 1990 to 2011. There are five series, "The actual real funds rate based on lagged core inflation", "Tealbook-consistent measure (FRB/US)", "Range of four model-based estimates", "70 Percent confidence interval", and "90 Percent confidence interval". The actual real funds rate series starts at about 4.5 in 1990, decreases to about -0.2 by 1992, generally increases to about 4.8 by 2000, generally decreases to about -0.7 by 2004, generally increases to about 3 by 2006, generally decreases to about -2 by late 2008 and generally increases to about -1.1 by 2011:Q3. Tealbook-consistent measure starts at about 4 in 1997. It generally increases to about 5.5 by 2000, generally decreases to about 0 by 2003, generally increases to about 3.3 by 2007, decreases to about -4 by 2009, generally increases to about -1.6 by 2011:Q1 and generally decreases to about -3 by 2011:Q3. The other 3 series closely track each other throughout the chart, with the 70 percent confidence interval being about 1 percent both lesser and greater than the Range of model-based estimates, and the 90 Percent confidence interval being about 2 percent both lesser and greater than the Range of model-based estimates at any given point. The Range of model-based estimates begins at a range of about [1.5, 4] in 1990, decreases to about [-1.3, 2] by 1991, generally increases to about [2, 4.5] by 2000, generally decreases to about [-0.5, 0] by 2003, increases to about [0.5, 2.25] by 2006, decreases to about [-7, -2.5] by 2009 and then increases to about [-2.9, -0.1] by 2011.

#### Short-Run and Medium-Run Measures (Percent)

	Current Tealbook	Current Quarter Estimate as of Previous Tealbook	Previous Tealbook
<b>Short-Run Measures</b>			
Single-equation model	-2.3	-1.6	-1.6
Small structural model	-2.1	-1.6	-1.1
EDO model	-0.2	-0.2	-0.4
FRB/US model	-2.7	-2.6	-2.7
Confidence intervals for four model-based estimates			
70 percent confidence interval	-3.6 to -0.0		
90 percent confidence interval	-4.5 to 1.1		
Tealbook-consistent measures			
EDO model	-3.3	-1.1	-1.9
FRB/US model	-2.9	-1.8	-2.2
<b>Medium-Run Measures</b>			
Single-equation model	1.0	1.0	1.1
Small structural model	0.8	1.2	1.1
Confidence intervals for two model-based estimates			
70 percent confidence interval	-0.0 to 1.8		
90 percent confidence interval	-0.6 to 2.4		
TIPS-based factor model	1.8		1.8
<b>Memo</b>			
Actual real federal funds rate	-1.1		-1.0

Note: Explanatory Note A provides background information regarding the construction of these measures and confidence intervals. The actual real federal funds rate shown is based on lagged core inflation as a proxy for inflation expectations. For information regarding alternative measures, see Explanatory Note A. Estimates of  $r^*$  may change at the beginning of a quarter even when the staff outlook is unchanged because the twelve-quarter horizon covered by the calculation has rolled forward one quarter. Therefore, whenever the Tealbook is published early in the quarter, this table includes a third column labeled "Current Quarter Estimate as of Previous Tealbook."

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

*Figure: Nominal Federal Funds Rate*

Line chart, by percent, 2010 to 2015. There are three series, "Current Tealbook: Constrained", "Previous Tealbook: Constrained", and "Current Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2010:Q2 at about 0.1 and remains constant here until 2014:Q3. It then generally increases to about 1.8 by 2015:Q4. Previous Tealbook: Constrained begins in 2010:Q2 at about 0.1 and remains constant there until 2013:Q3. It then increases to about 3.4 by 2015:Q4. Current Tealbook: Unconstrained begins in 2010:Q2 at about 0.13 and remains relatively constant here until 2011:Q1. It then decreases to about -2.8 by 2012:Q2. It then increases to about 2.9 by 2015:Q4.

