

Accessible Material

September 2010 Tealbook Tables and Charts

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September 2010 Tealbook Book A Tables and Charts[‡]

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 Tealbook," "August Tealbook," "Market, expected rate," and "Market, Modal Rate." Current Tealbook and August Tealbook begin at about 5.25 and generally decrease together to about .25 in late 2008. They remain about constant until mid-2012 then generally increase together ending at about .5. Market, expected rate and Market, modal rate begin at about 5.25 and generally decrease together to about .25 in mid-2011. Market, expected rate generally increases ending at about 1 and Market, modal rate generally increases ending at about .5.

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 Tealbook," "BBB Corporate Yield - August Tealbook," "Conforming Mortgage Rate - Current Tealbook," "Conforming Mortgage Rate - August Tealbook," "10-Year Treasury Yield - Current Tealbook," and "10-Year Treasury Yield - August Tealbook." BBB Corporate Yield Current Tealbook and BBB corporate Yield August Tealbook both begin at about 6 and generally increase together to about 9.5 in 2008:Q4. They generally decrease together to about 5.5 in 2010:Q3 then generally increase together ending at about 6. Conforming Mortgage Rate - Current Tealbook and Conforming Mortgage Rate - August Tealbook begin at about 6 and generally increase together to about 6.5 in 2007:Q3. They generally decrease together to about 6 in 2008:Q1 then generally increase together to about 6.25 in 2008:Q3. They generally decrease together to about 4.5 in 2010:Q3 then generally increase together ending at about 6. 10-Year Treasury Yield - Current Tealbook and 10-Year Treasury Yield - August Tealbook both begin at about 5 and fluctuate but generally decrease together to about 3 in 2010:Q3. They generally increase together with 10-Year Treasury Yield - Current Tealbook ending at about 4.5 and 10-Year Treasury Yield - August Tealbook ending at about 4.

Figure: Equity Prices

Line chart, 2007 to 2012. Unit is an index, 2007:Q1 = 100, ratio scale. Data are quarter-end. There are two series, "Dow Jones Total Stock Market Index - Current Tealbook," and "Dow Jones Total Stock Market Index - August Tealbook." Both series begin at about 100 and generally increase together to about 105 in 2007:Q3. They generally decrease together to about 55 in 2009:Q1 then generally increase together with Dow Jones Total Stock Market Index - Current Tealbook ending at about 110 and Dow Jones Total Stock Market Index - August Tealbook ending at about 100.

Figure: House Prices

Line chart, 2007 to 2012. Unit is an index, 2007:Q1 = 100, ratio scale. Data are quarterly. There are two series, "Core Logic Index - Current Tealbook," and "Core Logic Index - August Tealbook." Both series begin at about 100 and generally decrease to about 70 in 2009:Q1. They generally increase together to about 75 in 2010:Q2 then remain about constant to the end of the timeline.

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 Tealbook" and "West Texas Intermediate - August Tealbook." Both 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 80 in 2010:Q1. West Texas Intermediate - Current Tealbook remains about constant to the end of the timeline and West Texas Intermediate - August Tealbook generally increases ending at about 85.

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 Tealbook" and "August Tealbook." Both series begin at about 100 and generally decrease together to about 90 in 2008:Q2. They generally increase together to about 100 in 2009:Q1 then generally decrease together to about 92 in 2009:Q4. They generally increase together to about 94 in 2010:Q2. Current Tealbook generally decreases ending at about 86 and August Tealbook generally decreases ending at about 87 in 2012:Q1.

Note: Shading represents the projection period, which begins in 2010:Q3. In the upper-left panel that reports the federal funds rate, the black dotted line is not apparent because the paths of the federal funds rate in the August and the current Tealbooks are the same.

Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

Measure	2010:Q2		2010:Q3		2010:Q4	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
Real GDP	2.1	1.7	2.4	1.7	2.6	2.4
Private domestic final purchases	4.3	4.3	1.5	.9	2.9	2.1
Personal consumption expenditures	1.6	2.0	1.6	2.2	2.0	2.0
Residential investment	28.5	26.3	-8.6	-27.2	8.3	3.5
Nonres. structures	4.8	-2.7	.6	-1.5	.7	-1.8
Equipment and software	26.1	26.4	3.9	-.3	10.5	4.6
Federal purchases	9.2	9.1	4.3	3.4	.5	4.5
State and local purchases	1.4	.6	-.5	-1.0	-.2	-.1
	Contribution to change in real GDP (percentage points)					
Inventory investment	.6	.8	.8	.9	-.6	-.9
Net exports	-2.9	-3.5	.1	-.1	.8	1.1

Recent Nonfinancial Developments (1)

Figure: Change in Private Payroll Employment

Line chart, 2001 to 2010. Unit is thousands of employees. 0 on the scale is marked by a horizontal line. The end of the timeline is labeled August. The series begins at about 0 and fluctuates but generally decreases to about -400 in late 2001. It fluctuates but generally increases to about 300 in early 2005 then fluctuates but generally decreases to about -800 in early 2009. It fluctuates but generally increases to about 300 in early 2010 then generally decreases ending at about 100. There is a second series showing the 3-month moving average. It begins at about 100 then generally decreases to about -400 in late 2001. It fluctuates but generally increases to about 300 in early 2005 then fluctuates but generally decreases to about -800 in early 2009. It fluctuates but generally increases to about 300 in early 2010 then generally decreases ending at about 100.

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

Figure: Unemployment Rate

Line chart, 2001 to 2010. Unit is percent. The end of the timeline is marked August. The series begins at about 4 and generally increases to about 6.5 in mid-2003. It generally decreases to about 4 in early 2007 then generally increases to about 10 in early 2009. It generally decreases ending at about 9.5.

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

Figure: Manufacturing IP ex. Motor Vehicles and Parts

Line chart, 2001 to 2010. Unit is 3-month percent change, annual rate. 0 on the timeline is marked by a horizontal line. The end of the timeline is marked August. The series begins at about -2.5 and generally increases to about 7 in mid-2002. It generally decreases to about -.25 in early 2003 then fluctuates but generally increases to about 8 in mid-2005. It generally increases to about 13 in late 2005 then generally decreases to about .25 in early 2006. It fluctuates but generally increases to about 7 in early 2007 then generally decreases to about -24 in early 2009. It generally increases to about 8 in mid-2009 then generally decreases to about 2.5 in mid-2009. It generally increases to about 13 in late 2009 then generally decreases ending at about 2.5.

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

Figure: Production of Light Motor Vehicles

Line chart, 2001 to 2010. Unit is millions of units, annual rate. The series begins at about 11 and generally increases to about 13 in mid-2002. It fluctuates but generally decreases to about 4 in mid-2009. It generally increases ending at about 8 in August 2010. 2010:Q3 Schedules are marked as a circle at about 8.

Note: Schedules data are from Ward's Communications.

Source: Ward's Auto Infobank.

[Box:] How Likely Is a Double Dip?

Figure: Probability of Recession

Line chart, 1960 to 2010. Unit is percent. There are three series, "GDP only," "GDP and GDI," and "Monthly indicators."

GDP only begins at about 0 and generally increases to about 95 in late 1960. It generally decreases to about 0 in early 1961 and remains about constant until early 1969. It generally increases to about 90 in late 1969 then generally decreases to about 0 in early 1971. It remains about constant until early 1973 then generally increases to about 100 in early 1975. It generally decreases to about 0 in mid-1975 then generally increases to about 100 in early 1980. It generally decreases to about 0 in early 1981 then generally increases to about 100 in late 1981. It generally decreases to about 0 and remains about constant until mid-1989. It generally increases to about 90 in late 1990 then generally decreases to about 0 in early 1992. It fluctuates but remains about constant until early 2000 then generally increases to about 40 in mid-2001. It generally decreases to about 0 in late 2004 then remains about constant until early 2006. It generally increases to about 100 in early 2008 and remains about constant until early 2010. It generally decreases ending at about 10.

GDP and GDI begins at about 0 and generally increases to about 100 in early 1961. It generally decreases to about 0 and remains about constant until early 1969. It generally increases to about 100 in early 1970 and generally decreases to about 0 in early 1971. It remains about constant until early 1973 then generally increases to about 100 in late 1973. It generally decreases to about 0 in mid-1975 then generally increases to about 100 in early 1980. It generally decreases to about 0 in late 1980 then generally increases to about 100 in early 1981. It generally decreases to about 0 in early 1983 and remains about constant until late 1988. It generally increases to about 100 in early 1991 then generally decreases to about 0 in late 1994. It remains about constant until early 2000 then generally increases to about 100 in early 2001. It generally decreases to about 0 in late 2003 then remains about constant until early 2006. It generally increases to about 100 in late 2006 and remains about constant until early 2009. It generally decreases to about 0 in late 2010 then generally increases ending at about 20.

Monthly Indicators begins at about 0 and generally increases to about 100 in late 1960. It generally decreases to about 0 in early 1961 and fluctuates but remains about constant until mid-1969. It generally increases to about 90 in late 1970 then generally decreases to about 0 in early 1971. It generally increases to about 100 in early 1980 then generally decreases to about 0 in late 1980. It generally increases to about 100 in late 1981 then fluctuates but remains about constant until early 1983 where it decreases to about 0. It remains about constant until late 1989 then generally increases to about 100 in mid-1990. It generally decreases to about 0 in early 1992 then remains about constant until early 2000. It generally increases to about 80 in early 2001 then generally decreases to about 0 in late 2003. It generally increases to about 100 in early 2008 and remains about constant until mid-2009. It generally decreases ending at about 0.

Note: GDP only and GDP and GDI models extend through 2010:Q3. The monthly indicator model uses information through August. Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER): 1960:Q2-1961:Q1, 1969:Q4-1970:Q4, 1973:Q4-1975:Q1, 1980:Q1-1980:Q3, 1981:Q3-1982:Q4, 1990:Q3-1991:Q1, and 2001:Q1-2001:Q4. A vertical line indicates the NBER Peak in December 2007.

Probabilities of Recession (percent)

Model	2010:Q1	2010:Q2	2010:Q3
GDP	5	9	12
GDP and GDI	2	9	18
Real monthly indicator	0	1	3
Stochastic simulation with TB Errors*	6	9	13

* Probabilities of two consecutive quarters of negative GDP growth over the next four quarters, using the March, June, and September staff projections as baselines. [Return to table](#)

Recent Nonfinancial Developments (2)

Figure: Real PCE Goods ex. Motor Vehicles

Line chart, 2001 to 2011. Unit is billions of chained (2005) dollars. The end of the timeline is marked August. The series begins at about 2300 and generally increases to about 2900 in late 2007. It generally decreases to about 2800 in late 2008 then generally increases ending at about 3000.

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

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

Figure: Sales of Light Motor Vehicles

Line chart, 2001 to 2011. Unit is millions of units, annual rate. The series begins at about 18 and generally increases to about 22 in late 2001. It generally decreases to about 16 in early 2002 then fluctuates but remains about constant until mid-2005. It generally increases to about 20 in mid-2005 then generally decreases to about 9 in early 2009. It generally increases to about 15 in late 2009 then generally decreases to about 9 in late 2009. It generally increases ending at about 12.

Source: Ward's Auto Infobank.

Figure: Single-Family Housing Starts

Line chart, 2001 to 2011. Unit is thousands of units, annual rate. There are two series, "Starts" and "Adjusted permits." The end of the timeline is marked July. Both series begin at about 1300 and fluctuate but generally increase together to about 1800 in late 2005. They generally decrease together to about 300 in late 2008 and

generally increase together to about 600 in early 2010. They generally increase 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 2011. Unit is thousands of units, annual rate. The end of the timeline is marked July. There are two series, "New (right scale)" and "Existing (left scale)." New begins at about 900 and fluctuates but generally increases to about 1400 in late 2005. It generally decreases ending at about 300. Existing begins at about 4500 and fluctuates but generally increases to about 6400 in late 2005. It fluctuates but generally decreases to about 4250 in late 2008 then generally increases to about 5700 in late 2009. It generally decreases to about 4400 in early 2010 then generally increases to about 5000 in mid-2010. It generally decreases ending at about 3250.

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

Figure: Nondefense Capital Goods Excluding Aircraft

Line chart, 2001 to 2011. Unit is billions of dollars. The end of the timeline is labeled July. There are two series, "Orders" and "Shipments." Orders begins at about 62 and generally decreases to about 45 in early 2002. It fluctuates but generally increases to about 70 in late 2007 then generally creases to about 47 in early 2009. It generally increases to about 64 in early 2010 then generally decreases ending at about 59. Shipments begins at about 62 and generally decreases to about 50 in early 2003. It generally increases to about 65 in early 2008 then generally decreases to about 54 in early 2009. It generally increases ending at about 60.

Source: U.S. Census Bureau.

Figure: Nonresidential Construction Put in Place

Line chart, 2001 to 2011. Unit is billions of chained (2005) dollars. The end of the timeline is labeled July. The series begins at about 275 and generally decreases to about 225 in late 2002. It generally increases to about 400 in late 2007 then fluctuates but remains about constant until late 2008. It 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. The end of the first series is labeled August. The end of the second series is labeled July. 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 1.45 in late 2007. It generally increases to about 1.6 in early 2009 then generally decreases ending at about 1.5. Census book-value data begins at about 1.4 and generally decreases to about 1.2 in late 2005. It generally increases to about 1.25 in late 2006 then generally decreases to about 1.2 in mid-2008. It generally increases to about 1.4 in late 2008 then generally decreases ending at about 1.2.

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. The end of the first series is labeled August. The end of the second series is labeled Q2. There are two series, "Unified (monthly)" and "NIPA (quarterly)." Unified begins at about 375 and fluctuates but generally increases to about 700 in early 2009. It fluctuates but generally decreases ending at about 625. NIPA begins at about 375 and generally increases ending at about 625.

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.

Figure: Trade Balance

Line chart, 2001 to 2011. Unit is billions of dollars. The end of the timeline is labeled July. The series begins at about -30 and fluctuates but generally decreases to about -70 in late 2005. It fluctuates but generally increases to about -60 in late 2007 then generally decreases to about -70 in mid-2008. It generally increases to about 25 in mid-2009 then generally decreases to about -50 in early 2010. It generally increases ending at about -40.

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

Figure: Exports and Non-Oil Imports

Line chart, 2001 to 2011. Unit is billions of dollars. The end of the timeline is labeled July. There are two series, "Non-oil imports" and "Exports." Non-oil imports begins at about 110 and generally decreases to about 100 in early 2002. It generally increases to about 180 in mid-2008 then generally decreases to about 130 in early 2009. It generally increases ending at about 170. Exports begins at about 90 and generally decreases to about 80 in late 2001. It generally increases to about 160 in mid-2008 then generally decreases to about 120 in early 2009. It generally increases ending at about 155.

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

Figure: Total PCE Prices

Line chart, 2001 to 2011. Unit is percent. The end of the timeline is labeled July. 0 on the scale is marked by a horizontal line. 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 late 2008 then generally decreases to about -1 in early 2009. It generally increases ending at about 2. 3-month change begins at about 2 and generally decreases to about -2 in late 2001. It generally increases to about 4 in early 2002 then generally decreases to about 2 in late 2002. It generally increases to about 4 in early 2003 then generally decreases to about -1 in mid-2003. It generally increases to about 4 in late 2003 then generally fluctuates between about 2 and about 4 until early 2005. It generally increases to about 8 in mid-2005 then generally decreases to about 0 in late 2005. It generally increases to about 4 in mid-2006 then generally decreases to about -1 in late 2006. It fluctuates but generally increases to about 6 in late 2007 then generally decreases to about -9 in late 2008. It generally increases to about 4 in late 2009 then generally decreases ending at about 0.

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 2011. Unit is percent. The end of the timeline is labeled July. 0 on the scale is marked by a horizontal line. 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 mid-2002 then generally decreases to about 1.5 in late 2003. It fluctuates but generally increases to about 2.5 in early 2008 then generally decreases to about 1 in late 2009. It generally increases to about 2 in early 2010 then generally decreases ending at about 1. 3-month change begins at about 2.5 and generally decreases to about -1 in late 2001. It generally increases to about 4 in early 2002 then generally decreases to about 1 in late 2002. It generally increases to about 3.5 in early 2005 then generally fluctuates between about 1 and about 3 until late 2007. It generally decreases to about 0 in late 2008 then generally increases to about 2.5 in early 2009. It generally decreases to about 1 in mid-2009 then generally increases to about 2 in late 2009. It generally decreases ending at about 1.

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

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

Projections of Real GDP and Related Components

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

Measure	2009	2010		2011	2012
		H1	H2		
Real GDP	.2	2.7	2.0	3.3	4.4
Previous Tealbook	.2	2.9	2.5	3.6	
Final sales	-3	1.0	2.0	3.4	4.3
Previous Tealbook	-3	1.3	2.4	3.8	
Personal consumption expenditures	.2	1.9	2.1	3.0	4.2
Previous Tealbook	.2	1.7	1.8	3.5	
Residential investment	-13.4	5.3	-13.2	19.2	17.5
Previous Tealbook	-13.4	6.1	-.5	19.0	
Nonresidential structures	-26.5	-10.5	-1.6	-2.0	-.7
Previous Tealbook	-26.5	-7.2	.7	-.5	
Equipment and software	-4.9	23.4	2.1	10.5	11.0
Previous Tealbook	-4.9	23.2	7.2	11.6	
Federal purchases	3.6	5.4	4.0	1.1	.2
Previous Tealbook	3.6	5.4	2.3	1.0	
State and local purchases	-1.0	-1.6	-.6	.4	1.3
Previous Tealbook	-1.0	-1.2	-.4	.0	
Exports	-.1	10.3	9.6	7.6	7.5
Previous Tealbook	-.1	10.8	10.3	8.2	
Imports	-7.2	21.5	4.1	5.7	6.3

Previous Tealbook	-7.2	19.7	5.1	6.5	
	Contributions to change in real GDP (percentage points)				
Inventory change	.5	1.7	.0	.0	.1
Previous Tealbook	.5	1.6	.1	-.2	
Net exports	1.2	-1.9	.5	.0	-.1
Previous Tealbook	1.2	-1.5	.5	.0	

Figure: Real GDP

Line chart, 1981 to 2012. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. The projection period begins around 2010:Q2. There are two series, "Current" and "Previous Tealbook." Both series begin at about 2 and generally increase together to about 4 in late 1981. They generally decrease together to about -2 in late 1982 then generally increase together to about 8 in early 1984. They generally decrease together to about -1 in late 1990 then 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 early 2004. They generally decrease together to about -4 in early 2009 then generally increase together ending at about 4.

Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER): July 1981-November 1982, July 1990-March 1991, and March 2001-November 2001. The vertical line represents the last business cycle peak as defined by the NBER (December 2007).

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. 0 on the scale is marked by a horizontal line. The projection period begins in 2010:Q2. There are two series, "Current" and "Previous Tealbook." Both series begin at about 3 and generally decrease together to about -2.5 in 2009:Q2. They generally increase together to about 2 in 2010:Q2 then current generally increases ending at about 4 and Previous Tealbook generally increases ending at about 3.5 in 2011:Q4.