#### *Figure: Real Federal Funds Rate*

Line chart, by percent, 2010 to 2015. There are three series, "Current Tealbook: Constrained", "Previous Tealbook: Constrained", and "Current Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2010:Q2 at about -1.3 and generally increases to about -0.7 by 2010:Q4. It then generally decreases to about -2 by 2012:Q1 and then generally increases to about -0.3 by 2015:Q4. Previous Tealbook: Constrained begins in 2010:Q2 at about -1.25 and increases to about -0.6 by 2010:Q4. It then decreases to about -1.9 by 2012:Q1 and remains relatively stable here until 2013:Q3. It then generally increases to about 1.3 by 2015:Q4. Current Tealbook: Unconstrained begins in 2010:Q2 at about -1.3 and increases to about -0.7 by 2010:Q4. It then decreases to about -4.8 by 2012:Q3 and then increases to about 0.7 by 2015:Q4.

#### *Figure: Civilian Unemployment Rate*

Line chart, by percent, 2010 to 2015. There are three series, "Current Tealbook: Constrained", "Previous Tealbook: Constrained", and "Current Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2010:Q2 at about 9.7 and generally decreases to about 8.9 by 2011:Q1. It then generally increases to about 9.15 by 2011:Q3 and then generally decreases to about 4.8 by 2015:Q4. Previous Tealbook: Constrained begins in 2010:Q2 at about 9.7 and decreases to about 8.9 by 2011:Q1. It then generally increases to about 9.0 by 2011:Q2 and then generally decreases to about 4.65 by 2015:Q4. Current Tealbook: Unconstrained begins in 2010:Q2 at about 9.7 and generally decreases to about 8.9 by 2011:Q1. It then generally increases to about 9.15 by 2011:Q3 and then generally decreases to about 4.85 by 2015:Q4.

#### *Figure: PCE Inflation*

Line chart, by percent (four-quarter average), 2010 to 2015. There are three series, "Current Tealbook: Constrained", "Previous Tealbook: Constrained", and "Current Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2010:Q2 at about 1.99 and decreases to about 1.2 by 2010:Q4. It then generally increases to about 2.75 by 2011:Q3 and then generally decreases to about 1.8 by 2013:Q4. By 2015:Q4 it has generally increased to about 2.06. Previous Tealbook: Constrained begins in 2010:Q2 at about 1.92 and decreases to about 1.1 by 2010:Q4. It then generally increases to about 2.5 by 2011:Q3 and then generally decreases to about 1.6 by 2012:Q2. By 2015:Q4 it has generally increased to about 2.07. Current Tealbook: Unconstrained begins in 2010:Q2 at about 1.99 and decreases to about 1.2 by 2010:Q4. It then increases to about 2.75 by 2011:Q3 and then generally decreases to about 1.7 by 2012:Q3. By 2015:Q4 it has increased to about 2.1.

Note: Starting this Tealbook, the optimal control simulations are derived from a loss function that uses headline inflation instead of core inflation and the lower right panel now displays the behavior of simulated headline inflation. The simulations labeled "Previous Tealbook" are derived from calculations that use the new loss function and the staff outlook as of the June Tealbook.

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

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

Line chart, by percent, 2011 to 2014. There are four series, "Current Tealbook", "Previous Tealbook", "70 percent confidence interval" and "90 percent confidence interval". The Current Tealbook begins at about 0.1 in 2011:Q2 and remains stable here until 2013:Q2. It then increases to about 1.8 by 2014:Q4. The Previous Tealbook begins at about 0.1 in 2011:Q2 and remains constant here until 2012:Q3. It then increases to about 3.1 by 2014:Q4. The 70 percent confidence interval begins at a range of about [0.1, 0.13] in 2011:Q2 and generally increases to about [0.2, 3.85] by 2014:Q4. The 90 percent confidence interval begins at a range of about [0.1, 0.2] in 2011:Q2 and generally increases to about [0.1, 5.0] by 2014:Q4.

Note: The staff baseline projection for the federal funds rate is derived from the outcome-based policy rule. Dark and light shadings represent the 70 and 90 percent confidence intervals respectively. Explanatory Note B provides further background information.

#### *Figure: Market-Based Expectations for the Federal Funds Rate*

Line chart, by percent, 2011 to 2014. There are six series, "Current Tealbook", "Previous Tealbook", "Current 70 percent confidence interval", "Current 90 percent confidence interval", "Previous 70 percent confidence interval" and "Previous 90 percent confidence interval". The Current Tealbook begins at about 0.1 in 2011:Q3 and then generally increases to about 1.2 by 2014:Q4. The Previous Tealbook begins at about 0.1 in 2011:Q3 and then increases to about 1.9 by 2014:Q4. The other 2 Current series closely track the Current Tealbook series throughout the chart. The Current 70 percent confidence interval begins at a range of about [0.05, 0.15] in 2011:Q3 and then increases to about [0.05, 2.35] by 2014:Q4. The Current 90 percent confidence interval begins at a range of about [0.05, 0.2] in 2011:Q3 and then increases to about [0, 3.95] by 2014:Q4. The other two Previous series closely track the Previous Tealbook series throughout the chart. The Previous 70 percent confidence interval begins at a range of about [0.05, 0.15] in 2011:Q3 and then increases to about [0.8, 3.0] by 2014:Q4. The Previous 90 percent confidence interval begins at a range of about [0.05, 0.21] in 2011:Q3 and then increases to about [0.5, 4.35] by 2014:Q4.

Note: The figure depicts the mean path and confidence intervals of future federal funds rates derived from market quotes as of August 3. 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

	Constrained Policy		Unconstrained Policy	
	2011Q3	2011Q4	2011Q3	2011Q4
Taylor (1993) rule	<b>0.36</b>	<b>0.76</b>	<b>0.36</b>	<b>0.76</b>
<i>Previous Tealbook</i>	0.45	0.90	0.45	0.90
Taylor (1999) rule	<b>0.13</b>	<b>0.13</b>	<b>-2.63</b>	<b>-2.20</b>
<i>Previous Tealbook</i>	0.13	0.13	-2.25	-1.73
Estimated outcome-based rule	<b>0.13</b>	<b>0.13</b>	<b>-0.19</b>	<b>-0.47</b>
<i>Previous Tealbook</i>	0.13	0.13	-0.02	-0.15
Estimated forecast-based rule	<b>0.13</b>	<b>0.13</b>	<b>-0.15</b>	<b>-0.48</b>
<i>Previous Tealbook</i>	0.13	0.13	0.02	-0.15
First-difference rule	<b>0.17</b>	<b>0.22</b>	<b>0.17</b>	<b>0.22</b>
<i>Previous Tealbook</i>	0.31	0.46	0.31	0.46

### Memo

	2011Q3	2011Q4
Staff assumption	0.10	0.13
Fed funds futures	0.10	0.09
Median expectation of primary dealers	0.13	0.13
Blue Chip forecast (August 1, 2011)	0.10	0.20

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.

† Note: Data values for figures are rounded and may not sum to totals. [Return to text](#)