Figure: Residential Investment

Line chart, 2007 to 2012. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. The projection period begins in 2010:Q2. There are two series, "Current" and "Previous Tealbook." Both 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 Current decreases to about -5 in 2010:Q3 and generally increases to about 20 in 2012:Q1. Current generally decreases ending at about 17. Previous Tealbook generally decreases to about 0 in 2010:Q3 then generally increases ending at about 17 in 2011:Q4.

Figure: Equipment and Software

Line chart, 2007 to 2012. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. The projection period begins in 2010:Q2. There are two series, "Current" and "Previous Tealbook." Both series begin at about 2.5 and remain about constant until 2008:Q1. They generally decrease together to about -20 in 2009:Q1 then generally increase together to about 15 in 2010:Q1. Current generally decreases to about 5 in 2011:Q1 then generally increases ending at about 10. Previous Tealbook generally decreases to about 10 in 2011:Q1 then generally increases ending at about 12 in 2011:Q4.

Figure: Nonresidential Structures

Line chart, 2007 to 2012. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. The projection period begins in 2010:Q2. There are two series, "Current" and "Previous Tealbook." Both 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 0 in 2011:Q1. Current remains about constant ending in 2012:Q4. Previous Tealbook remains about constant ending in 2011:Q4.

Figure: Government Consumption & Investment

Line chart, 2007 to 2012. Unit is 4-quarter percent change. The projection period begins in 2010:Q2. There are two series, "Current" and "Previous Tealbook." Both series begin at about 0.5 and generally increase together to about 3.0 in 2008:Q4. They generally decrease together to about 1.0 in 2010:Q1. Current generally decreases to about 0.5 in 2010:Q3 then generally increases to about 1.5 in 2011:Q1. It generally decreases to about 0.5 in 2011:Q4 and remains about constant ending in 2012:Q4. Previous Tealbook generally decreases to about 0.5 in 2011:Q1 then generally decreases ending at about 0.5 in 2011:Q4.

Figure: Exports and Imports

Line chart, 2007 to 2012. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. The projection period begins in 2010:Q2. There are four series, "Exports (Current)," "Exports (Previous Tealbook)," "Imports (Current)" and "Imports (Previous Tealbook)." Both Exports series begin at about 7 and generally increase together to about 12 in 2007:Q3 and fluctuate but remain about constant until 2008:Q2. They generally decrease together to about -15 in 2009:Q2 then

generally increase together to about 15 in 2010:Q2. Exports (Current) generally decreases to about 7 in 2011:Q4 and remains about constant to the end of the timeline. Exports (Previous Tealbook) generally decreases ending at about 7 in 2011:Q4. Both Imports series begin at about 4 and generally decrease together to about -20 in 2009:Q2. They generally increase together to about 17 in 2010:Q1. Imports (Current) generally decreases to about 5 in 2011:Q1 and remains about constant to the end of the timeline. Imports (Previous Tealbook) generally decreases ending at about 5 in 2011:Q4.

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

[Box:] How Much Progress Have Households Made in Repairing Their Balance Sheets?

Figure: Measures of Household Debt Burden

Line chart, 1980 to 2010. Unit is a ratio. Data are quarterly. There are two series, "Debt service ratio (right scale)" and "Debt/DPI (left scale)." Debt service ratio begins at about 0.11 and generally decreases to about 0.115 in early 1981. It fluctuates but remains about constant until late 2003 then generally increases to about 0.125 in late 1986. It generally decreases to about 0.115 in early 1994 then fluctuates but generally increases to about 0.14 in late 2007. It generally decreases ending at about 0.12. Debt/DPI begins at about 0.7 and fluctuates but generally increases to about 1.3 in early 2008. It generally decreases ending at about 1.2.

Figure: Average Interest Rates on Household debt

Line chart, 1980 to 2010. Unit is percent. Data are quarterly. There are two series, "Consumer Credit Rate (left index)" and "Mortgage Rate (right index)." Consumer Credit Rate begins at about 14 and generally increases to about 16 in 1982. It generally decreases to about 14 in 1987 then generally increases to about 14.5 in late 1991. It fluctuates but generally decreases to about 10 in early 2004 then fluctuates but remains about constant to the end of the timeline. Mortgage rate begins at about 9 and generally increases to about 11.25 in late 1984. It fluctuates but generally decreases ending at about 6.

[Box:] The Recovery in Equipment and Software Investment

Figure: Real Spending on Equipment and Software

Line chart, 1960 to 2012. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. The projection period begins around 2010:Q2. The series begins at about 10 and generally decreases to about -8 in early 1961. It fluctuates but generally increases to about 20 in late 1965 then generally decreases to about -25 in late 1967. It generally increases to about 11 in early 1969 then generally decreases to about -5 in late 1970. It generally increases to about 22 in mid-1973 then generally decreases to about -10 in 1975. It generally increases to about 18 in 1979 then fluctuates but generally decreases to about -10 in late 1982. It generally increases to about 22 in 1983 then generally decreases to about 0 in late 1986. It fluctuates but generally increases to about 10 in late 1989 then generally decreases to about -5 in late 1990. It generally increases to about 15 in early 1992 then fluctuates but remains about constant until late 1999. It generally decreases to about 0 in late 2001 then generally increases to about 10 in early 2005. It generally decreases to about -20 in early 2009 then generally increases to about 15 in early 2010. It generally decreases to about 5 in early 2011 then generally increases ending at about 11.

Note: Shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER): 1960:Q2-1961:Q1, 1969:Q4-1970:Q4, 1973:Q4-1975:Q1, 1980:Q1-1980:Q3, 1981:Q3-1982:Q4, 1990:Q3-1991:Q1, and 2001:Q1-2001:Q4. The vertical line represents the last business cycle peak as defined by the NBER (December 2007).

Source: Bureau of Economic Analysis; staff forecast.

Figure: Real Capital Stock of Equipment and Software

Line chart, 1960 to 2012. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. The projection period begins around 2010:Q2. The series begins at about 1 and generally increases to about 8.5 in mid-1966. It fluctuates but generally decreases to about 1 in early 1992 then generally increases to about 7.5 in late 1999. It generally decreases to about 2 in early 2002 then generally increases to about 4 in early 2006. It generally decreases to about 0 in late 2009 then generally increases ending at about 3.5.

Note: Shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER): 1960:Q2-1961:Q1, 1969:Q4-1970:Q4, 1973:Q4-1975:Q1, 1980:Q1-1980:Q3, 1981:Q3-1982:Q4, 1990:Q3-1991:Q1, and 2001:Q1-2001:Q4. The vertical line represents the last business cycle peak as defined by the NBER (December 2007).

Source: Bureau of Economic Analysis; staff forecast.

Figure: Depreciation Rate: Total Equipment and Software

Line chart, 1960 to 2009. Unit is 4-quarter percent change. The series begins at about 12.5 and generally decreases to about 11.75 in late 1960. It generally increases to about 15.5 in early 2009 then generally decreases ending at about 15.

Note: Shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER): 1960:Q2-1961:Q1, 1969:Q4-1970:Q4, 1973:Q4-1975:Q1, 1980:Q1-1980:Q3, 1981:Q3-1982:Q4, 1990:Q3-1991:Q1, and 2001:Q1-2001:Q4. The vertical line represents the last business cycle peak as defined by the NBER (December 2007).

Source: Bureau of Economic Analysis.

Aspects of the Medium-Term Projection

Figure: Personal Saving Rate

Line chart, 1990 to 2012. Unit is percent. The projection period begins around 2010:Q2. There are two series, "Current" and "Previous Tealbook." Both series begin at about 6.5 and generally increase to about 7.5 in mid-1992. They fluctuate but generally decrease together to about 4.5 in early 1994 then generally increase together to about 6.5 in mid-1995. They generally decrease together to about 4.5 in mid-1997 then generally increase together to about 6 in early 1998. They fluctuate but generally decrease together to about 2 in early 2001 then generally increase together to about 4 in mid-2001. They fluctuate but generally decrease together to about 3.5 in late 2004 then fluctuate but generally increase together to about 7 in mid-2009. Current generally decreases ending at about 5 and Previous Tealbook generally decreases ending at about 6.

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

Figure: Wealth-to-Income Ratio

Line chart, 1990 to 2012. Unit is a ratio. The projection period begins in 2010:Q2. There are two series, "Current" and "Previous Tealbook." Both series begin at about 4.8 and fluctuate but generally increase together to about 6.0 in early 2000. They fluctuate but generally decrease together to about 5.0 in early 2002 then generally increase together to about 6.4 in late 2007. They generally decrease to about 4.4 in early 2009 then generally increase ending at about 5.

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

Source: Flow of Funds Accounts.

Figure: Single-Family Housing Starts

Line chart, 1990 to 2012. Unit is millions of units. The projection period begins in 2010:Q2. There are two series, "Current" and "Previous Tealbook." Both series begin at about 1 and generally decrease together to about 0.75 in late 1990. They fluctuate but generally increase together to about 1.75 in mid-2006 then generally decrease together to about 0.25 in late 2008. They generally increase together ending at about 1.

Source: U.S. Census Bureau.

Figure: Equipment and Software Spending

Line chart, 1990 to 2012. Unit is share of nominal GDP. The projection period begins in 2010:Q2. There are two series, "Current" and "Previous Tealbook." Both series begin at about 7.5 and generally decrease to about 6.75 in early 1992. They fluctuate but generally increase together to about 9.5 in late 2000. They fluctuate but generally decrease together to about 7.5 in late 2003 then generally increase together to about 8 in late 2005. They generally decrease together to about 6.5 in early 2009 then generally increase together ending at about 7.75.

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. 0 on the scale is marked by a horizontal line. The projection period begins in 2010:Q2. There are two series, "Current" and "Previous Tealbook." Both series begin at about -3 and generally decrease together to about -5 in early 1992. They generally increase together to about 2 in early 2001 then generally decrease together to about -4 in mid-2004. They generally increase together to about -2 in mid-2006 then generally decrease together to about -10 in late 2009. They 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. 0 on the scale is marked by a horizontal line. The projection period begins in 2010:Q2. There are two series, "Current" and "Previous Tealbook." Both series begin at about -2 and generally increase together to about 1 in early 1991. They fluctuate but generally decrease together to about -7 in late 2005 then generally increase together to about -2.5 in early 2009. They generally decrease together to about -3 in mid-2011 then generally increase together ending at about -2.5.

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

Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, and March 2001-November 2001. The vertical lines represent the last business cycle peak as defined by the NBER (December 2007).

[Box:] Structural Unemployment and Revisions to the Staff's NAIRU

Figure: Job Losers not on Temporary Layoff

Line chart, 1980 to 2010. Unit is percent of labor force. The series begins at about 2 and generally increases to about 4.5 in late mid-1983. It generally decreases to about 1.5 in late 1989 then generally increases to about 3.5 in mid-1992. It generally decreases to about 1.0 in mid-2000 then generally increases to about 2.75 in late 2004. It generally increases to about 5.5 in late 2009 then generally decreases ending at about 5.0.

Figure: Beveridge Curve

Scatter plot, with unemployment rate on the x-axis and Composite Help-Wanted Index on the y-axis. There are three series, "2008:Q1 to 2009:Q4," "2010:Q1 to 2010:Q2," and "Average of July and August." 2008:Q1 to 2009:Q4 begins at about 120 when the unemployment rate is about 5 and generally decreases to about 70 at an unemployment rate of about 9.5. It remains about constant to the end of the timeline. 2010:Q1 to 2010:Q2 is about 90 at an unemployment rate of about 9.5. Average of July and August is about 90 at an unemployment rate of about 9.5. There is also a series of black dots that begins at about 150 at an unemployment rate of about 4 then decreases to a clustered range of about [115, 135] at an unemployment rate of about [4.5, 5.5]. It decreases to a clustered range of about [90, 115] at an unemployment rate of about [5.5, 6.5].

Decomposition of Potential GDP

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

Measure	1974-1995	1996-2000	2001-2008	2009	2010	2011	2012
Potential GDP	3.0	3.5	2.7	2.2	2.5	2.5	2.5
Previous Tealbook	3.0	3.5	2.7	2.6	2.4	2.5	
<i>Selected contributions¹</i>							
Structural labor productivity	1.5	2.7	2.5	2.3	2.0	2.0	2.1
Previous Tealbook	1.5	2.7	2.5	2.4	1.9	2.0	
Capital deepening	.7	1.5	.7	.3	.4	.6	.8
Previous Tealbook	.7	1.5	.7	.1	.3	.6	
Multifactor productivity	.5	.9	1.6	1.9	1.5	1.3	1.2
Previous Tealbook	.5	.9	1.6	2.1	1.5	1.4	
Trend hours	1.7	1.1	.8	.1	.7	.7	.7
Previous Tealbook	1.7	1.1	.8	.4	.7	.7	
Labor force participation	.5	.0	-.2	-.2	-.2	-.2	-.2
Previous Tealbook	.5	.0	-.2	-.2	-.2	-.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 projection period begins in 2010:Q2. There are two series, "Structural Productivity" and "Trend." Structural Productivity begins at about 44 and fluctuates but generally increases ending at about 58. Trend begins at about 44 and generally increases with fewer fluctuations ending at about 58.

Figure: Labor Force Participation Rate

Line chart, 2001 to 2012. Unit is percent. The projection period begins in 2010:Q3. There are two series, "Structural Productivity" and "Trend." Structural Productivity begins at about 67 and fluctuates but generally decreases to about 66 in 2005:Q1. It fluctuates but generally increases to about 66.5 in 2007:Q1. It fluctuates but generally decreases to about 64.5 in 2010:Q3 then remains about constant to the end of the timeline. Trend begins at about 67 and generally decreases ending at about 65.25.

Source: 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	6.2	1.3	1.6	2.0
Previous Tealbook	6.3	1.4	1.3	
Nonfarm private employment	-4.7	.9	2.1	2.9
Previous Tealbook	-4.7	1.2	2.7	
Labor force participation rate ¹	64.9	64.7	64.7	64.6
Previous Tealbook	64.9	64.7	64.6	
Civilian unemployment rate ¹	10.0	9.7	9.1	8.0
Previous Tealbook	10.0	9.7	8.9	
MEMO				
GDP gap ²	-7.1	-7.2	-6.4	-4.7
Previous Tealbook	-7.9	-7.6	-6.6	

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. 0 on the scale is marked by a horizontal line. The projection period begins around 2010:Q3. There are two series, "Current" and "Previous Tealbook." Both series begin at about 200 and generally decrease together to about -200 in early 1991. They generally increase together to about 300 in late 1994. They generally decrease together to about 150 in mid-1995 then fluctuate but remain about constant until early 2000. They generally decrease together to about -300 in late 2000 then fluctuate but generally increase together to about 300 in early 2006. They generally decrease together to about -800 in early 2009 then generally increase together ending at about 300.

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

Figure: Unemployment Rate

Line chart, 1990 to 2012. Unit is percent. The projection period begins around 2010:Q3. There are six series, "NAIRU - Current," "NAIRU - Previous Tealbook," "NAIRU with EEB adjustment - Current," "NAIRU with EEB Adjustment - Previous Tealbook," "Current" and "Previous Tealbook." NAIRU - Current and NAIRU - Previous Tealbook begin at about 5.5 and generally decrease together to about 4.5 in late 2008. NAIRU - Current generally increases ending at about 6 and NAIRU - Previous Tealbook generally increases ending at about 5. NAIRU with EEB adjustment - Current and NAIRU with EEB adjustment - current begin at about 5.5 and generally increase together to about 6 in mid-1992. They generally decrease together to about 4.5 in late 2008. NAIRU with EEB Adjustment - Current generally increases to about 6.5 in early 2010 then generally decreases ending at about 6. NAIRU with EEB adjustment - Previous Tealbook generally increases to about 6 in early 2010 then generally decreases ending at about 5.5. Current and Previous Tealbook begin at about 5.25 and generally increase together to about 7.5 in early 1992. They generally decrease together to about 4 in late 2000 then generally increase together to about 10 in early 2009. They generally decrease together ending at about 8.

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

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

Figure: GDP Gap

Line chart, 1990 to 2012. Unit is percent. 0 on the scale is marked by a horizontal line. The projection period begins around 2010:Q2. There are two series, "Current" and "Previous Tealbook." Both series begin at about 0 and generally decrease together to about -4 in early 1992. They generally increase together to about 3.5 in mid-2000 then generally decrease together to about -2.5 in early 2003. They generally increase together to about 0 in early 2006 then generally decrease together to about -8 in early 2009. They generally increase together 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.

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

Figure: Manufacturing Capacity Utilization Rate

Line chart, 1990 to 2012. Unit is percent. The projection period begins around 2010:Q3. There are two series, "Current" and "Previous Tealbook." Both series begin at about 83 and generally decrease together to about 78 in early 1991. They generally increase together to about 85 in mid-1995 then generally decrease together to about 72 in late 2001. They generally increase together to about 80 in mid-2007 then generally decrease together to about 65 in early 2009. They generally increase together ending at about 78. A horizontal line shows that the average rate from 1972 to 2009 is about 79.

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

Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, and March 2001-November 2001. The vertical lines represent the last business cycle peak as defined by the NBER (December 2007).

Inflation Projections

(Percent change, Q4 to Q4)

Measure	2009	2010	2011	2012
PCE chain-weighted price index	1.5	1.2	1.1	1.0
Previous Tealbook	1.5	1.3	1.1	
Food and beverages	-1.6	1.2	.7	.7
Previous Tealbook	-1.6	1.3	.7	
Energy	2.7	1.4	4.4	1.8
Previous Tealbook	2.7	4.5	3.8	
Excluding food and energy	1.7	1.1	.9	.9
Previous Tealbook	1.7	1.1	.9	
Prices of core goods imports ¹	-1.9	2.7	1.2	.9
Previous Tealbook	-1.9	2.7	1.2	

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 2010. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. The projection period begins around 2010:Q2. There are two series, "Current" and "Previous Tealbook." Both series begin at about 4 and generally increase together to about 5.5 in late 1990. They fluctuate but generally decrease together to about 1 in mid-1998 then generally increase together to about 2.5 in mid-2001. They generally decrease together to about .5 in early 2002 then fluctuate but generally increase together to about 4.5 in mid-2008. They generally decrease together to about -1 in late 2009 then generally increase together to about 2.5 in early 2010. They generally decrease together ending at about 1.

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

Figure: PCE Prices ex. Food and Energy

Line chart, 1990 to 2010. Unit is 4-quarter percent change. The projection period begins around 2010:Q2. 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 together to about 4.5 in late 1991. They generally decrease together to about 1.5 in early 1998 then generally increase together to about 2.5 in mid-2008. They fluctuate but generally decrease together ending at about 1. Market based - current and Market based - Previous Tealbook begin at about 4.5 and generally increase together to about 5 in late 1990. They generally decrease together to about 1 in mid-2008 then generally increase together to about 2.5 in mid-2008. They generally decrease together ending at about 1.

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

Figure: Compensation per Hour

Line chart, 1990 to 2010. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. The projection period begins around 2010:Q2. 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 Productivity and Costs - Previous Tealbook begin at about 5 and generally decrease together to about 2.5 in early 1996. They fluctuate but generally increase together to about 5 in late 1999 then fluctuate but generally decrease together to about 1 in late 2009. They generally increase together ending at about 2.