**Last update: February 3, 2017**

---

# Accessible Material

## August 2011 Tealbook B Tables and Charts<sup>‡</sup>

### Monetary Policy Alternatives

Table 1: Overview of Alternatives for the August 9 FOMC Statement

Key Components	June Statement	August Alternatives		
		A	B	C
<b>Economic Activity</b>				
<i>Economic Recovery</i>	continuing at a moderate pace, though somewhat more slowly than expected.	economic growth so far this year has been considerably slower than expected	economic growth so far this year has been slower than expected	economic growth has been modest of late
<i>Labor Market</i>	indicators have been weaker than anticipated	indicators suggest deterioration in overall labor market conditions	indicators show weakness in overall labor market conditions	indicators suggest improvement in overall labor market conditions has slowed
<i>Temporary Factors Influencing Recovery</i>	slower pace of the recovery reflects in part factors likely to be temporary	appear to account for only some of the weakness in economic activity	slow pace of recovery appears to reflect, in part, temporary factors	modest pace of recovery appears to reflect in part factors that are proving to be temporary
<i>Household Spending</i>	continues to expand	has flattened out		
<b>Inflation</b>				
<i>Recent Developments</i>	inflation has picked up in recent months;	inflation picked up earlier in the year; more recently, inflation has moderated	inflation picked up earlier in the year; more recently, inflation has moderated somewhat	inflation has picked up this year
	mainly reflecting higher prices for some commodities and imported goods, as well as the supply chain disruptions	mainly reflecting higher prices for some commodities and imported goods, as well as the supply chain disruptions		as firms have faced cost pressures from higher prices for some commodities and imported goods
	longer-term expectations have remained stable	longer-term expectations have remained stable		
<b>Outlook</b>				
<i>Economic Activity</i>	Committee expects the pace of recovery to pick up over coming quarters and the unemployment rate to resume its gradual decline	Committee now expects a somewhat slower pace of recovery over coming quarters and anticipates that the unemployment rate will decline only gradually		Committee expects pace of recovery to pick up over coming quarters and the unemployment rate to resume a gradual decline
		downside risks to the economic outlook have increased	n.a.	
<i>Inflation</i>	will subside as the effects of past commodity price increases dissipate	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 commodity price increases dissipate further		anticipates that inflation will subside, over coming quarters, as the effects of past commodity price increases dissipate
	will continue to pay close attention to the evolution of inflation and inflation expectations	n.a.		sees the risks to inflation as tilted to the upside
		will continue to pay close attention to inflation and inflation expectations		
<b>Federal Funds Rate Target Range</b>				
<i>Intermeeting</i>				

<i>Period</i>	0 to ¼ percent		0 to ¼ percent	
<i>Forward Guidance</i>	exceptionally low levels for an extended period	exceptionally low levels at least through mid-2013	exceptionally low levels for an extended period	
<b>SOMA Portfolio Policy</b>				
<i>Approach</i>	maintain reinvestment policy	purchase \$400 billion of Treasury securities with maturities of 7 years to 30 years and sell those with maturities of 3 years or less	n.a.	
		maintain reinvestment policy and use proceeds to purchase only securities with maturities of 7 years to 30 years	maintain reinvestment policy	For the time being, maintain reinvestment policy
<b>Future Policy Action</b>				
<i>Asset Purchases / Holdings</i>	prepared to adjust as appropriate	prepared to adjust further if needed	prepared to adjust as appropriate	
<i>Overall</i>	Will monitor the economic outlook and financial developments and will act as needed	will carefully assess the economic outlook in light of incoming information and will employ its policy tools as appropriate	will carefully assess the economic outlook in light of incoming information and will  [act as needed] or [employ its policy tools as appropriate]	Will monitor the economic outlook and financial developments and will act as needed

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

## August FOMC Statement--Alternative A

- Information received since the Federal Open Market Committee met in ~~April~~ **June** indicates that ~~the economic growth so far this year recovery is continuing at a moderate pace, though somewhat more slowly~~ **has been considerably slower** than the Committee had expected. ~~Also, Recent indicators continue to suggest a deterioration in overall labor market conditions, have been weaker than anticipated and the unemployment rate has moved up.~~ The slower pace of the recovery reflects in part factors that are likely to be temporary, including the damping effect of higher food and energy prices on consumer purchasing power and spending as well as supply chain disruptions associated with the tragic events in Japan. Household spending **has flattened out, investment in nonresidential structures is still weak, and the housing sector remains depressed.** ~~However, and business investment in equipment and software continues to expand. However, investment in nonresidential structures is still weak, and the housing sector continues to be depressed.~~ **Temporary factors, including the damping effect of higher food and energy prices on consumer purchasing power and spending as well as supply chain disruptions associated with the tragic events in Japan, appear to account for only some of the recent weakness in economic activity.** Inflation ~~has picked up earlier in the year~~ recent months, mainly reflecting higher prices for some commodities and imported goods, as well as the recent supply chain disruptions. **More recently, inflation has moderated as prices of energy and some commodities have declined somewhat from their earlier peaks.** ~~However,~~ Longer-term inflation expectations have remained stable.
- Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. ~~The unemployment rate remains elevated; however,~~ The Committee **now** expects ~~the a somewhat slower~~ pace of recovery ~~to pick up~~ over coming quarters and **anticipates that** the unemployment rate ~~to resume its gradual~~ will decline **only gradually** toward levels that the Committee judges to be consistent with its dual mandate. **Moreover, downside risks to the economic outlook have increased.** ~~Inflation has moved up recently, but~~ The Committee **also** anticipates that inflation will **settle, over coming quarters, at** ~~subside to~~ 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.
- 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 ¼ percent. The Committee ~~continues to~~ **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** ~~for an extended period.~~
- In order to provide greater support for the economic recovery, the Committee also decided to adjust the composition of its securities holdings. Over the next 12 months, the Committee will purchase \$400 billion of Treasury securities with remaining maturities of 7 years to 30 years and sell an equal amount of Treasury securities with remaining maturities of 3 years or less. Lengthening the average duration of the Federal Reserve's securities portfolio should put downward pressure on longer-term interest rates in private credit markets and thereby support growth in private demand for goods and services.** The Committee **also** will complete its purchases of \$600 billion of longer-term Treasury securities ~~by the end of this month and will maintain its existing policy of reinvesting principal payments from its securities holdings and, going forward, will use the proceeds to purchase only Treasury securities with remaining maturities of 7 years to 30 years.~~ The

Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings **further if needed as appropriate**.

5. The Committee will **monitor carefully assess** the economic outlook **in light of incoming information** and financial developments and will **employ its policy tools as appropriate** to best foster maximum employment and price stability.

## August FOMC Statement--Alternative B

1. Information received since the Federal Open Market Committee met in ~~April~~ **June** indicates that the economic **growth so far this year** ~~recovery is continuing at a moderate pace, though somewhat more slowly~~ **has been slower** than the Committee had expected. Also, Recent labor market indicators **continue to show weakness in overall labor market conditions, have been weaker than anticipated and the unemployment rate remains elevated**. The ~~slower~~ pace of the recovery reflects in part factors that are likely to be temporary, including the damping effect of higher food and energy prices on consumer purchasing power and spending as well as supply chain disruptions associated with the tragic events in Japan. Household spending **has flattened out, investment in nonresidential structures is still weak, and the housing sector remains depressed**. ~~However, business investment in equipment and software continues to expand. However, investment in nonresidential structures is still weak, and the housing sector continues to be depressed.~~ **The slow pace of the recovery this year appears to reflect, in part, temporary factors, including the damping effect of higher food and energy prices on consumer purchasing power and spending as well as supply chain disruptions associated with the tragic events in Japan.** Inflation has picked up ~~earlier in the year~~ **recent months**, mainly reflecting higher prices for some commodities and imported goods as well as the ~~recent~~ supply chain disruptions. **More recently, inflation has moderated somewhat, as prices of energy and some commodities have leveled off.** ~~However,~~ Longer-term inflation expectations have remained stable.
2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. ~~The unemployment rate remains elevated; however,~~ The Committee **now** expects ~~the~~ **a somewhat slower** pace of recovery to pick up over coming quarters and **anticipates that** the unemployment rate to ~~resume its gradual~~ **will** decline **only gradually** toward levels that the Committee judges to be consistent with its dual mandate. ~~Inflation has moved up recently, but~~ The Committee **also** anticipates that inflation will **settle, over coming quarters, at** ~~subside to~~ 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~~ **Nonetheless**, 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 ¼ percent. The Committee continues to anticipate 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 for an extended period. The Committee **also** ~~will complete its purchases of \$600 billion of longer-term Treasury securities by the end of this month and~~ will maintain its existing policy of reinvesting principal payments from its securities holdings. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate.
4. The Committee will ~~monitor~~ **carefully assess** the economic outlook **in light of incoming information** and financial developments and will ~~act as needed~~ **employ its policy tools as appropriate** to best foster maximum employment and price stability.