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

Figure: Long-Term Inflation Expectations

Line chart, 1990 to 2010. Unit is percent. There are two series, "Thomson Reuters/Michigan next 5-10 years" and "SPF next 10 years." Thomson Reuters/Michigan next 5-10 years begins at about 4 and generally increases to about 4.5 in late 1990. It fluctuates but generally decreases to about 2.75 in early 1998 then fluctuates but generally increases to about 3.25 in early 2001. It fluctuates but generally increases to about 3.5 in early 2008 then generally decreases ending at about 3 in August 2010. SPF next 10 years begins at about 4 and generally decreases to about 2.5 in early 1998. It remains about constant to the end of the timeline in 2010:Q3.

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

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

Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, and March 2001-November 2001. The vertical lines represent the last business cycle peak as defined by the NBER (December 2007).

The Long-Term Outlook

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

Item	2010	2011	2012	2013	2014	2015
Real GDP	2.4	3.3	4.4	4.8	4.3	3.2
Civilian unemployment rate ¹	9.7	9.1	8.0	6.9	6.1	5.7
PCE prices, total	1.2	1.1	1.0	1.1	1.4	1.6
Core PCE prices	1.1	.9	.9	1.1	1.3	1.5
Federal funds rate ¹	.1	.1	.3	1.8	3.0	3.7

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. 0 on the scale is marked by a horizontal line. There are two series, Real GDP and Potential GDP. Real GDP begins at about 1.5 and generally increases to about 4.5 in early 2004. It generally decreases to about 4 in mid-2009 then generally increases to about 3 in early 2010. It decreases to about 2 in late 2010 then generally increases to about 5 in late 2013 then generally decreases ending at about 3. Potential GDP begins at about 3.5 and generally decreases to about 2 in late 2004. It remains about constant to the end of the timeline.

Figure: Unemployment rate

Line chart, 2002 to 2015. Unit is percent. The series begins at about 5.75 and generally decreases to about 4.5 in early 2007. It generally increases to about 10 in early 2009 then generally decreases ending at about 6. There is a second series labeled NAIRU. It begins at about 5 and remains about constant until mid-2008. It generally increases to about 6 in early 2010 and remains about constant until the end of the timeline.

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 generally increases to about 3 in mid-2006. It generally decreases to about 2 in late 2006 then generally increases to about 4 in early 2008. It generally decreases to about -1 in mid-2009 then generally increases to about 2 in early 2010. It generally decreases to about 1 in mid-2012 then generally increases ending at about 1.5. PCE prices excluding food and energy begins at about 1.5 and generally increases to about 2 in late 2002. It generally decreases to about 1.5 in late 2003 then fluctuates but generally increases to about 2.5 in mid-2008. It generally decreases to about 1 in mid-2009 then generally increases to about 1.5 in early 2010. It generally decreases to about 1 in early 2012 then generally increases ending at about 1.5.

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 fluctuates but generally decreases to about 5.5 in early 2004. It generally increases to about 9 in early 2009 then generally decreases to about 5 in late 2010. It generally increases ending at about 6.5. 10-Year Treasury begins at about 5.5 and generally decreases to about 4 in mid-2003. It fluctuates but generally increases to about 5 in mid-2006 then fluctuates but generally decreases to about 3 in mid-2010. It generally increases ending at about 5. Federal funds rate begins at about 2 and generally decreases to about 1 in mid-2004. It generally increases to about 5 in mid-2006 then generally decreases to about 0 in early 2009. It remains about constant until mid-2012 then generally increases ending at about 4.

Note: In each panel, shading represents the projection period (beginning around 2010:Q3).

Evolution of the Staff Forecast

Figure: Change in Real GDP

Line chart, Tealbook publication date 1/23/2008 to 12/8/2010. Unit is percent, Q4/Q4. 0 on the scale is marked by a horizontal line. There are four series, "2009," "2010," "2011," and "2012." 2009 begins at about 2 then generally increases to about 3 on 3/13/2008. It generally decreases to about -2 on 3/12/2009 then generally increases ending at about 0 on 9/15/2010. 2010 begins at about 2.5 on 10/22/2008 and generally increases to about 3 on 1/22/2009. It generally decreases to about 1.5 on 3/12/2009 then generally increases to about 3.5 on 4/21/2010. It generally decreases ending at about 2 on 9/15/2010. 2011 begins at about 4.5 on 9/16/2010. It fluctuates but remains about constant until 4/21/2010. It generally decreases ending at about 3 on 9/15/2010. 2012 appears at about 4.25 on 9/15/2010.

Figure: Unemployment Rate

Line chart, Tealbook publication date 1/23/2008 to 12/8/2010. Unit is percent, fourth quarter. There are four series, "2009," "2010," "2011," and "2012." 2009 begins at about 5.0 and generally increases to about 10.0 on 6/17/2009. It remains about constant ending on 9/15/2010. 2010 begins at about 6.0 on 9/10/2008 and generally increases to about 9.5 on 3/12/2009. It decreases to about 9.25 on 4/22/2009 then generally increases to about 9.75 on 6/17/2009. It generally decreases to about 9.0 on 9/16/2009 then generally increases ending at about 9.5 on 9/15/2010. 2011 begins at about 7.75 on 9/16/2009 and generally increases ending at about 9.0 on 9/15/2010. 2012 appears at about 8.0 on 9/15/2010.

Figure: Change in PCE Prices excluding Food and Energy

Line chart, Tealbook publication date 1/23/2008 to 12/8/2010. Unit is percent, Q4/Q4. There are four series, "2009," "2010," "2011," and "2012." 2009 begins at about 2.0 and generally increases to about 2.25 on 6/18/2008. It remains about constant until 9/10/2008 then generally decreases to about 1.0 on 1/22/2009. It generally increases ending at about 1.75 on 9/15/2010. 2010 begins at about 2.0 on 9/10/2008 then generally decreases to about 0.5 on 3/12/2009. It generally increases to about 1.25 on 1/20/2010 then generally decreases to about 0.75 on 6/16/2010. It generally increases ending at about 1.0 on 9/15/2010. 2011 begins at about 0.75 on 9/16/2009 and generally increases to about 1.0 on 12/9/2009. It generally decreases to about 0.75 on 6/16/2010 then generally increases ending at about 1.0 on 9/15/2010. 2012 appears at about 1.0 on 9/15/2010.

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

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

Last update: January 29, 2016

International Economic Developments and Outlook

Staff Projections for Foreign Economies

(Percent change from end of previous period, annual rate)

Indicator	2009	Projection					
		2010		2010		2011	2012
		Q1	Q2	Q3	Q4		
Real GDP	.4	4.9	5.9	2.5	2.9	3.2	3.5
August TB	.4	4.8	4.7	3.1	3.2	3.4	...
CPI	1.2	3.4	1.3	1.9	2.1	2.2	2.2
August TB	1.2	3.4	1.3	1.8	2.2	2.2	...

... Not applicable. [Return to table](#)

Recent Foreign Indicators

Figure: Nominal Exports

Line chart, 2006 to 2010. Unit is an index, Jan. 2006 = 100. 100 on the scale is marked by a horizontal line. There are three series, "Foreign," "AFE," and "EME (excludes Venezuela)." Foreign begins at about 100 and generally increases to about 130 in late 2008. It generally decreases to about 80 in early 2009 then generally increases ending at about 110. AFE begins at about 100 and generally increases to about 140 in mid-2008. It generally decreases to about 80 in early 2009 then generally increases ending at about 105. EME begins at about 100 and generally increases to about 100 in early 2007. It generally decreases to about 100 in mid-2007 then generally increases to about 120 in late 2008. It generally decreases to about 80 in early 2009 then generally increases ending at about 110.

Figure: Industrial Production

Line chart, 2006 to 2010. Unit is an index, Jan. 2006 = 100. 100 on the scale is marked by a horizontal line. There are three series, "Foreign," "AFE (excludes Australia and Switzerland)," and "EME (Excludes Chile)." 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 increases to about 102 in mid-2007. It generally decreases to about 82 in early 2009 then generally increases ending at about 90. EME begins at about 100 and generally increases to about 110 in late 2007. It generally decreases to about 100 in early 2009 then generally increases ending at about 120.

Figure: Retail Sales

Line chart, 2006 to 2010. Unit is 12-month percent change. 0 on the scale is marked by a horizontal line. There are three series, "Foreign," "AFE (excludes Australia and Switzerland)," and "EME (includes Brazil, China, Israel, Korea, Singapore, Taiwan, and Venezuela)." Foreign begins at about 4 and generally increases to about 5 in early 2008. It generally decreases to about -2.5 in early 2009 then generally increases ending at about 5. AFE begins at about 3 and generally decreases to about -5 in early 2009. It generally increases to about 5 in early 2010 then generally decreases ending at about 2.5. EME begins at about 7 and generally increases to about 10 in early 2007. It fluctuates but generally decreases to about 4 in early 2009 then generally increases to about 10 in early 2010. It generally decreases ending at about 6.

Figure: Employment

Line chart, 2006 to 2010. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There are three series, "Foreign," "AFE," and "EME (excludes China and Chile)." Foreign begins at about 2 and remains about constant until early 2008. It generally decreases to about -1 in early 2009 then generally increases ending at about 1. AFE begins at about 1.5 and remains about constant until late 2007. It generally decreases to about -2 in mid-2009 then generally increases ending at about -.5. EME begins at about 2.75 and generally decreases to about 2 in late 2007. It generally increases to about 3 in late 2007 then generally decreases to about 0 in mid-2009. It generally increases ending at about 2.

Figure: Consumer Prices: Advanced Foreign Economies

Line chart, 2006 to 2010. Unit is 12-month percent change. 0 on the scale is marked by a horizontal line. There are two series, "Headline" and "Core (excludes all food and energy; staff calculation)." Headline begins at about 2 and fluctuates but generally decreases to about 2 in mid-2007. It generally increases to about 3.25 in mid-2008 then generally decreases to about -1 in mid-2009. It generally increases ending at about 1.5. Core begins at about 1 and generally increases to about 1.5 in mid-2007. It generally decreases ending at about .75.

Note: Excludes Australia, Sweden, and Switzerland.

Figure: Consumer Prices: Emerging Market Economies

Line chart, 2006 to 2010. Unit is 12-month percent change. 0 on the scale is marked by a horizontal line. There are three series, "Headline," "Ex. Food - East Asia," and "Ex. Food - Latin America." Headline begins at about 2 and generally increases to about 6 in mid-2008. It generally decreases to about 0 in mid-2009 then generally increases ending at about 4. Ex. Food - East Asia begins at about 2 and generally decreases to about 2.75 in mid-2007. It generally increases to about 4 in mid-2008 then generally decreases to about -2 in mid-2009. It generally increases ending at about 2. Ex. Food - Latin America begins at about 4 and fluctuates but remains about constant until late 2007. It generally increases to about 5.5 in late 2008 then generally decreases to about 4 in mid-2009. It generally increases ending at about 5.

Source: Haver Analytics and CEIC.

The Foreign Outlook

Total Foreign

Figure: Real GDP

Line chart, 2008 to 2012. Unit is percent change, annual rate. 0 on the scale is marked by a horizontal line. There are two series, "Current Tealbook" and "Last Tealbook." Both series begin at about 5 and generally decrease together to about -10 in early 2009. They generally increase together to about 5 in mid-2010 then generally decrease together to about 2.5 in mid-2010. They remain about constant until the end of the timeline.

Figure: CPI

Line chart, 2008 to 2012. Unit is percent change, annual rate. 0 on the scale is marked by a horizontal line. There are two series, "Current Tealbook" and "Last Tealbook." Both series begin at about 5.5 and generally decrease to about -.5 in early 2009. They generally increase together to about 4 in early 2010 then generally decrease together to about 1 in early 2010. They generally increase together to about 2 in mid-2010 and remain about constant to the end of the timeline.

Advanced Foreign Economies

Figure: Real GDP

Line chart, 2008 to 2012. Unit is percent change, annual rate. 0 on the scale is marked by a horizontal line. There are two series, "Current Tealbook" and "Last Tealbook." Both series begin at about 1 and generally decrease together to about -10 in early 2009. They generally increase together to about 4.5 in early 2010 then generally decrease together to about .5 in mid-2010. They remain about constant to the end of the timeline.

Figure: CPI

Line chart, 2008 to 2012. Unit is percent change, annual rate. 0 on the scale is marked by a horizontal line. There are two series, "Current Tealbook" and "Last Tealbook." Both series begin at about 2 and generally increase together to about 4 in late 2008. They generally decrease together to about -2 in late 2008 then generally increase together to about 2 in late 2009. They generally decrease together to about 0 in early 2010 then generally increase together to about 2 in early 2011. They remain about constant to the end of the timeline.

Emerging Market Economies

Figure: Real GDP

Line chart, 2008 to 2012. Unit is percent change, annual rate. 0 on the scale is marked by a horizontal line. There are two series, "Current Tealbook" and "Last Tealbook." Both series begin at about 6.5 and generally decrease together to about -10 in early 2009. They generally increase together to about 10 in early 2010 then generally decrease together to about 5 in mid-2010. They remain about constant to the end of the timeline.

Figure: CPI

Line chart, 2008 to 2012. Unit is percent change, annual rate. 0 on the scale is marked by a horizontal line. There are two series, "Current Tealbook" and "Last Tealbook." Both series begin at about 8 and generally decrease together to about 0 in early 2009. They generally increase together to about 4.5 in early 2010 then generally decrease together to about 2 in mid-2010. They generally increase together to about 3 in late 2010 and remain about constant to the end of the timeline.

Note: Shaded areas indicate forecast data (beginning around 2010:Q3).

[Box:] The Recent Appreciation of the Yen

Figure: Yen Exchange Rates

Line chart, 1990 to 2010. Unit for left scale is Yen REER Index, Average 2000-2010 = 100. Unit for right scale is Yen/Dollar; the scale is inverted because lower values imply Yen appreciation. There are two series, "Yen/Dollar" and "Yen REER Index." Yen/Dollar begins at about 150 and generally increases to about 80 in mid-1995. It generally decreases to about 150 in mid-1998 then generally increases to about 100 in late 1999. It generally decreases to about 135 in late 2001 then generally increases to about 100 in early 2005. It generally decreases to about 120 in early 2007 then generally increases ending at about 85. Yen REER Index begins at about 100 and generally increases to about 150 in early 1995. It generally decreases to about 90 in mid-1998 then generally increases to about 125 in mid-1999. It generally decreases to about 80 in early 2007 then generally increases to about 110 in late 2008. It generally decreases ending at about 100.

Figure: Japanese Trade

Line chart, 1990 to 2010. Unit for left scale is percent of GDP. Unit for right scale is an index, 2005 = 100. 0 on the left scale is marked by horizontal line. There are two series, "Real exports (right scale)" and "Nominal Trade Balance (left scale)." Real exports begins at about 50 and generally increases to about 135 in early 2008. It generally decreases to about 80 in late 2008 then generally increases ending at about 125. Nominal trade balance begins at about 1 and generally increases to about 2.5 in early 1994. It generally decreases to about 0 in early 1996 then generally increases to about 2 in early 1998. It fluctuates but generally decreases to about .5 in early 2001 then generally increases to about 2.25 in late 2003. It generally decreases to about 1.5 in early 2006 then generally increases to about 2 in late 2007. It generally decreases to about -1 in early 2009 then generally increases to about 1.5 in late 1009. It generally decreases ending at about 1.25.

Staff Projections for Advanced Foreign Economies

(Percent change from end of previous period, annual rate)

Indicator	2009	Projection					
		2010		2010		2011	2012
		Q1	Q2	Q3	Q4		
Real GDP	-1.4	3.7	3.0	2.2	2.0	2.1	2.4
August TB	-1.4	3.6	3.3	2.4	2.3	2.3	...
CPI	.2	2.1	.1	.7	1.0	1.3	1.4
August TB	.2	2.1	.1	.7	1.2	1.3	...

... Not applicable.

[Box:] Recent Developments in the Irish Banking System

Figure: Sovereign CDS Premiums

Line chart, September to September. Unit is basis points. There are five series, "Greece," "Ireland," "Portugal," "Spain," and "Italy." Greece begins at about 100 and generally increases to about 400 in early February. It generally decreases to about 300 in March then generally increases to about 950 in late April. It generally decreases to about 500 in early May then generally increases to about 1000 in early June. It generally decreases to about 700 in late July then generally increases to about 900 in early August. It generally decreases ending at about 850. Ireland begins at about 150 and generally decreases to about 100 in October. It generally increases to about 150 in early December then generally decreases to about 100 in March. It generally increases to about 250 in late May then generally decreases to about 200 in late July. It generally increases ending at about 400. Portugal begins at about 75 and generally increases to about 250 in early February. It generally decreases to about 150 in early March then generally increases to about 500 in late April. It generally decreases to about 200 in early May then generally increases to about 350 in late May. It generally decreases to about 300 in late July then generally increases ending at about 350. Spain begins at about 100 and generally increases to about 200 in early February. It generally decreases to about 100 in early March then generally increases to about 300 in late March. It generally decreases to about 100 in early May then generally decreases to about 200 in mid-July. It generally increases ending at about 250. Italy begins at about 100 and generally increases to about 150 in early February. It generally decreases to about 100 in early March then generally increases to about 200 in late April. It generally decreases to about 100 in early May then generally increases to about 250 in late May. It generally decreases to about 150 in early August then generally increases ending at about 200.

Figure: Median Bank CDS Premiums

Line chart, September to September. Unit is basis points. There are five series, "Greece," "Ireland," "Portugal," "Spain," and "Italy." Greece begins at about 200 and remains about constant until mid-November. It generally increases to about 900 in late April then generally decreases to about 600 in mid-May. It generally increases to about 1000 in early July then generally decreases to about 750 in mid-July. It generally increases ending at about 900. Ireland begins at about 250 and generally decreases to about 200 in late September. It remains about constant until early November then generally increases to about 250 in late November. It generally decreases to about 200 in early January then generally increases to about 200 in late April. It generally increases to about 450 in late June then generally decreases to about 350 in late July. It generally increases ending at about 400. Portugal begins at about 100 and remains about constant until early January. It generally increases to about 250 in early February then generally decreases to about 150 in early March. It generally increases to about 550 in early May then generally decreases to about 300 in early May. It generally increases to about 500 in late May then generally decreases to about 300 in late July. It generally increases ending at about 400. Spain begins at about 200 and generally decreases to about 150 in early January. It generally increases to about 400 in early May then generally decreases to about 200 in early May. It generally increases to about 400 in late April then generally decreases to about 250 in late July. It generally increases ending at about 300. Italy begins at about 50 and remains about constant until early January. It generally increases to about 200 in early May then generally decreases to about 150 in mid-May. It fluctuates but remains about constant to the end of the timeline.

Source: Markit CDS & Bonds.

Staff Projections for Emerging Market Economies

(Percent change from end of previous period, annual rate)

Indicator	2009	Projection					
		2010		2010		2011	2012
		Q1	Q2	Q3	Q4		
Real GDP	2.8	6.4	9.7	3.0	4.0	4.5	4.8
August TB	2.8	6.4	6.4	4.0	4.4	4.7	...
CPI	2.2	4.7	2.4	3.1	3.2	3.0	3.1
August TB	2.2	4.7	2.4	2.7	3.1	3.0	...

... Not applicable.

Evolution of Staff's International Forecast

Figure: Total Foreign GDP

Line chart, Tealbook publication dates 1/23/2008 to 12/8/2010. Unit is percent change, Q4/Q4. There are four series, "2009," "2010," "2011," and "2012." 2009 begins at about 3.5 and generally decreases to about -2 on 3/12/2009. It generally increases to about .5 on 3/10/2010 and remains about constant ending on 9/15/2010. 2010 begins at about 4 on 9/10/2008 and generally decreases to about 2.5 on 3/12/2009. It generally increases ending at about 4 on 9/15/2010. 2011 begins at about 4 on 8/6/2009 and remains about constant until 3/10/2010. It generally decreases ending at about 3 on 9/15/2010. 2012 appears at about 3.5 on 9/15/2010.

Figure: Total Foreign CPI

Line chart, Tealbook publication dates 1/23/2008 to 12/8/2010. Unit is percent change, Q4/Q4. There are four series, "2009," "2010," "2011," and "2012." 2009 begins at about 2.5 and generally increases to about 3 on 6/18/2008. It remains about constant until 10/22/2008 then generally decreases to about .5 on 3/12/2009. It generally increases to about 1 on 6/17/2009 then generally decreases to about .75 on 12/9/2009. It generally increases to about 1 on 1/20/2010 and remains about constant to the end of the timeline. 2010 begins at about 2.25 on 9/10/2008 and generally decreases to about 1.5 on 3/12/2009. It remains about constant until 12/9/2009 then generally increases to about 2.5 on 4/21/2010. It generally decreases ending at about 2 on 9/15/2010. 2011 begins at about 1.75 on 9/16/2009 and generally increases ending at about 2 on 9/15/2010. 2012 appears at about 2 on 9/15/2010.

Figure: U.S. Current Account Balance

Line chart, Tealbook publication dates 1/23/2008 to 12/8/2010. Unit is percent of GDP. There are four series, "2009," "2010," "2011," and "2012." 2009 begins at about -4.5 and fluctuates but generally increases ending at about -3. 2010 begins at about -3 on 9/10/2008 then generally decreases to about -4 on 3/12/2009. It generally increases to about -3 on 8/6/2009 and remains about constant ending on 9/15/2010. 2011 begins at about -3.25 on 9/16/2009 and fluctuates but generally increases ending at about -3. 2012 appears at about -3 on 9/15/2010.

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

September 2010 Tealbook Book A Tables and Charts[‡]

Financial Developments

Policy Expectations and Treasury Yields

Figure: Implied Federal Funds Rate

Line chart, 2010 to 2012. Unit is percent. There are four series, "Mean: September 14, 2010," "Mean: August 9, 2010," "Mode: September 14, 2010," and "Mode: August 9, 2010." All four series begin at about 0.25 and remain about constant until the end of 2011:Q1. Mean: September 14, 2010 generally increases ending at about 0.75. Mean: August 9, 2010 generally increases ending at about 1. Mode: September 14, 2010 generally increases ending at about 0.4. Mode: August 9, 2010 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. Both include an allowance for term premiums and other adjustments.

Source: Bloomberg and CME group.

Figure: Implied Expectation of Quarter of First Rate Increase from the Desk's Dealer Survey

Bar chart, 2010:Q3 to >=2012:Q3. Unit is percent. There are two series, "Recent: 18 Respondents" and "Last FOMC: 18 Respondents." Recent begins at about 0 in 2011:Q1 and increases to about 15 in 2011:Q4. It decreases to about 12 in 2012:Q2 and increases ending at about 25. Last FOMC begins at about 0 in 2010:Q4 and generally increases to about 20 in 2011:Q3. It decreases to about 8 in 2012:Q2 and increases ending at about 10.

Figure: Interest Rates

Line chart, August 9 through September 13. Unit is percent. The August FOMC meeting is marked by a vertical line on August 10. Initial claims is marked by a vertical line on August 19 and September 9. Existing home sales is marked by a vertical line on August 21. FRBKC Symposium is marked by a vertical line on August 28. FOMC Minutes is marked by a vertical line on August 31. ISM is marked by a vertical line on September 1. Employment report is marked by a vertical line on September 2. There are two series, "June 2011 Eurodollar (right scale)" and "10-year Treasury yield (left scale)." June 2011 Eurodollar begins at about 0.6 and generally increases to about 0.65 late on August 9. It generally decreases to about 0.55 early on August 11 then generally increases to about 0.65 on August 14. It generally decreases to about 0.5 on August 21 then generally increases to about 0.6 on August 25. It fluctuates but generally decreases to about 0.55 on August 30. It fluctuates but generally increases to about 0.6 on August 29 then generally decreases to about 0.55 on September 7. It generally increases to about 0.65 on September 10 then generally decreases ending at about 0.55. 10-year treasury yield begins at about 2.8 and fluctuates but generally decreases to about 2.4 on August 25. It generally increases to about 2.65 on August 29 then generally decreases to about 2.45 on August 30. It generally increases to about 2.75 on September 3 then generally decreases to about 2.6 on September 7. It generally increases to about 2.8 on September 11 then generally decreases ending at about 2.7.

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

Source: Bloomberg.

Figure: 10-Year Off-The-Run Treasury Yield

Line chart, 2007 to 2010. Unit is percent. Data are daily. The August 2010 FOMC meeting is marked by a vertical line. The end of the timeline is labeled September 14. The series begins at about 4.55 and generally increases to about 5.5 in 2007:Q2. It generally decreases to about 3.5 in 2008:Q1 then generally increases to about 4.5 in 2008:Q3. It generally decreases to about 2.5 in 2009:Q1 then generally increases to about 4.25 in 2009:Q2. It generally decreases to about 3.5 in 2009:Q4 then generally increases to about 4 in 2010:Q1. It generally decreases ending at about 2.5.

Note: Par yield estimates based on smoothed nominal Treasury yield curve.

Figure: Inflation Compensation

Line chart, 2007 to 2010. Unit is percent. Data are daily. The August 2010 FOMC meeting is marked by a vertical line. 0 on the scale is marked by a horizontal line. The end of the timeline is labeled September 14. 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 fluctuates but remains about constant until 2008:Q4. It generally increases to about 3.5 in 2008:Q4 then generally decreases to about 2 in 2009:Q1. It generally increases to about 3 in 2009:Q4 then generally decreases ending at about 2. Next 5 years begins at about 2 and remains about constant until 2008:Q3. It generally decreases to about -1.5 in 2008:Q4 then generally increases to about 2 in 2010:Q1. It generally decreases ending at about 1.

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

Source: Barclays PLC and staff estimates.

Asset Market Developments

Figure: Equity Prices

Line chart, 2008 to 2010. Unit is an index, August 9, 2010 = 100. Data are daily. The August 2010 FOMC meeting is marked by a vertical line. The end of the timeline is labeled September 14. There are two series, "S&P 500 Bank Index" and "S&P 500." S&P 500 Bank Index begins at about 120 and generally increases to about 175 in 2008:Q2. It generally decreases to about 40 in 2009:Q1 then generally increases to about 120 in 2010:Q2. It generally decreases ending at about 100. S&P 500 begins at about 115 and generally decreases to about 60 in 2009:Q1. It generally increases to about 110 in 2010:Q1 then generally decreases ending at about 100.

Source: Bloomberg.

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

Line chart, 2007 to 2010. Unit is percent, log scale. Data are daily. The August 2010 FOMC meeting is marked by a vertical line. The end of the timeline is labeled September 14. The series begins at about 0 and generally increases to about 30 in 2008:Q1. It generally decreases to about 15 in 2008:Q2 then generally increases to about 80 in 2008:Q4. It generally decreases to about 15 in 2010:Q1 then generally increases to about 50 in 2010:Q2. It generally decreases ending at about 20.

Source: Chicago Board Options Exchange.

Figure: Equity Risk Premium

Line chart, 1990 to 2010. Unit is percent. Data are monthly. The end of the timeline is marked + (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 late 1990. It generally decreases to about 8 in early 1992 then generally increases to about 9 in early 1995. It generally decreases to about 2 in late 2000 then generally increases to about 12 in late 2008. It generally decreases to about 8 in late 2009 then generally increases ending at about 10. Expected real yield on 10-year treasury begins at about 4.5 and generally decreases to about 2 in late 1993. It generally increases to about 5 in early 1995. It generally decreases to about 2.5 in late 1998 then generally increases to about 4 in late 1999. It generally decreases to about 1 in mid-2003 then generally increases to about 3 in early 2007. It generally decreases ending at about 0.

Source: Thomson Financial.

Figure: Corporate Bond Spreads

Line chart, 2002 to 2010. Unit is basis points. Data are daily. The August 2010 FOMC meeting is marked by a vertical line. The end of the timeline is labeled September 14. There are two series, "10-year high-yield (right scale)" and "10-year BBB (left scale)." 10-year high-yield begins at about 600 and generally increases to about 900 in 2002:Q3. It generally decreases to about 300 in 2005:Q1 then generally increases to about 1750 in 2008:Q4. It generally decreases ending at about 500. 10-year BBB begins at about 200 and generally increases to about 300 in 2002:Q4. It generally decreases to about 50 in 2005:Q1 then generally increases to about 650 in 2008:Q4. It generally decreases ending at about 200.

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

Source: Merrill Lynch and staff estimates.

Figure: Spread on 30-Day Unsecured Financial Paper

Line chart, 2007 to 2010. Unit is basis points. Data are 5-day moving average. The August 2010 FOMC meeting is marked by a vertical line. 0 on the scale is marked by a horizontal line. The end of the timeline is labeled September 14. The series begins at about 0 and fluctuates but generally increases to about 60 in 2008:Q2. It generally decreases to about 10 in 2008:Q2 then generally increases to about 150 in 2008:Q4. It generally decreases ending at about 0.

Note: The spread is the AA financial unsecured rate minus the AA nonfinancial unsecured rate.

Source: Depository Trust & Clearing Corporation.

Figure: Libor over OIS Spreads

Line chart, June 2009 to September 2010. Unit is basis points. Data are daily. The August 2010 FOMC meeting is marked by a vertical line. The end of the timeline is labeled September 14. There are three series, "1-month," "3-month," and "6-month." 1-month begins at about 10 and fluctuates but remains about constant until late March 2010. It generally decreases to about 0 in late April 2010 then generally increases to about 10 in early August 2010. It generally decreases ending at about 0. 3-month begins at about 45 and generally decreases to about 0 in early March 2010. It generally increases to about 30 in late July 2010 then generally decreases ending at about 10. 6-month begins at about 100 and generally decreases to about 15 in mid-March 2010. It generally increases to about 50 in late June 2010 then generally decreases ending at about 30.

Source: British Banker's Association and Prebon.

[Box:] Have Inflation Expectations Moved Lower?

Figure: Five-Year Inflation Compensation

Line chart, January 2007 to May 2010. Unit is percent. April 30 2010 is marked by a vertical line. 0 on the scale is marked by a horizontal line. There are two series, "TIPS inflation compensation" and "Inflation swaps." TIPS inflation compensation begins at about 2.25 and generally decreases to about 1.75 in August 2007. It generally increases to about 2.5 in August 2008 then generally decreases to about -2.0 in late November 2008. It generally increases to about 2.0 in April 2010 then generally decreases ending at about 1.0. Inflation Swaps begins at about 2.5 and fluctuates but remains about constant until April 2008. It generally increases to about 3.25 in September 2008 then generally decreases to about -0.5 in December 2008 then fluctuates but generally increases to about 2.5 in December 2009. It generally decreases ending at about 1.5.

Figure: Five-Year, Five-Year Forward Inflation Compensation

Line chart, January 2007 to May 2010. Unit is percent. April 30 2010 is marked by a vertical line. 0 on the scale is marked by a horizontal line. There are two series, "TIPS inflation compensation" and "Inflation swaps." TIPS inflation compensation begins at about 2.5 and generally increases to about 3.25 in April 2008. It generally decreases to about 2.5 in October 2008 then generally increases to about 3.75 in November 2008. It generally decreases to about 2 in February 2009 then generally increases to about 3.25 in March 2010. It generally decreases ending at about 2.25. Inflation swaps begins at about 2.5 and generally increases to about 3.5 in March 2008. It generally decreases to about 2.0 in October 2008 then generally increases to about 3.5 in May 2009. It generally fluctuates but generally decreases ending at about 2.5.

Table 1: Model Decomposition of Declines in TIPS Inflation Compensation
(April 30, 2010 to September 14, 2010)

	5-year	5-year, 5-year forward
Changes in inflation expectations	-43	-40
Changes in inflation risk premium	-23	-26
Changes in residuals	4	15
Total change	-62	-52

Model-Implied and Survey-Based Inflation Expectations

Figure: Ten-Year Inflation Expectations

Line chart, January 2007 to July 2010. Unit is percent. April 30, 2010 is marked by a vertical line. There are four series, "Model-Implied (Daily)," "CPI (SPF, Quarterly)," "PCE (SPF, Quarterly), and Thomson Reuters/Michigan Survey (Monthly; over the next 5 to 10 years)." Model-Implied begins at about 2.4 and generally increases to about 2.7 in August 2007. It fluctuates but generally decreases to about 1.8 in October 2008. It generally increases to about 2.5 in November 2008 then generally decreases to about 1.5 in January 2009. It fluctuates but generally increases to about 2.2 in March 2010 then generally decreases ending at about 1.7. CPI begins at about 2.3 and generally increases to about 2.5 in April 2008. It remains about constant until January 2009 then generally decreases to about 2.4 in April 2009. It generally increases to about 2.5 in September 2009 then generally decreases to about 2.3 in January 2010. It generally increases to about 2.4 in April 2010 then generally decreases ending at about 2.3. PCE begins at about 2.0 and generally increases to about 2.2 in April 2008. It remains about constant until April 2009 then generally increases to about 2.2 in June 2009. It generally decreases ending at about 2.1. Thomson Reuters/Michigan Survey begins at about 3.0 and generally fluctuates between about 3.0 and 3.1 until December 2007. It generally increases to about 3.4 in July 2008 then generally decreases to about 2.6 in January 2009. It generally increases to about 3.2 in March 2009 then generally decreases to about 2.6 in April 2009. It fluctuates between about 3.0 and 2.8 until April 2010 then generally increases to about 2.9 in June 2010. It fluctuates but remains about constant to the end of the timeline.

Figure: Five-Year, Five-Year Forward Inflation Expectations

Line chart, January 2007 to May 2010. Unit is percent. April 30, 2010 is marked by a vertical line. There are two series, "Model-Implied (Daily)" and "CPI (Primary Dealers Survey, FOMC Frequency)." Model-Implied begins at about 2.5 and fluctuates but generally increases to about 2.5 in August 2007. It fluctuates but generally decreases to about 2.0 in March 2008 then generally increases to about 2.2 in July 2008. It generally decreases to about 1.9 in October 2008 then generally increases to about 2.6 in November 2008. It generally decreases to about 1.6 in January 2009 then fluctuates but generally increases to about 2.3 in May 2009. It generally decreases to about 2.0 in November 2009 then generally increases to about 2.3 in March 2010. It generally decreases ending at about 1.8. CPI begins at about 2.3 and generally decreases to about 2.2 in August 2007. It generally increases to about 2.4 in October 2008. It generally decreases to about 2.1 in May 2009 then generally increases to about 2.3 in January 2010. It generally decreases ending at about 2.1.

Foreign Developments

Figure: Stock Price Indexes

Line chart, 2007 to 2010. Unit is an index, January 1, 2007 = 100. Data are daily. The August 2010 FOMC meeting is marked by a vertical line. The end of the timeline is labeled September 14. There are four series, "DJ Euro," "Topix," "FTSE," and "MSCI Emerging Markets." DJ Euro begins at about 100 and generally increases to about 110 in 2007:Q3. It generally decreases to about 50 in 2009:Q1 then generally increases to about 70 in 2009:Q4. It fluctuates but remains about constant to the end of the timeline. Topix begins at about 100 and generally decreases to about 40 in 2009:Q1. It fluctuates but remains about constant to the end of the timeline. FTSE begins at about 100 and generally decreases to about 60 in 2009:Q1. It generally increases ending at about 80. MSCI Emerging Markets begins at about 100 and generally increases to about 150 in 2007:Q4. It generally decreases to about 50 in 2009:Q1 then generally increases ending at about 120.

Source: Bloomberg.

Figure: Nominal 10-Year Government Bond Yields

Line chart, 2007 to 2010. Unit is percent. Data are daily. The August 2010 FOMC meeting is marked by a vertical line. The end of the timeline is labeled September 14. There are three series, "Germany," "United Kingdom," and "Japan." Germany begins at about 4 and generally increases to about 5 in 2007:Q3. It generally decreases to about 3.5 in 2008:Q1 then generally increases to about 4.5 in 2008:Q2. It generally decreases to about 3 in 2009:Q1 then generally increases to about 3.5 in 2009:Q2. It generally decreases ending at about 2. United Kingdom begins at about 5 and generally increases to about 5.5 in 2007:Q2. It generally decreases to about 4.5 in 2008:Q1 then generally increases to about 5 in 2008:Q2. It generally decreases to about 3 in 2009:Q1 then generally increases to about 4 in 2010:Q1. It generally decreases ending at about 3. Japan begins at about 2 and generally decreases to about 1 in 2008:Q1. It generally increases to about 2 in 2008:Q2 then generally decreases ending at about 1.

Source: Bloomberg.

Figure: Euro-Area 10-Year Government Bond Spreads

Line chart, 2007 to 2010. Unit is percentage points. Data are daily. The August 2010 FOMC meeting is marked by a vertical line. 0 on the scale is marked by a horizontal line. The end of the timeline is labeled September 14. There are three series, "Greece," "Spain," and "Ireland." Greece begins at about 0 and generally increases to about 3 in 2009:Q1. It generally decreases to about 1 in 2009:Q3 then generally increases to about 10 in 2010:Q1. It generally decreases to about 4 in 2010:Q2 then generally increases ending at about 10. Spain begins at about 0 and generally increases to about 1 in 2009:Q1. It remains about constant until 2010:Q2 then generally increases ending at about 2. Ireland begins at about 0 and generally increases to about 3 then generally decreases to about 1 in 2010:Q2. It generally increases ending at about 4.

Note: Spread over German bunds.

Source: Bloomberg.

Figure: Nominal Trade-Weighted Dollar Indexes

Line chart, 2007 to 2010. Unit is an index, January 1, 2007 = 100. Data are daily. The August 2010 FOMC meeting is marked by a vertical line. The end of the timeline is labeled September 14. There are three series, "Broad," "Major," and "OITP." Broad begins at about 100 and generally decreases to about 90 in 2008:Q3. It generally increases to about 108 in 2009:Q1 then generally decreases to about 93 in 2009:Q4. It generally increases to about 100 in 2010:Q2 then generally decreases ending at about 95. Major begins at about 100 and generally decreases to about 85 in 2008:Q1. It generally increases to about 105 in 2009:Q1 then generally decreases to about 87 in 2009:Q4. It generally increases to about 100 in 2010:Q2 then generally decreases ending at about 90. OITP begins at about 100 and generally decreases to about 90 in 2008:Q3. It generally increases to about 110 in 2009:Q1 then generally decreases ending at about 100.