## August FOMC Statement--Alternative C

1. Information received since the Federal Open Market Committee met in ~~April~~ **June** indicates that the economic **growth** ~~recovery has been modest of late is continuing at a moderate pace, though somewhat more slowly than the Committee had expected.~~ Also, recent labor market indicators **suggest that have been weaker than anticipated improvement in overall labor market conditions has slowed.** The ~~slower~~ **modest** pace of the recovery **appears to** reflects in part factors that are **likely proving** to be temporary, including the damping effect of higher food and energy prices on consumer purchasing power and spending as well as supply chain disruptions associated with the tragic events in Japan. ~~Household spending and Business investment in equipment and software continues to expand~~ **despite these shocks**. However, **household spending has flattened out,** investment in nonresidential structures is still weak, and the housing sector continues to be depressed. Inflation has picked up ~~in recent months~~ **this year, mainly reflecting as firms have faced cost pressures** from higher prices for some commodities and imported goods, ~~as well as the recent supply chain disruptions.~~ However, longer-term inflation expectations have remained stable.
2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. ~~The unemployment rate remains elevated; however,~~ The Committee expects the pace of recovery to pick up over coming quarters and the unemployment rate to resume **its** a gradual decline toward levels that the Committee judges to be consistent with its dual mandate. ~~Inflation has moved up recently, but~~ The Committee anticipates that inflation will **subside, over coming quarters,** to levels at or below those consistent with the Committee's dual mandate as the effects of past energy and other commodity price increases dissipate. However, **the Committee sees the risks to the inflation outlook as tilted to the upside.** 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~~ **in the medium run**, ~~over time,~~ is at levels consistent with its **dual** mandate, **and thereby support progress toward maximum employment,** the Committee decided today to keep the target range for the federal funds rate at 0 to ¼ percent. The Committee continues to anticipate 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 for an extended period. **For the time being,** the Committee will ~~complete its purchases of \$600 billion of longer-term Treasury securities by the end of this month and~~ will maintain its existing policy of reinvesting principal payments from its securities holdings. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate.
4. The Committee will monitor the economic outlook and financial developments and will act as needed to best foster maximum employment and price stability.

## Long-Run Projections of the Balance Sheet and Monetary Base

Figure: Total Assets

Line chart, by billions of dollars, 2006 to 2020. Data are monthly. There are three series, "Alt B and C," "Alt A," and "June Alt B." Alt B and C begins in 2006 at about 800 and generally increases slowly to about 900 by August 2008. It then steeply inclines to about 2250 by November 2008 and then generally decreases to about 1850 by December 2008. By 2011 it has generally increased to about 2850 and by July 2016 it has generally decreased to about 1520. It then increases to about 1980

by the end of 2020. Alt A begins in 2006 at about 800 and generally increases slowly to about 900 by August 2008. It then steeply inclines to about 2250 by November 2008 and then generally decreases to about 1850 by December 2008. By 2013 it has generally increased to about 3000 and by January 2018 it has generally decreased to about 1650. It then increases to about 1980 by the end of 2020. June Alt B begins in 2006 at about 800 and generally increases slowly to about 900 by August 2008. It then steeply inclines to about 2250 by November 2008 and then generally decreases to about 1850 by December 2008. By 2011 it has generally increased to about 2850 and by November 2015 it has generally decreased to about 1500. It then increases to about 1980 by the end of 2020.