Source: Federal Reserve Board and Bloomberg.

Figure: Bilateral Exchange Rates

Line chart, 2007 to 2010. Unit is foreign currency/\$, January 1, 2007 = 100. Data are daily. The August 2010 FOMC meeting is marked by a vertical line. The end of the timeline is labeled September 14. There are four series, "Euro," "Yen," "Swiss Franc," and "British Pound." Euro begins at about 100 and generally decreases to about 80 in 2008:Q1. It generally increases to about 100 in 2009:Q1 then generally decreases to about 85 in 2009:Q4. It generally increases to about 110 in 2010:Q1 then generally decreases ending at about 100. Yen begins at about 100 and generally decreases to about 80 in 2008:Q1. It generally increases to about 90 in 2008:Q3 then generally decreases ending at about 65. Swiss Franc begins at about 100 and generally decreases to about 80 in 2008:Q1. It generally increases to about 100 in 2008:Q4 then generally decreases to about 80 in 2009:Q4. It generally increases to about 95 in 2010:Q2 then generally decreases ending at about 80. British Pound begins around 100 and generally increases to about 140 in 2008:Q4. It generally decreases to about 120 in 2009:Q3 then generally increases to about 140 in 2010:Q1. It generally decreases ending at about 125.

Source: Federal Reserve Bank of New York.

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

Bar chart, 2007 to 2010. Unit is billions of dollars, annual rate. 2010 is divided into 3 clusters labeled Q1, Q2, and July. There are two series, "Official" and "Private." Official begins at about 100 and remains about constant until 2008:Q1. It generally increases to about 750 in 2008:Q3 then generally decreases to about 100 in 2010:Q2. It increases ending at about 400 in July 2010. Private begins at about 50 and remains about constant until 2008:Q1. It generally increases to about 200 in 2008:Q4. It generally decreases to about 0 in 2009:Q4 then generally increases to about 400 in 2010:Q1. It remains about constant until 2010:Q2 then generally decreases ending at about 200 in July 2010.

Source: Treasury International Capital data adjusted for staff estimates.

Figure: Selected Components of Net Debt Financing, Nonfinancial Firms

Bar chart, 2006 to 2010. Unit is billions of dollars. Data are at a monthly rate. There are three series, "Commercial paper (seasonally adjusted, period end basis)," "C&I loans (seasonally adjusted, period end basis)," and "Bonds." There is also a "Total" series presented as a line chart that sums the total of the other series. Approximate values are: 2006: Bonds 20, C&I Loans, 10, Commercial Paper 5, Total 35. 2007: Bonds 25, C&I Loans 15, Commercial Paper 0, Total 40. 2008: Bonds 20, C&I Loans 10, Commercial Paper 5, Total 25. 2009:H1 Bonds 40, C&I Loans -20, Commercial Paper -15, Total 5. 2009:H2 Bonds 20, C&I Loans -25, Commercial Paper -5, Total -10. 2010:Q1 Bonds 35, C&I Loans -20, Commercial Paper 5, Total 20. 2010:Q2 Bonds 20, C&I Loans -10, Commercial Paper 5, Total 15. 2010 July: Bonds 20, C&I Loans 10, Commercial Paper 5, Total 35. 2010 August: Bonds 40, C&I Loans -15, Commercial Paper 0, Total 25.

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

Figure: Corporate Bond Yields

Line chart, 2008 to 2010. Unit is percent. Data are daily. The August 2010 FOMC meeting is marked by a vertical line. The end of the timeline is labeled September 14. There are two series, "10-year high yield" and "10-year BBB." 10-year high yield begins at about 9.5 and generally increases to about 20 in 2008:Q4. It generally decreases to about 14 in 2009:Q1 then generally increases to about 17 in 2009:Q2. It generally decreases ending at about 8. 10-Year BBB begins at about 6 and generally increases to about 10 in 2008:Q4. It generally decreases ending at about 5.

Source: Staff estimates of smoothed yield curves based on Merrill Lynch bond data.

Figure: Selected Components of Net Equity Issuance, Nonfinancial Firms

Bar chart, 2006 to 2010. Unit is billions of dollars. There are four series, "Cash Mergers," "Repurchases," "Private Issuance," and "Public Issuance." There is also a "Total" series presented as a line chart that sums the total of the other series. Approximate values are: 2006: Cash Mergers -25, Repurchases -30, Private Issuance 20, Public Issuance 5, Total -30. 2007: Cash Mergers -40, Repurchases -45, Private Issuance 20, Public Issuance 5, Total -60. 2008: Cash Mergers -10, Repurchases -25, Private Issuance 20, Public Issuance 5, Total -10. 2009:H1 Cash Mergers -5, Repurchases -5, Private Issuance 15, Public Issuance 10, Total 15. 2009:H2 Cash Mergers -15, Repurchases -10, Private Issuance 10, Public Issuance 5, Total -10. 2010:Q1 Cash Mergers -10, Repurchases -20, Private Issuance 10, Public Issuance 5, Total -15. 2010:Q2 (preliminary): Cash Mergers -5, Repurchases -20, Private Issuance 15, Public Issuance 5, Total -5.

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

Figure: Revisions to Expected S&P 500 Earnings

Line chart, 2000 to 2010. Unit is percent. Data are monthly. 0 on the scale is marked by a horizontal line. The end of the timeline is labeled Mid-September (estimate). The series begins at about 0 and generally decreases to about -6 in late 2001. It generally increases to about .5 in early 2002 then generally decreases to about -3 in late 2002. It generally increases to about 2 in mid-2004 then generally decreases to -17.2 in February 2009. It generally increases to about 2.5 in mid-2009 then fluctuates between about 3 and 0 until the end of the timeline.

Note: Index is a weighted average of the percent change in the consensus forecasts of current-year and following-year earnings per share for a fixed sample.

Source: Thomson Financial.

Figure: Prices of Commercial Real Estate

Line chart, 1994 to 2010. Unit is index, 2001:Q1 = 100. There are two series, "Moody's Index" and "NCREIF TBI (re-weighted by staff to exclude multifamily)." Both series begin at about 75 and generally increase together to about 100 in late 2000. Moody's Index generally increases to about 200 in early 2007 then generally decreases to about 120 in early 2010. It generally increases ending at about 125 in 2010:Q2. NCREIF TBI generally increases to about 190 in late 2007 then generally decreases ending at about 115 in June 2010.

Source: NCREIF; MIT Center for Real Estate; Moody's Investors Service.

Figure: Delinquency Rates on Commercial Mortgages on Existing Properties

Line chart, 1996 to 2010. Unit is percent. There are three series, "At life insurance companies," "CMBS," and "At commercial banks (excluding farmland)." At life insurance companies begins at about 2.5 and generally decreases to about 0 in late 1999. It remains about constant until the end of the timeline in 2010:Q2. CMBS begins at about .5 in late 1998 and generally increases to about 2 in late 2003 then generally decreases to about .5 in late 2008. It generally increases ending at about 9 in August 2010. At commercial banks begins at about 3.25 and generally decreases to about 1 in mid-2006. It generally increases ending at about 6 in 2010:Q2.

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

Source: Citigroup; Call Report data; ACLI.

Household Finance

Figure: Mortgage Rate and MBS Yield

Line chart, 2007 to 2010. Unit is percent. The August 2010 FOMC meeting is marked by a vertical line. 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 6.7 in 2007:Q2. It generally decreases to about 5.5 in 2008:Q1. Then generally increases to about 6.5 in 2008:Q3. It generally decreases to about 4.75 in 2009:Q1 then generally increases to about 5.5 in late 2009:Q1. It generally decreases ending at about 4.5 on September 8, 2010. MBS yield begins at about 5.6 and generally increases to about 6.4 in 2007:Q2. It generally decreases to about 5.0 in 2008:Q1 then generally increases to about 6.0 in 2008:Q4. It generally decreases to about 3.75 in 2009:Q1 then generally increases to about 5.0 2009:Q2 then generally decreases ending at about 3.5 on September 14, 2010.

Note: For 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 2010. Unit is an index, March 16, 1990 = 100. The August 2010 FOMC meeting is marked by a vertical line. The end of the timeline is labeled September 10. There are two series, Purchase Index (left scale) and Refi Index (right scale). Purchase index begins at about 300 and generally increases to about 500 in mid-2005. It generally decreases to about 350 in late 2006 then generally increases to about 450 in late 2007. It generally decreases ending at about 150. Refi index begins at about 2000 and generally increases to about 10,000 in mid-2003. It generally decreases to about 1000 in early 2006 then generally increases to about 4000 in late 2007. It generally decreases to about 1000 in mid-2008 then generally increases to about 6000 in late 2008. It generally decreases to about 2000 in early 2010 then generally increases ending at about 6000.

Note: Seasonally adjusted by FRB staff.

Source: Mortgage Bankers Association.

Figure: Growth of Household Sector Debt

Line chart, 1992 to 2010. Unit is percent. Data are quarterly, s.a.a.r. 0 on the scale is marked by a horizontal line. There are two series, "Consumer credit" and "Home mortgage." Consumer credit begins at about -1 and generally increases to about 16 in early 1995. It generally decreases to about 2 in mid-1998 then generally increases to about 15 in late 2000. It generally decreases to about 4 in mid-2006 then generally increases to about 7 in mid-2007. It generally decreases to about -6 in late 2009 then generally increases ending at about -2 in July 2010. Home mortgage begins at about 8 and generally decreases to about 4 in mid-1993. It generally increases to about 15 in mid-2003 then generally decreases to about -6 in early 2010. It generally increases ending at about -2 in 2010:Q2.

Source: Federal Reserve Board.

Figure: Delinquencies on Prime Mortgages

Line chart, 2002 to 2010. Unit is percent of loans. Data are monthly. The end of the timeline is labeled July. There are two series, "Delinquency transition rate (left scale)" and "Delinquency rate (right scale)." Delinquency transition rate begins at about 1.1 and generally increases to about 1.3 in early 2003. It fluctuates but generally decreases to about 0.7 in early 2006 then fluctuates but generally increases to about 1.6 in late 2008. It generally decreases to about 1.3 in early 2009 then generally increases to about 1.5 in mid-2009. It generally decreases to about 1.2 in late 2009 then generally increases to about 1.5 in early 2010 then generally decreases ending at about 1.2. Delinquency rate begins at about 2 and remains about constant until mid-2007. It generally increases to about 7 in late 2009 then generally decreases ending at about 6.

Note: For delinquency rate, percent of loans 90 or more days past due or in foreclosure. For transition rate, percent of previously current mortgages that transition to being at least 30 days delinquent each month.

Source: LPS Applied Analytics.

Figure: Spread of Consumer Interest Rates to Treasury Yield

Line chart, 2004 to 2010. Unit is percentage points. There are two series, "Credit cards (offer rate)" and "New auto loans (transaction rate)." Credit cards begins at about 8 and generally increases to about 11 in early 2008. It generally decreases to about 8.5 in mid-2008 then generally increases ending at about 13 in July 2010. New auto loans begins at about 4 and generally decreases to about 0 in mid-2006. It generally increases to about 5.5 in early 2008 then generally decreases to about 2.5 in mid-2008. It generally increases to about 6.5 in early 2009 then generally decreases ending at about 4 on September 5, 2010.

Note: Spreads are relative to 2-year Treasury yield. For credit cards, monthly; for new auto loans, weekly.

Source: For credit cards, Mintel; for auto loans, PIN.

Figure: Delinquencies on Consumer Loans

Line chart, 1998 to 2010. Unit is percent. There are three series, "Credit card loans in securitized pools," "Nonrevolving Consumer loans at commercial banks," and "Auto loans at captive finance companies." Credit card loans in securitized pools begins at about 5 and generally decreases to about 4.5 early 2000 then generally increases to about 5.5 in mid-2003. It generally decreases to about 3 in late 2005 then generally increases to about 6 in late 2008. It generally decreases ending at about 5 in July 2010. Nonrevolving consumer loans at commercial banks begins at about 3 and generally decreases to about 2 in early 2006. It generally increases to about 3.5 in early 2009 then generally decreases ending at about 3.25 in 2010:Q2. Auto loans at captive finance companies begins at about 3 and generally decreases to about 2 in late 1999. It generally increases to about 2 in early 2001 then generally decreases to about 2 in late 2001. It generally increases to about 2.5 in early 2003 then generally decreases to about 2 in mid-2004. It generally increases to about 3 in mid-2009 then generally decreases ending at about 2.75 in July 2010.

Source: For credit cards, Moody's Investors Service; for nonrevolving consumer loans, Call Report; for auto loans, Federal Reserve Board.

Commercial Banking and Money

Figure: Bank Credit

Line chart, 2007 to 2010. Unit is an index, January 2008 = 100. Data are monthly average. The end of the timeline is labeled August. There are two series, "Securities" and "Total Loans." Securities begins at about 95 and generally increases to about 110 in late 2008. It generally decreases to about 105 in late 2008 then generally increases ending at about 115. Total loans begins at about 90 and generally increases to about 103 in late 2008. It generally decreases ending at about 85.

Note: The data have been adjusted to remove the effects of consolidations of assets under FAS 166 and FAS 167.

Source: Federal Reserve Board.

Figure: C&I Loan Rate Spread

Line chart, 1998 to 2010:Q3. Unit is basis points. Data are quarterly. The series begins at about 150 and fluctuates but generally increases to about 220 in early 2004. It generally decreases to about 175 in mid-2008 then generally increases ending at about 290.

Note: The rate of C&I loans less than \$25 million over a market interest rate on an instrument of comparable maturity.

Source: Survey of Terms of Business Lending.

Figure: Return on Assets

Line chart, 1985 to 2010:Q2. Unit is percent. Data are quarterly s.a.a.r. 0 on the scale is marked by a horizontal line. The series begins at about 0.75 and generally decreases to about -1.5 in early 1987. It generally increases to about 1.0 in early 1989 then generally decreases to about 0 in late 1989. It generally increases to about 1.5 in late 2006 then generally decreases to about -1.0 in late 2008. It generally increases ending at about 0.75.

Source: Call Reports.

Figure: Regulatory Capital Ratios

Line chart, 1990 to 2010:Q2. Unit is percent. Data are quarterly. There are three series, "Total (tier 1 + tier 2)," "Tier 1 Ratio," and "Leverage Ratio." Total begins at about 9.5 and generally increases to about 13 in late 1993. It generally decreases to about 12 in early 2001 then generally increases to about 13 in early 2002. It generally decreases to about 12 in early 2008 then generally increases ending at about 15. Tier 1 ratio begins at about 8 and generally increases to about 11 in late 1993. It generally decreases to about 9 in late 1998 then generally increases to about 10 in early 2002. It generally decreases to about 9 in early 2008 then generally increases ending at about 12. Leverage Ratio begins at about 6 and generally increases to about 8. It remains about constant until late 2008 then generally increases ending at about 8.5.

Note: All series are seasonally adjusted.

Source: Call Reports.

Growth of M2 and Its Components

Percent, s.a.a.r.

	M2	Liquid deposits	Small time deposits	RMMF	Curr.
2008	8.6	6.9	12.3	13.6	5.8
2009					
H1	7.6	16.4	-6.1	-15.4	10.8
H2	2.4	16.5	-26.4	-31.0	2.9
2010					
Q1	0.0	9.2	-25.0	-27.1	2.1
Q2	2.0	8.4	-18.6	-20.2	6.4
July	0.0	3.7	-16.8	-11.0	4.5
Aug. (p)	6.6	14.6	-20.8	-20.9	8.5

Note: RMMF are retail money market mutual funds.

p Preliminary. [Return to table](#)

Source: Federal Reserve Board.

Figure: Interest Rates on Selected Components of M2

Line chart, 2008 to 2010. Unit is percent. Data are monthly. The end of the timeline is labeled August (preliminary). There are three series, "Money market mutual funds," "Small time deposits," and "Liquid deposits." Money market mutual funds begins at about 3.5 and generally decreases to about 1.5 in mid-2008. It remains about constant until late 2008 then generally decreases to about 0 in early 2009. It remains about constant to the end of the timeline. Small time deposits begins at about 3 and generally decreases to about 1.75 in mid-2008. It generally increases to about 2 in late 2008 then generally decreases ending at about 0.25. Liquid deposits begins at about 2 and generally decreases to about 1 in early 2008 then generally increases to about 1.5 in mid-2008. It generally decreases ending at about 0.5.

Source: Federal Reserve Board.

[Box:] Balance Sheet Developments over the Intermeeting Period

Federal Reserve Balance Sheet

Billions of dollars

	Change since last FOMC	Current (09/13/10)	Maximum level	Date of maximum level
Total assets	-18	2,311	2,364	05/13/10
Selected assets:				
Liquidity programs for financial firms	-1	+0	677	11/06/08
Primary, secondary, and seasonal credit	+0	+0	114	10/28/08
Foreign central bank liquidity swaps	-1	+0	586	12/04/08
Lending through other credit facilities	-6	33	351	01/23/09
Net portfolio holdings of Commercial Paper Funding Facility (CPFF LLC)	-0	0	351	01/23/09
Term Asset-Backed Securities Loan Facility (TALF)	-6	33	49	03/11/10
Support for specific institutions	-4	113	121	05/05/10
Credit extended to AIG, net	-3	20	91	10/27/08
Preferred interests in AIA Aurora LLC and ALICO Holdings LLC	0	26	26	09/13/10
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	-1	68	75	12/30/08
Securities held outright†	-4	2,051	2,073	06/14/10
U.S. Treasury securities	14	791	791	09/13/10
Agency debt securities	-3	156	169	03/11/10
Agency mortgage-backed securities	-15	1,103	1,129	06/14/10
Total liabilities	-18	2,253	2,309	05/13/10
Selected liabilities:				
Federal Reserve notes in circulation	5	911	914	09/08/10
Reserve balances of depository institutions	2	1,044	1,249	02/24/10
Term deposits held by depository institutions	0	2	4	07/28/10
U.S. Treasury, general account	-31	7	187	12/31/09
U.S. Treasury, supplementary financing account	+0	200	559	10/22/08
Other deposits	8	10	81	03/12/10
Total capital	-0	58	60	08/03/10

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

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

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

Last update: January 29, 2016

Risks and Uncertainty

Alternative Scenarios

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

Measure and scenario	2010 H2	2011	2012	2013	2014- 15
<i>Real GDP</i>					
Extended Tealbook baseline	2.0	3.3	4.4	4.8	3.7
Stronger recovery	3.3	4.8	5.2	4.8	3.1
Weaker recovery	1.3	1.6	2.6	4.0	4.4
Lower potential	1.6	2.5	3.0	3.6	3.1
Wage stagnation	1.7	3.1	4.5	5.1	3.8
Higher inflation	2.0	3.2	3.9	4.3	3.6
Weaker activity abroad	1.9	2.4	3.7	5.0	4.2
<i>Unemployment rate¹</i>					
Extended Tealbook baseline	9.7	9.1	8.0	6.9	5.7
Stronger recovery	9.6	8.4	7.0	6.0	5.3
Weaker recovery	9.8	9.8	9.3	8.5	6.5
Lower potential	9.8	9.4	8.8	8.2	7.4
Wage stagnation	9.7	9.2	8.1	6.9	5.6
Higher inflation	9.7	9.1	8.2	7.3	6.1
Weaker activity abroad	9.7	9.4	8.7	7.6	6.1
<i>Core PCE inflation</i>					
Extended Tealbook baseline	1.1	.9	.9	1.1	1.4
Stronger recovery	1.1	1.0	1.0	1.2	1.6
Weaker recovery	1.1	.8	.7	.8	1.0
Lower potential	1.3	1.3	1.3	1.5	1.8
Wage stagnation	1.0	.6	.4	.6	.9
Higher inflation	1.1	1.5	1.7	2.0	2.1
Weaker activity abroad	1.0	.5	.4	.9	1.4
<i>Federal funds rate¹</i>					
Extended Tealbook baseline	.1	.1	.3	1.8	3.7
Stronger recovery	.1	.5	1.7	3.0	4.4
Weaker recovery	.1	.1	.1	.1	2.2
Lower potential	.1	1.0	1.8	2.7	4.1
Wage stagnation	.1	.1	.1	1.1	3.2
Higher inflation	.1	.5	1.6	2.7	4.1
Weaker activity abroad	.1	.1	.1	1.1	3.2

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

Figure: Real GDP

Line chart, 2008 to 2015. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There are seven series, "Extended Tealbook Baseline," "Stronger recovery," "Weaker recovery," "Lower potential," "Wage stagnation," "Higher inflation," and "Weaker activity abroad." Extended Tealbook Baseline begins at about 2 and generally decreases to about -4 in 2009:Q2. It generally increases to about 3 in 2010:Q3 then generally decreases to about 2.25 in 2011:Q1. It generally increases to about 4.75 in 2013:Q4 then generally decreases ending at about 3. Stronger recovery begins at about 3 in 2010:Q1 then generally increases to about 5.5 in 2012:Q2. It generally decreases ending at about 2.5. Weaker recovery begins at about 3 in 2010:Q1 then generally decreases to about 1.5 in 2011:Q1. It generally increases to about 5 in 2015:Q1 then generally decreases ending at about 4. Lower potential begins at about 3 in 2010:Q1 and generally decreases to about 2 in 2010:Q4. It generally increases to about 3.5 in 2014:Q2 then generally decreases ending at about 2.5. Wage stagnation begins at about 3 in 2010:Q1 and generally decreases to about 2 in 2011:Q1. It generally increases to about 5 in 2013:Q4 then generally decreases ending at about 3. Higher inflation begins at about 3 in 2010:Q1 then generally decreases to about 2 in 2011:Q1. It generally increases to about 4 in 2014:Q1 then generally decreases ending at about 3. Weaker activity abroad begins at about 3 in 2010:Q1 and generally decreases to about 2 in 2011:Q1. It generally increases to about 5 in 2014:Q1 then generally decreases ending at about 3.75. There is a dark shaded range showing 70 percent interval that begins at about 3 in 2010:Q1 and increases to about [2.5, 7] in 2014:Q1. It decreases ending at about [1, 6]. There is a light shaded range showing 90 percent interval that begins at about 3 in 2010:Q1 then increases to about [1, 8.5] in 2014:Q1. It decreases ending at about [0, 7.5].

Figure: Unemployment Rate

Line chart, 2008 to 2015. Unit is percent. There are seven series, "Extended Tealbook Baseline," "Stronger recovery," "Weaker recovery," "Lower potential," "Wage stagnation," "Higher inflation," and "Weaker activity abroad." Extended Tealbook Baseline begins at about 5.0 and generally increases to about 10.0 in 2009:Q4. It generally decreases ending at about 5.75. Stronger recovery begins at about 9.75 in 2010:Q1 and generally decreases to about 5.25 in 2014:Q4 then generally increases ending at about 5.5. Weaker recovery begins at about 9.75 in 2010:Q1 and remains about constant until 2012:Q2. It generally decreases ending at about 6.5. Lower potential begins at about 9.75 in 2010:Q1 and remains about constant until 2011:Q2. It generally decreases ending at about 7.5. Wage stagnation begins at about 9.75 in 2010:Q1 and remains about constant until 2011:Q3. It generally decreases ending at about 5.5. Higher inflation begins at about 9.75 in 2010:Q1 and remains about constant until 2011:Q1. It generally decreases ending at about 6.25. Weaker activity abroad begins at about 9.75 in 2010:Q1 and remains about constant until 2011:Q1. It generally decreases ending at about 6.25. There is a dark shaded region showing 70 percent interval that begins at about 9.75 in 2010:Q1 and increases to a range of about [9.5, 10]. It generally decreases ending at about [4.5, 6.75]. There is a light shaded region showing 90 percent interval that begins at about 9.75 in 2010:Q1 the increases to a range of about [9.5, 10.25]. It generally decreases ending at about [3.75, 7.5].

Figure: PCE Prices excluding Food and Energy

Line chart, 2008 to 2015. Unit is 4-quarter percent change. 0.0 on the scale is marked by a horizontal line. There are seven series, "Extended Tealbook Baseline," "Stronger recovery," "Weaker recovery," "Lower potential," "Wage stagnation," "Higher inflation," and "Weaker activity abroad." Extended Tealbook Baseline begins at about 2.4 and generally increases to about 2.5 in 2008:Q4. It generally decreases to about 1.25 in 2009:Q3 then generally increases to about 1.75 in 2010:Q1. It generally decreases to about 1.0 in 2011:Q4 then generally increases ending at about 1.5. Stronger recovery begins at about 1.75 in 2010:Q1 and generally decreases to about 1.0 in 2011:Q4. It generally increases ending at about 1.75. Weaker recovery begins at about 1.75 in 2010:Q1 then generally decreases to about .75 in 2013:Q2. It generally increases ending at about 1.0. Lower potential begins at about 1.75 in 2010:Q1 and generally decreases to about 1.25 in 2010:Q4. It generally increases ending at about 2.0. Wage stagnation begins at about 1.75 in 2010:Q1 and generally decreases to about 0.25 in 2013:Q1. It generally increases ending at about 1. Higher inflation begins at about 1.75 in 2010:Q1 and generally decreases to about 1.25 in 2010:Q4. It generally increases ending at about 2.25. Weaker activity abroad begins at about 1.75 in 2010:Q1 and generally decreases to about 0.5 in 2012:Q2. It generally increases ending at about 1.5. There is a dark shaded region showing 70 percent interval that starts at about 1.75 in 2010:Q1 and generally decreases to a range of about [0.25, 1.75] in 2012:Q4. It generally increases ending at about [0.75, 2.5]. There is a light shaded region showing 90 percent interval that begins at about 1.75 and decreases to a range of about [-0.5, 2.25] in 2012:Q4. It generally increases ending at about [0.25, 3.0].

Figure: Federal Funds Rate

Line chart, 2008 to 2015. Unit is percent. 0 on the scale is marked by a horizontal line. There are seven series, "Extended Tealbook Baseline," "Stronger recovery," "Weaker recovery," "Lower potential," "Wage stagnation," "Higher inflation," and "Weaker activity abroad." Extended Tealbook Baseline begins at about 3 and generally decreases to about 0 in 2009:Q1. It remains about constant until 2012:Q3 then generally increases ending at about 3.75. Stronger recovery begins at about 0 in 2010:Q1 and remains about constant until 2011:Q2. It generally increases ending at about 4.5. Weaker recovery begins at about 0 in 2010:Q1 and remains about constant until 2014:Q1. It generally increases ending at about 2. Lower potential begins at about 0 in 2010:Q1 and remains about constant until 2011:Q1. It generally increases ending at about 4. Wage stagnation begins at about 0 in 2010:Q1 and remains about constant until 2013:Q1. It generally increases ending at about 3. Higher inflation begins at about 0 in 2010:Q1 and remains about constant until 2011:Q2. It generally increases ending at about 4. Weaker activity abroad begins at about 0 in 2010:Q1 and remains about constant until 2013:Q1. It generally increases ending at about 3.25. There is a dark shaded region showing 70 percent interval that begins at about 0 in 2010:Q3 and generally increases ending at a range of about [2, 5.5]. There is a light shaded region showing 90-percent interval change that begins at about 0 in 2010:Q3 and generally increases ending at a range of about [0.75, 6.5].

Measure	2010	2011	2012	2013	2014	2015
<i>Real GDP (percent change, Q4 to Q4)</i>						
Projection	2.4	3.3	4.4	4.8	4.3	3.2
Confidence interval						
Tealbook forecast errors	1.5-3.2	1.5-5.2	2.5-6.3	...	...	...
FRB/US stochastic simulations	1.7-3.1	1.8-5.0	2.3-6.2	2.6-6.9	2.2-6.8	.9-5.8
<i>Civilian unemployment rate (percent, Q4)</i>						
Projection	9.7	9.1	8.0	6.9	6.1	5.7
Confidence interval						
Tealbook forecast errors	9.3-10.1	8.3-9.9	6.8-9.2	...	...	...
FRB/US stochastic simulations	9.4-10.0	8.4-9.8	7.0-9.0	5.9-8.1	5.0-7.3	4.5-6.9
<i>PCE prices, total (percent change, Q4 to Q4)</i>						
Projection	1.2	1.1	1.0	1.1	1.4	1.6
Confidence interval						
Tealbook forecast errors	-.7-1.6	-.1-2.3	-.3-2.2	...	...	...
FRB/US stochastic simulations	-.8-1.6	-.2-2.1	-.1-2.0	-.1-2.3	-.3-2.6	-.5-2.8
<i>PCE prices excluding food and energy (percent change, Q4 to Q4)</i>						
Projection	1.1	.9	.9	1.1	1.3	1.5
Confidence interval						
Tealbook forecast errors	-.8-1.4	-.2-1.6	-.1-1.9	...	...	...
FRB/US stochastic simulations	-.9-1.4	-.3-1.6	-.1-1.8	-.3-1.9	-.5-2.2	-.7-2.5
<i>Federal funds rate (percent, Q4)</i>						
Projection	.1	.1	.3	1.8	3.0	3.7
Confidence interval						
FRB/US stochastic simulations	-.1-2	-.1-1.1	-.1-2.2	-.1-3.5	1.3-4.7	2.1-5.5

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 September 10, 2010)

Figure: Real GDP

Line chart, 2008 to 2011. Unit is percent change, annual rate. 0 on the scale is marked by a horizontal line. There are two series, "Blue Chip consensus" and "Staff forecast." Both series begin at about -1 and generally increase together to about 1 in 2008:Q2. They generally decrease together to about -7 in 2008:Q4 then generally increase together to about 5 in 2009:Q4. They generally decrease together to about 2 in 2010:Q2. Blue Chip Consensus generally increases ending at about 3 and Staff forecast generally increases ending at about 4. There is a shaded region that begins at about 2 in 2010:Q2 and increases to a range of about [2, 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 2011. Unit is percent change, annual rate. 0 on the scale is marked by a horizontal line. There are two series, "Blue Chip consensus" and "Staff forecast." Both series begin at about -1 and generally increase together to about 0 in 2008:Q2. They generally decrease together to about -3.5 in 2008:Q3 then generally increase together to about -0.5 in 2009:Q1. The generally decrease together to about -1.5 in 2009:Q2 then generally increase together to about 2 in 2009:Q3. They generally decrease together to about 1 in 2009:Q4. Blue Chip Consensus generally increases ending at about 2.75 and Staff Forecast generally increases ending at about 3.75. There is a shaded region that begins at about 2 in 2010:Q1 and increases ending at a range of about [2, 3.75].

Figure: Unemployment Rate

Line chart, 2008 to 2011. Unit is percent. There are two series, "Blue Chip consensus" and "Staff forecast." Both series begin at about 5 and generally increase together to about 10 in 2010:Q1. They generally decrease together ending at about 9. There is a shaded region that begins at about 9 and generally increases to a range of about [9.25, 10] in 2010:Q4. It generally decreases ending at about [8.5, 9.5].

Figure: Consumer Price Index

Line chart, 2008 to 2011. Unit is percent change, annual rate. 0 on the scale is marked by a horizontal line. There are two series, "Blue Chip consensus" and "Staff forecast." Both series begin at about 5 and generally increase to about 7 in early 2008:Q4. They generally decrease together to about -10 in late 2008:Q4. They generally increase together to about 3.5 in 2009:Q3 then generally decrease together to about -1 in 2010:Q2. Blue Chip consensus generally increases ending at about 2 and Staff Forecast generally increases to about 2 then generally decreases ending at about 1. There is a shaded region that begins at about -1 in 2010:Q2 then generally increases ending at a range of about [1, 3].

Figure: Treasury Bill Rate

Line chart, 2008 to 2011. Unit is percent. 0 on the scale is marked by a horizontal line. There are two series, "Blue Chip consensus" and "Staff forecast." Both series begin at about 2 and generally decrease together to about 0 in 2009:Q4. Blue Chip Consensus remains about constant until 2011:Q1 then generally increases ending at about 1. Staff Forecast remains about constant to the end of the timeline. There is a shaded region that begins at about 0 in 2010:Q3 then generally increases ending at a range of about [0.25, 1.75].

Figure: 10-Year Treasury Yield

Line chart, 2008 to 2011. Unit is percent. There are two series, "Blue Chip consensus" and "Staff forecast." Both series begin at about 3.75 and generally increase together to about 4.0 in 2008:Q3. They generally decrease together to about 2.5 in 2009:Q1 then generally increase together to about 3.75 in 2010:Q1. They generally decrease together to about 3.0 in 2010:Q3. Blue Chip consensus generally increases ending at about 3.75 and Staff Forecast generally increases ending at about 3.5. There is a shaded region that begins at about 3.5 in 2010:Q2 and decreases to a range of about [2.5, 3.25] in 2010:Q3. It generally increases ending at about [3.25, 4.5].

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: January 29, 2016

Accessible Material

September 2010 Tealbook Book 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 ¹		
	08/04/10	09/15/10	08/04/10	09/15/10	08/04/10	09/15/10	08/04/10	09/15/10	08/04/10	09/15/10	
<i>Quarterly</i>											
2010:	Q1	4.8	4.8	3.7	3.7	2.1	2.1	1.2	1.2	9.7	9.7
	Q2	4.0	3.7	2.1	1.7	.1	.0	1.1	1.1	9.7	9.7
	Q3	3.8	3.6	2.4	1.7	1.1	1.2	.9	1.1	9.7	9.6
	Q4	3.4	2.7	2.6	2.4	1.8	1.4	.9	1.1	9.7	9.7
2011:	Q1	4.1	3.8	3.0	2.5	1.2	1.3	.9	1.0	9.5	9.6
	Q2	4.4	4.1	3.4	3.1	1.0	1.1	.9	.9	9.4	9.5
	Q3	4.8	4.6	3.9	3.6	1.0	1.0	.9	.9	9.2	9.3
	Q4	5.3	5.1	4.3	4.1	1.0	.9	.9	.9	8.9	9.1
2012:	Q1	...	5.6	...	4.3	...	1.0	...	.9	...	8.9
	Q2	...	5.6	...	4.4	...	1.0	...	.9	...	8.7
	Q3	...	5.6	...	4.4	...	1.0	...	.9	...	8.3
	Q4	...	5.6	...	4.5	...	1.0	...	.9	...	8.0
<i>Two-quarter²</i>											
2010:	Q2	4.4	4.2	2.9	2.7	1.1	1.0	1.2	1.1	-3	-3
	Q4	3.6	3.2	2.5	2.0	1.5	1.3	.9	1.1	.0	.0
2011:	Q2	4.2	4.0	3.2	2.8	1.1	1.2	.9	.9	-3	-2
	Q4	5.1	4.8	4.1	3.9	1.0	1.0	.9	.9	-5	-4
2012:	Q2	...	5.6	...	4.4	...	1.0	...	.9	...	-4
	Q4	...	5.6	...	4.5	...	1.0	...	.9	...	-7
<i>Four-quarter³</i>											
2009:	Q4	.6	.6	.2	.2	1.5	1.5	1.7	1.7	3.1	3.1
2010:	Q4	4.0	3.7	2.7	2.4	1.3	1.2	1.1	1.1	-3	-3
2011:	Q4	4.7	4.4	3.6	3.3	1.1	1.1	.9	.9	-8	-6
2012:	Q4	...	5.6	...	4.4	...	1.0	...	.9	...	-1.1
<i>Annual</i>											
2009		-1.7	-1.7	-2.6	-2.6	.2	.2	1.5	1.5	9.3	9.3
2010		3.8	3.7	2.9	2.7	1.8	1.7	1.4	1.4	9.7	9.7
2011		4.1	3.8	3.1	2.7	1.2	1.1	.9	1.0	9.3	9.4
2012		...	5.3	...	4.2	...	1.0	...	.9	...	8.5