## Growth Rates for the Monetary Base

Date	Alternatives B and C	Alternative A	Memo: June Tealbook
Percent, annual rate			
Monthly			
Aug-10	-2.4	-2.4	-2.4
Sep-10	-10.2	-10.2	-10.1
Oct-10	-9.8	-9.8	-9.8
Nov-10	3.2	3.2	3.2
Dec-10	16.8	16.8	16.8
Jan-11	23.3	23.3	23.3
Feb-11	57.6	57.6	57.6
Mar-11	97.8	97.8	97.8
Apr-11	74.4	74.4	74.4
May-11	42.1	42.1	42.1
Jun-11	35.9	35.9	39.6
Jul-11	26.9	26.9	31.1
Aug-11	16.2	18.0	5.5
Sep-11	-0.5	2.3	-14.4
Oct-11	-2.9	-1.0	-7.6
Nov-11	10.2	12.0	7.6
Dec-11	-1.0	1.2	7.4
Quarterly			
2010 Q3	-6.4	-6.4	-6.4
2010 Q4	-3.2	-3.2	-3.2
2011 Q1	36.8	36.8	36.8
2011 Q2	69.4	69.4	69.8
2011 Q3	25.5	26.3	23.6
2011 Q4	2.9	4.9	-2.7
2012 Q1	6.6	9.8	5.6
2012 Q2	3.9	8.0	-11.5
Annual - Q4 to Q4			
2009	52.5	52.5	52.5
2010	0.9	0.9	0.9
2011	37.3	38.2	34.9
2012	2.3	6.3	-8.7
2013	-12.5	-9.6	-16.3
2014	-15.4	-11.6	-16.5
2015	-22.1	-15.8	-21.0

Note: Not seasonally adjusted.

## M2 Growth Rates

(percent, seasonally adjusted annual rate)

Tealbook Forecast *	
Monthly Growth Rates	
Jan-11	3.3
Feb-11	8.3
Mar-11	3.8
Apr-11	4.8
May-11	7.5
Jun-11	12.2
Jul-11	25.2
Aug-11	8.0
Sep-11	-1.3
Oct-11	3.5
Nov-11	3.4
Dec-11	3.6
Quarterly Growth Rates	
2011 Q1	5.0
2011 Q2	6.4
2011 Q3	13.7
2011 Q4	2.9
Annual Growth Rates	
2010	3.2
2011	7.2
2012	3.1
2013	-1.1

\* This forecast is consistent with nominal GDP and interest rates in the Tealbook forecast. Actual data through June 2011; projections thereafter. [Return to table](#)

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

## August 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 ¼ percent. ~~The Committee directs the Desk to complete purchases of \$600 billion of longer-term Treasury securities by the end of this month.~~ **The Committee directs the Desk to execute purchases, over the next 12 months, of Treasury securities with remaining maturities of approximately 7 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 reinvesting principal payments on all domestic securities in the System Open Market Account in Treasury securities~~ **with remaining maturities of approximately 7 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.

## August 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 ¼ percent. ~~The Committee directs the Desk to complete purchases of \$600 billion of longer-term Treasury securities by the end of this month.~~ 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 maximum employment and price stability.

## August 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 ¼ percent. ~~The Committee directs the Desk to complete purchases of \$600 billion of longer-term Treasury securities by the end of this month.~~ 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 maximum employment and price stability.

† Note: Data values for figures are rounded and may not sum to totals. [Return to text](#)

**Last update: February 3, 2017**

---

Explanatory Notes

A. Measures of the Equilibrium Real Rate

Measure	Description
<b>Single-equation Model</b>	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.
<b>Small Structural Model</b>	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.
<b>EDO Model</b>	Estimates of the equilibrium real rate using EDO--an estimated dynamic-stochastic-general-equilibrium (DSGE) model of the U.S. economy--depend 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.
<b>FRB/US Model</b>	Estimates of the equilibrium real rate using FRB/US--the staff's large-scale econometric model of the U.S. economy--depend on a very broad array of economic factors, some of which take the form of projected values of the model's exogenous variables.
<b>Tealbook-consistent</b>	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.
<b>TIPS-based Factor Model</b>	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	-2.9	-1.2
Lagged headline inflation	-2.3	-3.1	-1.4
Projected headline inflation	-1.3	-2.9	-1.1