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 ¹	2011 ¹	2012 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real GDP	3.7	1.7	1.7	2.4	2.5	3.1	3.6	4.1	4.3	4.4	4.4	4.5	2.4	3.3	4.4
<i>Previous Tealbook</i>	3.7	2.1	2.4	2.6	3.0	3.4	3.9	4.3	...	...	...	...	2.7	3.6	...
Final sales	1.1	.9	.8	3.3	2.6	3.3	3.6	4.1	4.2	4.2	4.2	4.7	1.5	3.4	4.3
<i>Previous Tealbook</i>	1.1	1.6	1.6	3.2	3.0	3.7	3.9	4.8	...	...	...	...	1.9	3.8	...
Priv. dom. final purch.	2.1	4.3	.9	2.1	2.8	3.8	4.3	4.7	4.9	5.0	5.3	5.2	2.4	3.9	5.1
<i>Previous Tealbook</i>	2.1	4.3	1.5	2.9	3.4	4.5	4.9	5.3	...	...	...	...	2.7	4.5	...
Personal cons. expend.	1.9	2.0	2.2	2.0	2.1	2.8	3.3	3.7	3.9	4.1	4.3	4.4	2.0	3.0	4.2
<i>Previous Tealbook</i>	1.9	1.6	1.6	2.0	2.5	3.4	3.9	4.2	...	...	...	...	1.8	3.5	...
Durables	8.8	6.9	9.0	6.6	5.5	7.1	8.8	11.7	10.3	9.4	11.4	8.8	7.8	8.3	10.0
Nondurables	4.2	2.3	1.0	2.3	2.4	2.8	2.9	2.8	3.2	3.6	3.0	4.0	2.4	2.7	3.5
Services	.1	1.2	1.6	1.2	1.5	2.1	2.5	2.8	3.2	3.4	3.6	3.8	1.0	2.2	3.5
Residential investment	-12.3	26.3	-27.2	3.5	11.0	21.8	21.8	22.7	18.8	18.0	17.0	16.3	-4.4	19.2	17.5
<i>Previous Tealbook</i>	-12.3	28.5	-8.6	8.3	15.6	19.3	19.6	21.5	...	...	...	...	2.8	19.0	...
Business fixed invest.	7.8	17.6	-.7	2.8	5.9	7.2	7.5	7.8	7.9	7.9	8.9	7.5	6.7	7.1	8.1
<i>Previous Tealbook</i>	7.8	19.8	3.0	7.8	7.2	8.8	8.5	9.0	...	...	...	...	9.4	8.4	...
Equipment & software	20.4	26.4	-.3	4.6	8.8	10.6	11.0	11.5	11.4	11.0	12.0	9.8	12.2	10.5	11.0
<i>Previous Tealbook</i>	20.4	26.1	3.9	10.5	10.1	12.2	11.8	12.5	...	...	...	...	14.9	11.6	...
Nonres. structures	-17.8	-2.7	-1.5	-1.8	-1.9	-1.8	-2.1	-2.2	-1.8	-1.3	-.3	.6	-6.2	-2.0	-.7
<i>Previous Tealbook</i>	-17.8	4.8	.6	.7	-.2	-.3	-.6	-.8	...	...	...	...	-3.3	-.5	...
Net exports ²	-338	-446	-449	-411	-403	-399	-401	-402	-400	-403	-414	-406	-411	-401	-406
<i>Previous Tealbook²</i>	-338	-426	-422	-395	-390	-394	-400	-391	...	...	...	...	-395	-394	...
Exports	11.4	9.1	10.8	8.5	7.7	7.5	7.6	7.5	7.6	7.4	7.4	7.5	9.9	7.6	7.5
Imports	11.2	32.7	9.1	-.6	4.5	5.4	6.6	6.2	5.8	6.7	8.0	4.8	12.5	5.7	6.3
Gov't. cons. & invest.	-1.6	3.9	.8	1.7	.4	.6	.8	.9	.8	.8	.8	1.0	1.2	.7	.9
<i>Previous Tealbook</i>	-1.6	4.5	1.4	.0	.3	.4	.5	.5	...	...	...	...	1.1	.4	...
Federal	1.8	9.1	3.4	4.5	.9	1.1	1.2	1.1	.4	.3	-.1	.2	4.7	1.1	.2
Defense	.4	7.3	5.3	6.8	-.1	.1	.3	.1	.3	.2	-.5	.0	4.9	.1	.0
Nondefense	5.0	12.9	-.3	-.2	3.0	3.1	3.1	3.1	.6	.6	.6	.6	4.2	3.1	.6
State & local	-3.8	.6	-1.0	-.1	.1	.2	.4	.7	1.1	1.2	1.5	1.6	-1.1	.4	1.3
Change in bus. inventories ²	44	70	99	71	69	62	64	66	70	78	87	80	71	65	79
<i>Previous Tealbook²</i>	44	61	87	68	69	62	59	46	...	...	...	...	65	59	...
Nonfarm ²	37	60	94	67	65	59	60	62	67	75	84	77	64	62	76
Farm ²	8	10	6	5	4	4	4	4	3	3	3	3	7	4	3

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

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

Changes in Real Gross Domestic Product and Related Items

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

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Real GDP	3.1	2.7	2.4	2.3	-2.8	.2	2.4	3.3	4.4
<i>Previous Tealbook</i>	3.1	2.7	2.4	2.3	-2.8	.2	2.7	3.6	...
Final sales	2.8	2.7	2.8	2.5	-1.9	-.3	1.5	3.4	4.3

<i>Previous Tealbook</i>	2.8	2.7	2.8	2.5	-1.9	-.3	1.9	3.8	...
Priv. dom. final purch.	4.2	3.1	2.5	1.3	-3.8	-2.0	2.4	3.9	5.1
<i>Previous Tealbook</i>	4.2	3.1	2.5	1.3	-3.8	-2.0	2.7	4.5	...
Personal cons. expend.	3.5	2.7	3.3	1.7	-1.9	.2	2.0	3.0	4.2
<i>Previous Tealbook</i>	3.5	2.7	3.3	1.7	-1.9	.2	1.8	3.5	...
Durables	5.5	2.1	6.3	3.9	-12.3	4.8	7.8	8.3	10.0
Nondurables	3.0	3.3	3.2	.8	-2.9	1.1	2.4	2.7	3.5
Services	3.4	2.6	2.8	1.7	.3	-.8	1.0	2.2	3.5
Residential investment	6.6	5.3	-15.7	-20.7	-24.6	-13.4	-4.4	19.2	17.5
<i>Previous Tealbook</i>	6.6	5.3	-15.7	-20.7	-24.6	-13.4	2.8	19.0	...
Business fixed invest.	7.0	4.4	7.8	8.2	-8.3	-12.7	6.7	7.1	8.1
<i>Previous Tealbook</i>	7.0	4.4	7.8	8.2	-8.3	-12.7	9.4	8.4	...
Equipment & software	8.8	6.1	6.0	4.3	-11.8	-4.9	12.2	10.5	11.0
<i>Previous Tealbook</i>	8.8	6.1	6.0	4.3	-11.8	-4.9	14.9	11.6	...
Nonres. structures	1.7	-.1	13.0	17.3	-1.5	-26.5	-6.2	-2.0	-.7
<i>Previous Tealbook</i>	1.7	-.1	13.0	17.3	-1.5	-26.5	-3.3	-.5	...
Net exports ¹	-688	-723	-729	-655	-504	-363	-411	-401	-406
<i>Previous Tealbook¹</i>	-688	-723	-729	-655	-504	-363	-395	-394	...
Exports	7.1	6.7	10.2	10.1	-2.9	-.1	9.9	7.6	7.5
Imports	10.9	5.2	4.1	.7	-6.0	-7.2	12.5	5.7	6.3
Gov't. cons. & invest.	.6	.7	1.5	1.9	3.1	.8	1.2	.7	.9
<i>Previous Tealbook</i>	.6	.7	1.5	1.9	3.1	.8	1.1	.4	...
Federal	2.3	1.2	2.2	3.1	9.2	3.6	4.7	1.1	.2
Defense	2.4	.4	4.4	2.6	9.5	3.3	4.9	.1	.0
Nondefense	2.3	2.6	-2.3	4.2	8.5	4.5	4.2	3.1	.6
State & local	-.4	.4	1.2	1.2	-.4	-1.0	-1.1	.4	1.3
Change in bus. inventories ¹	66	50	59	28	-38	-113	71	65	79
<i>Previous Tealbook¹</i>	66	50	59	28	-38	-113	65	59	...
Nonfarm ¹	58	50	63	29	-39	-117	64	62	76
Farm ¹	8	0	-4	-1	1	3	7	4	3

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 ¹	2011 ¹	2012 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real GDP	3.7	1.7	1.7	2.4	2.5	3.1	3.6	4.1	4.3	4.4	4.4	4.5	2.4	3.3	4.4
<i>Previous Tealbook</i>	3.7	2.1	2.4	2.6	3.0	3.4	3.9	4.3	...	...	...	...	2.7	3.6	...
Final sales	1.1	.9	.8	3.3	2.6	3.3	3.6	4.1	4.2	4.1	4.2	4.7	1.5	3.4	4.3
<i>Previous Tealbook</i>	1.1	1.6	1.6	3.2	3.0	3.6	3.9	4.7	...	...	...	...	1.9	3.8	...
Priv. dom. final purch.	1.7	3.5	.8	1.8	2.3	3.1	3.5	3.9	4.0	4.1	4.3	4.3	1.9	3.2	4.2
<i>Previous Tealbook</i>	1.7	3.5	1.2	2.4	2.8	3.7	4.0	4.4	...	...	...	...	2.2	3.7	...
Personal cons. expend.	1.3	1.4	1.6	1.4	1.5	2.0	2.3	2.6	2.8	2.9	3.0	3.1	1.4	2.1	2.9
<i>Previous Tealbook</i>	1.3	1.2	1.1	1.4	1.7	2.4	2.8	3.0	...	...	...	...	1.3	2.5	...
Durables	.6	.5	.6	.5	.4	.5	.6	.8	.7	.7	.8	.7	.6	.6	.7

Nondurables	.7	.4	.2	.4	.4	.4	.5	.5	.5	.6	.5	.6	.4	.4	.5
Services	.0	.6	.8	.6	.7	1.0	1.2	1.3	1.5	1.6	1.7	1.8	.5	1.1	1.7
Residential investment	-.3	.6	-.7	.1	.2	.5	.5	.5	.5	.5	.4	.4	-.1	.4	.5
<i>Previous Tealbook</i>	-.3	.6	-.2	.2	.4	.4	.5	.5	...	...	...	...	.1	.5	...
Business fixed invest.	.7	1.5	-.1	.3	.6	.7	.7	.7	.8	.8	.9	.7	.6	.7	.8
<i>Previous Tealbook</i>	.7	1.7	.3	.7	.7	.8	.8	.9	...	...	...	...	.9	.8	...
Equipment & software	1.2	1.6	.0	.3	.6	.7	.8	.8	.8	.8	.9	.7	.8	.7	.8
<i>Previous Tealbook</i>	1.2	1.6	.3	.7	.7	.8	.8	.9	...	...	...	...	1.0	.8	...
Nonres. structures	-.5	-.1	.0	.0	.0	.0	-.1	-.1	.0	.0	.0	.0	-.2	-.1	.0
<i>Previous Tealbook</i>	-.5	.1	.0	.0	.0	.0	.0	.0	...	...	...	...	-.1	.0	...
Net exports	-.3	-3.5	-.1	1.1	.2	.1	-.1	.0	.0	-.1	-.3	.2	-.7	.0	-.1
<i>Previous Tealbook</i>	-.3	-2.9	.1	.8	.1	-.1	-.2	.2	...	...	...	...	-.5	.0	...
Exports	1.3	1.1	1.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.0	1.0
Imports	-1.6	-4.6	-1.4	.1	-.7	-.9	-1.1	-1.0	-1.0	-1.1	-1.3	-.8	-1.8	-.9	-1.1
Gov't. cons. & invest.	-.3	.8	.2	.4	.1	.1	.2	.2	.2	.2	.2	.2	.2	.1	.2
<i>Previous Tealbook</i>	-.3	.9	.3	.0	.1	.1	.1	.1	...	...	...	...	.2	.1	...
Federal	.2	.7	.3	.4	.1	.1	.1	.1	.0	.0	.0	.0	.4	.1	.0
Defense	.0	.4	.3	.4	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0
Nondefense	.1	.3	.0	.0	.1	.1	.1	.1	.0	.0	.0	.0	.1	.1	.0
State & local	-.5	.1	-.1	.0	.0	.0	.1	.1	.1	.1	.2	.2	-.1	.0	.2
Change in bus. inventories	2.6	.8	.9	-.9	-.1	-.2	.0	.1	.1	.2	.3	-.2	.9	.0	.1
<i>Previous Tealbook</i>	2.6	.6	.8	-.6	.0	-.2	-.1	-.4	...	...	...	...	.8	-.2	...
Nonfarm	2.6	.7	1.0	-.8	.0	-.2	.0	.1	.1	.2	.3	-.2	.9	.0	.1
Farm	.1	.1	-.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

Changes in Prices and Costs

(Percent, annual rate except as noted)

Item	2010				2011				2012				2010 ¹	2011 ¹	2012 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
GDP chain-wt. price index	1.0	1.9	1.9	.4	1.2	1.0	.9	.9	1.2	1.2	1.1	1.1	1.3	1.0	1.2
<i>Previous Tealbook</i>	1.0	1.8	1.3	.8	1.1	.9	.9	1.0	...	...	...	...	1.2	1.0	...
PCE chain-wt. price index	2.1	.0	1.2	1.4	1.3	1.1	1.0	.9	1.0	1.0	1.0	1.0	1.2	1.1	1.0
<i>Previous Tealbook</i>	2.1	.1	1.1	1.8	1.2	1.0	1.0	1.0	...	...	...	...	1.3	1.1	...
Energy	16.4	-17.5	4.5	5.3	7.3	5.1	2.9	2.2	2.2	1.6	1.6	1.6	1.4	4.4	1.8
<i>Previous Tealbook</i>	16.4	-17.5	5.1	18.2	6.8	3.9	2.6	1.9	...	...	...	...	4.5	3.8	...
Food	1.8	1.6	.3	1.3	.8	.7	.7	.7	.7	.7	.7	.7	1.2	.7	.7
<i>Previous Tealbook</i>	1.8	1.6	.7	1.2	.8	.7	.7	.7	...	...	...	...	1.3	.7	...
Ex. food & energy	1.2	1.1	1.1	1.1	1.0	.9	.9	.9	.9	.9	.9	.9	1.1	.9	.9
<i>Previous Tealbook</i>	1.2	1.1	.9	.9	.9	.9	.9	.9	...	...	...	...	1.1	.9	...
CPI	1.5	-.7	1.6	1.5	1.5	1.3	1.0	1.0	1.1	1.0	1.1	1.1	1.0	1.2	1.1
<i>Previous Tealbook</i>	1.5	-.7	1.4	2.2	1.3	1.1	1.0	1.0	...	...	...	...	1.1	1.1	...
Ex. food & energy	.0	.9	1.6	1.3	1.0	.9	.9	.9	1.0	1.0	1.0	1.0	.9	.9	1.0
<i>Previous Tealbook</i>	.0	.9	1.1	.9	.8	.9	.9	.9	...	...	...	...	.7	.9	...
ECI, hourly compensation ²	2.6	1.8	1.8	1.8	2.2	1.8	1.8	1.8	2.2	2.0	2.0	2.0	2.0	1.9	2.0
<i>Previous Tealbook</i> ²	2.6	1.8	1.9	1.9	2.4	1.9	1.9	1.9	...	...	...	...	2.0	2.0	...

Nonfarm business sector															
Output per hour	3.9	-1.7	1.5	1.8	1.1	1.5	1.8	2.0	2.3	2.1	1.9	1.8	1.3	1.6	2.0
<i>Previous Tealbook</i>	3.8	-1.0	1.6	1.0	.7	1.1	1.5	2.0	...	...	...	...	1.4	1.3	...
Compensation per hour	-9	-7	2.0	1.8	2.4	1.6	1.6	1.6	2.1	1.7	1.9	2.0	.5	1.8	1.9
<i>Previous Tealbook</i>	.0	-3	1.5	2.3	3.0	2.1	1.9	1.9	...	...	...	...	.9	2.2	...
Unit labor costs	-4.6	1.0	.5	.0	1.3	.1	-.2	-.4	-.2	-.4	.0	.2	-.8	.2	-.1
<i>Previous Tealbook</i>	-3.7	.7	-.1	1.3	2.2	1.0	.3	-.2	...	...	...	...	-.5	.8	...
Core goods imports chain-wt. price index ²	4.2	3.1	1.3	2.2	1.7	1.1	1.0	.8	.8	.9	.9	.9	2.7	1.2	.9
<i>Previous Tealbook</i> ³	4.2	3.2	1.3	2.0	1.4	1.2	1.2	1.1	...	...	...	...	2.7	1.2	...

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	.5	1.3	1.0	1.2
<i>Previous Tealbook</i>	3.2	3.5	2.9	2.6	2.1	.5	1.2	1.0	...
PCE chain-wt. price index	3.0	3.3	1.9	3.5	1.7	1.5	1.2	1.1	1.0
<i>Previous Tealbook</i>	3.0	3.3	1.9	3.5	1.7	1.5	1.3	1.1	...
Energy	18.6	21.5	-3.7	19.4	-9.0	2.7	1.4	4.4	1.8
<i>Previous Tealbook</i>	18.6	21.5	-3.7	19.4	-9.0	2.7	4.5	3.8	...
Food	2.7	1.5	1.7	4.8	6.9	-1.6	1.2	.7	.7
<i>Previous Tealbook</i>	2.7	1.5	1.7	4.8	6.9	-1.6	1.3	.7	...
Ex. food & energy	2.2	2.3	2.3	2.4	2.0	1.7	1.1	.9	.9
<i>Previous Tealbook</i>	2.2	2.3	2.3	2.4	2.0	1.7	1.1	.9	...
CPI	3.4	3.7	1.9	4.0	1.6	1.5	1.0	1.2	1.1
<i>Previous Tealbook</i>	3.4	3.7	1.9	4.0	1.6	1.5	1.1	1.1	...
Ex. food & energy	2.2	2.1	2.7	2.3	2.0	1.7	.9	.9	1.0
<i>Previous Tealbook</i>	2.2	2.1	2.7	2.3	2.0	1.7	.7	.9	...
ECL, hourly compensation ¹	3.8	2.9	3.2	3.0	2.4	1.2	2.0	1.9	2.0
<i>Previous Tealbook</i> ¹	3.8	2.9	3.2	3.0	2.4	1.2	2.0	2.0	...
Nonfarm business sector									
Output per hour	1.5	1.4	.9	2.6	-.4	6.2	1.3	1.6	2.0
<i>Previous Tealbook</i>	1.5	1.5	1.0	2.7	-.3	6.3	1.4	1.3	...
Compensation per hour	3.3	3.5	4.5	3.6	2.3	2.5	.5	1.8	1.9
<i>Previous Tealbook</i>	3.4	3.6	4.5	3.6	2.3	2.6	.9	2.2	...
Unit labor costs	1.9	2.0	3.5	.9	2.7	-3.5	-.8	.2	-.1
<i>Previous Tealbook</i>	1.9	2.0	3.5	.9	2.7	-3.5	-.5	.8	...
Core goods imports chain-wt. price index ²	3.6	2.2	2.5	2.9	3.5	-1.9	2.7	1.2	.9
<i>Previous Tealbook</i> ²	3.6	2.2	2.5	2.9	3.5	-1.9	2.7	1.2	...