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 ( $\pi_t$ ), inflation two and three quarters ahead ( $\pi_{t+2|t}$  and  $\pi_{t+3|t}$ ), 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  $\pi$  denotes an assumed value of policymakers' long-run outcome-based and forecast-based rules were estimated using real-time data over the sample 1988:1-2006:4; each specification was chosen using the Bayesian information criterion. Each rule incorporates a 75 basis point shift in the intercept, specified as a sequence of 25 basis point increments during the first three quarters of 1998. The first two simple rules were proposed 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
<b>Outcome-based rule</b>	$i_t = 1.20i_{t-1} - 0.39i_{t-2} + 0.19[1.17 + 1.73\pi_t + 3.66(y_t - y_t) - 2.72(y_{t-1} - y_{t-1})]$
<b>Forecast-based rule</b>	$i_t = 1.18i_{t-1} - 0.38i_{t-2} + 0.20[0.98 + 1.72\pi_{t+2 t} + 2.29(y_{t+1 t} - y_{t+1 t}) - 1.37(y_{t-1} - y_{t-1})]$
<b>Taylor (1993) rule</b>	$i_t = 2 + \pi_t + 0.5(\pi_t - \pi) + 0.5(y_t - y_t)$
<b>Taylor (1999) rule</b>	$i_t = 2 + \pi_t + 0.5(\pi_t - \pi) + (y_t - y_t)$
<b>First-difference rule</b>	$i_t = i_{t-1} + 0.5(\pi_{t+3 t} - \pi) + 0.5(\Delta^4 y_{t+3 t} - \Delta^4 y_{t+3 t})$

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

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

Billions of dollars

	Jul 31, 2011	2012	2014	2016	2018	2020
<b>Total assets</b>	2,869	2,998	2,374	1,840	1,748	1,941
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	53	46	26	18	9	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	53	46	26	18	9	4
Securities held outright	2,648	2,642	2,096	1,624	1,587	1,827
U.S. Treasury securities	1,638	1,887	1,559	1,354	1,576	1,827
Agency debt securities	112	77	39	16	0	0
Agency mortgage-backed securities	897	678	498	254	10	0
Special drawing rights certificate account	5	7	7	7	7	7
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	155	304	251	198	151	110
<b>Total liabilities</b>	2,817	2,928	2,281	1,718	1,585	1,726
Selected liabilities						
Federal Reserve notes in circulation	989	1,078	1,201	1,337	1,470	1,611
Reverse repurchase agreements	70	70	70	70	70	70
Deposits with Federal Reserve Banks	1,685	1,762	995	295	30	30
Reserve balances held by depository institutions	1,620	1,757	990	290	25	25
U.S. Treasury, General Account	65	5	5	5	5	5
U.S. Treasury, Supplementary Financing Account	0	0	0	0	0	0
Other balances	0	0	0	0	0	0
Interest of Federal Reserve Notes due to U.S. Treasury	0	0	0	0	0	0
<b>Total capital</b>	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 -- Alternatives B & C

Billions of dollars

	Jul 31, 2011	2012	2014	2016	2018	2020
<b>Total assets</b>	2,869	2,856	2,079	1,575	1,748	1,941
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	53	46	26	18	9	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	53	46	26	18	9	4
Securities held outright	2,648	2,640	1,913	1,437	1,629	1,834
U.S. Treasury securities	1,638	1,844	1,341	1,148	1,618	1,834
Agency debt securities	112	77	39	16	0	0
Agency mortgage-backed securities	897	719	534	272	11	0
Special drawing rights certificate account	5	7	7	7	7	7
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	155	165	139	120	109	103
<b>Total liabilities</b>	<b>2,817</b>	<b>2,786</b>	<b>1,986</b>	<b>1,453</b>	<b>1,585</b>	<b>1,726</b>
Selected liabilities						
Federal Reserve notes in circulation	989	1,078	1,201	1,337	1,470	1,611
Reverse repurchase agreements	70	70	70	70	70	70
Deposits with Federal Reserve Banks	1,685	1,620	699	30	30	30
Reserve balances held by depository institutions	1,620	1,615	694	25	25	25
U.S. Treasury, General Account	65	5	5	5	5	5
U.S. Treasury, Supplementary Financing Account	0	0	0	0	0	0
Other balances	0	0	0	0	0	0
Interest of Federal Reserve Notes due to U.S. Treasury	0	0	0	0	0	0
<b>Total capital</b>	<b>52</b>	<b>70</b>	<b>93</b>	<b>123</b>	<b>162</b>	<b>215</b>

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**