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

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

Other Macroeconomic Indicators

2010

2011

2012

Item													2010 ¹	2011 ¹	2012 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
<i>Employment and production</i>															
Nonfarm payroll employment ²	.1	.7	-.1	.1	.4	.6	.7	.8	.8	.8	.9	.9	.8	2.4	3.5
Unemployment rate ³	9.7	9.7	9.6	9.7	9.6	9.5	9.3	9.1	8.9	8.7	8.3	8.0	9.7	9.1	8.0
<i>Previous Tealbook</i> ³	9.7	9.7	9.7	9.7	9.5	9.4	9.2	8.9	...	...	...	...	9.7	8.9	...
NAIRU ³	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
<i>Previous Tealbook</i> ³	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	...	...	...	...	5.2	5.2	...
GDP gap ⁴	-6.8	-7.0	-7.2	-7.2	-7.2	-7.0	-6.8	-6.4	-6.0	-5.6	-5.1	-4.7	-7.2	-6.4	-4.7
<i>Previous Tealbook</i> ⁴	-7.6	-7.6	-7.7	-7.6	-7.5	-7.3	-7.0	-6.6	...	...	...	...	-7.6	-6.6	...
<i>Industrial production</i>															
Industrial production ⁵	7.1	6.5	4.3	.8	2.1	3.6	4.0	4.5	4.2	4.5	5.1	3.9	4.7	3.5	4.4
<i>Previous Tealbook</i> ⁵	7.0	6.6	3.5	1.4	3.5	4.4	4.6	5.1	...	...	...	...	4.6	4.4	...
Manufacturing industr. prod. ⁵	6.2	8.5	3.9	.6	1.9	4.7	5.1	5.7	5.1	5.3	6.0	4.4	4.7	4.3	5.2
<i>Previous Tealbook</i> ⁵	6.1	7.9	2.7	2.0	4.2	5.5	5.5	6.6	...	...	...	...	4.6	5.5	...
Capacity utilization rate - mfg. ³	70.0	71.5	72.1	72.2	72.5	73.4	74.3	75.3	76.1	76.9	77.9	78.6	72.2	75.3	78.6
<i>Previous Tealbook</i> ³	70.0	71.3	71.8	72.1	72.8	73.8	74.7	75.9	...	...	...	...	72.1	75.9	...
<i>Housing and vehicle sales</i>															
Housing starts ⁶	.6	.6	.6	.6	.7	.8	.9	1.0	1.0	1.1	1.2	1.3	.6	.8	1.1
Light motor vehicle sales ⁶	11.0	11.3	11.5	11.6	11.9	12.3	12.9	13.8	14.4	14.9	15.6	15.8	11.4	12.7	15.2
<i>Income and saving</i>															
Nominal GDP ⁵	4.8	3.7	3.6	2.7	3.8	4.1	4.6	5.1	5.6	5.6	5.6	5.6	3.7	4.4	5.6
Real disposable pers. income ⁵	1.3	4.4	.7	.9	1.1	3.0	3.2	3.7	3.7	4.1	4.0	4.4	1.8	2.8	4.0
<i>Previous Tealbook</i> ⁵	1.7	4.4	1.1	1.5	1.7	3.9	4.0	4.0	...	...	...	...	2.2	3.4	...
Personal saving rate ³	5.5	6.1	5.9	5.6	5.4	5.5	5.5	5.5	5.4	5.4	5.3	5.3	5.6	5.5	5.3
<i>Previous Tealbook</i> ³	5.5	6.2	6.3	6.2	6.0	6.2	6.2	6.2	...	...	...	...	6.2	6.2	...
<i>Corporate profits and profit share</i>															
Corporate profits ⁷	48.9	16.9	7.7	1.9	3.0	6.5	5.4	5.5	3.8	4.6	3.1	3.5	17.5	5.1	3.8
Profit share of GNP ³	10.7	11.0	11.1	11.1	11.1	11.2	11.2	11.2	11.2	11.1	11.1	11.0	11.1	11.2	11.0
<i>Federal and state saving</i>															
Net federal saving ⁸	-1,314	-1,325	-1,299	-1,299	-1,257	-1,223	-1,201	-1,187	-1,155	-1,148	-1,122	-1,106	-1,309	-1,217	-1,133
Net state & local saving ⁸	29	21	25	41	46	31	19	16	9	22	27	32	29	28	23
<i>Saving rates</i>															
Gross national saving rate ³	11.1	11.5	11.6	11.6	11.7	12.0	12.1	12.2	12.3	12.4	12.6	12.7	11.6	12.2	12.7
Net national saving rate ³	-1.8	-1.1	-.9	-.9	-.8	-.5	-.4	-.2	.0	.1	.3	.4	-.9	-.2	.4

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

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

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

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

5. Percent change, annual rate. [Return to table](#)

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

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

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

Other Macroeconomic Indicators

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

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
<i>Employment and production</i>									

	-1416	-1299	-1306	-1045	-329	-287	-295	-397	-449	-186	-274	-322	-405	-117	-202	-330
<i>Previous Tealbook</i>	-1416	-1306	-1270	<i>n.a.</i>	-329	-287	-302	-397	-435	-171	-267	-315	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
On-budget	-1553	-1385	-1396	-1147	-359	-351	-280	-439	-445	-249	-263	-368	-404	-186	-189	-383
Off-budget	137	86	90	102	30	64	-14	43	-4	63	-11	46	-1	69	-12	53
Means of financing																
Borrowing	1743	1426	1372	1065	478	344	343	434	472	176	289	312	395	142	217	320
Cash decrease	96	5	20	0	-25	-71	19	0	15	15	-10	15	15	-20	-10	15
Other ²	-424	-133	-86	-20	-124	14	-67	-38	-38	-5	-5	-5	-5	-5	-5	-5
Cash operating balance, end of period	275	270	250	250	219	290	270	270	255	240	250	235	220	240	250	235
NIPA federal sector																
					Seasonally adjusted annual rates											
Receipts	2261	2339	2537	2718	2323	2379	2424	2444	2534	2568	2603	2639	2703	2743	2784	2826
Expenditures	3355	3652	3782	3870	3637	3704	3723	3743	3791	3791	3804	3826	3858	3891	3906	3933
Consumption expenditures	977	1026	1079	1114	1017	1038	1048	1062	1077	1085	1092	1100	1114	1119	1123	1128
Defense	659	689	724	741	684	695	704	716	724	727	730	733	741	744	746	749
Nondefense	318	337	355	373	333	343	344	346	353	358	362	367	373	375	377	379
Other spending	2378	2625	2703	2757	2620	2665	2675	2681	2714	2707	2712	2727	2744	2772	2783	2805
Current account surplus	-1094	-1312	-1245	-1153	-1314	-1325	-1299	-1299	-1257	-1223	-1201	-1187	-1155	-1148	-1122	-1106
Gross investment	151	164	174	175	161	168	171	174	174	174	174	174	175	175	175	175
Gross saving less gross investment ³	-1122	-1349	-1285	-1188	-1348	-1364	-1340	-1341	-1298	-1263	-1240	-1224	-1191	-1183	-1155	-1138
Fiscal indicators⁴																
High-employment (HEB) surplus/deficit	-787	-949	-873	-825	-958	-966	-934	-927	-881	-848	-836	-836	-810	-826	-825	-838
Change in HEB, percent of potential GDP	2.0	0.9	-0.7	-0.5	0.1	-0.0	-0.3	-0.1	-0.3	-0.2	-0.1	-0.0	-0.2	0.1	-0.0	0.0
Fiscal impetus (FI), percent of GDP	1.1	1.0	-0.1	-0.5	0.3	0.3	0.1	0.1	-0.1	-0.1	-0.0	-0.1	-0.1	-0.1	-0.3	-0.2
<i>Previous Tealbook</i>	1.2	0.9	-0.2	<i>n.a.</i>	0.2	0.3	0.1	-0.0	-0.1	-0.1	-0.1	-0.1	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>

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. Quarterly figures for change in HEB and FI are not at annual rates. 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 annual FI estimates are on a calendar year basis. Also, for FI and the change in HEB, positive values indicate aggregate demand stimulus. [Return to table](#)

a Actual. [Return to table](#)

Change in Debt of the Domestic Nonfinancial Sectors

(Percent)

Period ¹	Total	Households			Business	State and local governments	Federal government	Memo: Nominal GDP
		Total	Home mortgages	Consumer credit				
<i>Year</i>								
2005	9.5	11.1	13.3	4.5	8.6	10.2	7.0	6.3
2006	9.0	10.1	11.2	4.1	10.5	8.3	3.9	5.4
2007	8.6	6.8	6.8	5.8	13.1	9.5	4.9	5.0
2008	6.0	.3	-.4	1.5	5.5	2.3	24.2	-.7
2009	3.0	-1.7	-1.6	-4.4	-2.7	4.9	22.7	.6
2010	4.4	-1.7	-3.0	-1.0	.8	3.1	20.5	3.7
2011	4.8	.9	-.6	4.0	2.3	4.5	13.3	4.4
2012	5.1	2.8	.8	8.1	3.1	4.3	10.1	5.6

Net borrowing	1443.9	1599.4	1249.2	1073.0	1206.8	1586.0	1579.2	1327.6	993.8	1096.2	1271.8	1190.2	702.5	1127.4
Net borrowing (n.s.a.)	1443.9	1599.4	1249.2	1073.0	342.7	434.5	471.8	175.9	289.4	312.1	395.0	141.6	216.6	319.9
Unified deficit (n.s.a.)	1471.3	1307.3	1231.4	1053.0	294.6	396.7	448.8	186.1	274.4	322.1	405.0	116.6	201.6	329.9
Depository institutions														
Funds supplied	-639.9	-178.7	166.2	241.9	261.9	79.5	127.5	167.0	177.8	192.4	232.4	254.1	262.1	219.1

Note: Data after 2010:Q2 are staff projections.

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

Foreign Real GDP and Consumer Prices: Selected Countries

(Quarterly percent changes at an annual rate)

Measure and country	Projected											
	2010				2011				2012			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Real GDP¹												
Total foreign	4.9	5.9	2.5	2.9	3.0	3.1	3.2	3.3	3.4	3.4	3.5	3.6
<i>Previous Tealbook</i>	4.8	4.7	3.1	3.2	3.3	3.3	3.4	3.5	...	...	...	...
Advanced foreign economies	3.7	3.0	2.2	2.0	1.9	2.0	2.1	2.2	2.2	2.4	2.5	2.6
Canada	5.8	2.0	2.4	2.5	2.5	2.6	2.7	2.7	2.7	2.7	2.7	2.7
Japan	5.0	1.5	1.5	1.6	1.6	1.6	1.7	1.7	1.7	1.8	1.8	1.9
United Kingdom	1.3	4.9	1.8	1.2	.8	1.9	2.3	2.3	2.3	2.3	2.4	2.4
Euro area	1.3	3.9	2.0	1.5	1.3	1.3	1.4	1.5	1.6	2.0	2.3	2.6
Germany	1.9	9.0	3.0	2.0	1.8	1.8	1.9	2.0	2.0	2.2	2.5	2.8
Emerging market economies	6.4	9.7	3.0	4.0	4.4	4.5	4.6	4.7	4.8	4.8	4.9	4.9
Asia	13.7	8.4	3.8	5.0	5.5	5.6	5.7	5.7	5.8	5.8	5.9	5.9
Korea	8.8	5.8	4.3	3.8	3.8	3.9	4.0	4.1	4.1	4.2	4.4	4.5
China	9.9	6.9	7.8	8.1	8.3	8.3	8.4	8.4	8.6	8.6	8.7	8.7
Latin America	-.1	11.9	2.0	2.9	3.3	3.4	3.5	3.6	3.7	3.8	3.9	3.9
Mexico	-2.5	13.5	1.0	2.5	3.3	3.4	3.5	3.7	3.8	3.8	3.9	3.9
Brazil	11.3	5.1	3.5	3.5	3.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Consumer prices²												
Total foreign	3.4	1.3	1.9	2.1	2.2	2.2	2.1	2.2	2.2	2.2	2.3	2.3
<i>Previous Tealbook</i>	3.4	1.3	1.8	2.2	2.3	2.2	2.1	2.2	...	...	...	...
Advanced foreign economies	2.1	.1	.7	1.0	1.3	1.3	1.1	1.2	1.3	1.4	1.4	1.4
Canada	2.3	-.9	1.6	1.2	1.5	2.2	2.0	2.1	2.1	2.2	2.2	2.1
Japan	.7	-.9	-1.2	-1.2	-1.0	-.8	-.8	-.7	-.6	-.6	-.5	-.4
United Kingdom	5.6	2.3	.7	1.7	5.0	1.4	1.4	1.5	1.6	1.7	1.7	1.8
Euro Area	1.8	1.4	.8	1.7	1.7	1.5	1.1	1.3	1.4	1.5	1.6	1.7
Germany	1.4	.8	.8	1.5	1.5	1.4	1.1	1.1	1.3	1.4	1.5	1.6
Emerging market economies	4.7	2.4	3.1	3.2	3.0	3.0	3.1	3.1	3.1	3.1	3.1	3.1
Asia	3.6	2.0	3.3	2.9	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7
Korea	3.3	1.9	2.1	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3
China	3.0	2.6	3.8	2.8	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5

Latin America	7.8	3.6	2.4	3.8	4.0	4.0	4.0	4.0	4.1	4.1	4.1	4.1
Mexico	7.9	2.7	2.3	3.5	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Brazil	7.4	5.9	1.0	3.9	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4

1. Foreign GDP aggregates calculated using shares of U.S. exports. [Return to table](#)

2. Foreign CPI aggregates calculated using shares of U.S. non-oil imports. [Return to table](#)

Foreign Real GDP and Consumer Prices: Selected Countries

(Percent change, Q4 to Q4)

Measure and country	2004	2005	2006	2007	2008	2009	Projected		
							2010	2011	2012
Real GDP¹									
Total foreign	3.9	4.1	4.0	4.2	-8	.4	4.1	3.2	3.5
<i>Previous Tealbook</i>	3.9	4.1	3.9	4.2	-8	.4	4.0	3.4	...
Advanced foreign economies	2.6	2.8	2.5	2.4	-1.7	-1.4	2.7	2.1	2.4
Canada	3.7	3.1	1.9	2.5	-9	-1.1	3.2	2.6	2.7
Japan	1.1	2.9	2.1	1.8	-4.3	-1.4	2.4	1.7	1.8
United Kingdom	2.4	2.4	2.7	2.4	-2.7	-2.9	2.3	1.9	2.4
Euro area	1.7	2.1	3.6	2.2	-2.1	-2.0	2.2	1.4	2.1
Germany	.2	1.6	4.5	1.8	-2.0	-2.0	3.9	1.9	2.4
Emerging market economies	5.6	5.9	5.9	6.5	.4	2.8	5.7	4.5	4.8
Asia	6.0	7.8	7.2	8.4	.9	7.1	7.7	5.7	5.9
Korea	2.7	5.2	4.6	5.7	-3.2	6.1	5.7	3.9	4.3
China	10.0	10.5	11.0	12.6	7.2	11.5	8.2	8.3	8.6
Latin America	5.1	3.9	4.6	4.7	-4	-9	4.1	3.4	3.8
Mexico	4.6	3.5	3.9	3.9	-1.1	-2.3	3.4	3.5	3.8
Brazil	5.1	3.5	4.8	6.8	1.0	4.4	5.8	3.9	4.0
Consumer prices²									
Total foreign	2.8	2.3	2.1	3.7	3.4	1.2	2.2	2.2	2.2
<i>Previous Tealbook</i>	2.8	2.3	2.1	3.7	3.4	1.2	2.2	2.2	...
Advanced foreign economies	1.8	1.6	1.4	2.2	2.0	.2	1.0	1.3	1.4
Canada	2.3	2.3	1.4	2.5	1.9	.8	1.0	1.9	2.1
Japan	.5	-1.0	.3	.6	1.0	-2.0	-.7	-.8	-.5
United Kingdom	1.4	2.1	2.7	2.1	3.9	2.1	2.6	2.3	1.7
Euro Area	2.3	2.3	1.8	2.9	2.3	.4	1.4	1.4	1.5
Germany	2.1	2.2	1.3	3.1	1.7	.3	1.1	1.3	1.4
Emerging market economies	3.9	3.0	2.9	5.1	4.6	2.2	3.4	3.0	3.1
Asia	3.1	2.6	2.4	5.5	3.7	1.3	3.0	2.6	2.7
Korea	3.4	2.5	2.1	3.4	4.5	2.4	2.4	2.3	2.3
China	3.2	1.4	2.1	6.6	2.6	.6	3.0	2.5	2.5
Latin America	5.6	3.7	4.1	4.2	6.6	4.0	4.4	4.0	4.1
Mexico	5.3	3.1	4.1	3.8	6.2	4.0	4.1	3.7	3.7
Brazil	7.2	6.1	3.2	4.3	6.2	4.2	4.5	4.4	4.4

1. Foreign GDP aggregates calculated using shares of U.S. exports. [Return to table](#)

2. Foreign CPI aggregates calculated using shares of U.S. non-oil imports. [Return to table](#)

U.S. Current Account

Quarterly Data

	Projected											
	2010				2011				2012			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	<i>Billions of dollars, s.a.a.r.</i>											
U.S. current account balance	-432.8	-502.9	-458.2	-435.8	-454.6	-446.7	-459.1	-462.4	-464.6	-471.2	-482.1	-470.6
<i>Previous Tealbook</i>	-436.0	-499.8	-469.3	-452.7	-465.8	-453.7	-461.4	-448.3	...	...	...	...
Current account as percent of GDP	-3.0	-3.4	-3.1	-2.9	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-2.9
<i>Previous Tealbook</i>	-3.0	-3.4	-3.2	-3.0	-3.1	-3.0	-3.0	-2.9	...	...	...	...
Net goods & services	-457.8	-526.4	-494.5	-486.3	-487.6	-489.8	-497.7	-503.1	-505.6	-511.3	-526.4	-521.7
Investment income, net	175.0	162.6	159.8	169.6	165.1	160.0	158.1	155.7	156.1	155.2	159.5	166.2
Direct, net	281.5	273.5	268.4	276.9	276.9	277.7	281.2	284.0	289.4	295.0	305.5	317.6
Portfolio, net	-106.5	-110.9	-108.6	-107.3	-111.9	-117.7	-123.1	-128.3	-133.3	-139.9	-146.1	-151.5
Other income and transfers, net	-150.0	-139.1	-123.5	-119.1	-132.0	-116.9	-119.5	-115.1	-115.1	-115.1	-115.1	-115.1

Annual Data

	2004	2005	2006	2007	2008	2009	Projected		
							2010	2011	2012
		<i>Billions of dollars</i>							
U.S. current account balance	-630.5	-747.6	-802.6	-718.1	-668.9	-378.4	-457.4	-455.7	-472.1
<i>Previous Tealbook</i>	-630.5	-747.6	-802.6	-718.1	-668.9	-378.4	-464.5	-457.3	...
Current account as percent of GDP	-5.3	-5.9	-6.0	-5.1	-4.7	-2.7	-3.1	-3.0	-3.0
<i>Previous Tealbook</i>	-5.3	-5.9	-6.0	-5.1	-4.7	-2.7	-3.2	-3.0	...
Net goods & services	-609.3	-714.2	-759.2	-702.1	-698.8	-374.9	-491.2	-494.5	-516.2
Investment income, net	73.4	78.8	54.7	106.6	159.3	129.2	166.7	159.7	159.2
Direct, net	150.9	173.2	174.0	241.6	287.7	252.1	275.1	280.0	301.9
Portfolio, net	-77.5	-94.4	-119.4	-134.9	-128.4	-122.8	-108.3	-120.2	-142.7
Other income and transfers, net	-94.5	-112.2	-98.1	-122.6	-129.3	-132.8	-132.9	-120.9	-115.1

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Monetary Policy Strategies

Equilibrium Real Federal Funds Rate

Figure: Short-Run Estimates with Confidence Intervals

Line chart, by percent, 1990 to 2010. 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 by 1992, generally increases to about 4.5 by 2001, generally decreases to about -1 by 2004, generally increases to about 3 by 2007, generally decreases to about -1.5 by 2008 and remains relatively stable here until 2010: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 by 2007, decreases to about -4.3 by 2009, generally increases to about -1.7 by 2010:Q1 and generally decreases to about -2.4 by 2010: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 starts at between about 1 and 4, decreases to between about -1.3 and 2 by 1991, generally increases to between about 2 and 4.5 by 2000, generally decreases to between about -0.5 and 1.5 by 2003, increases to between about 0.5 and 2.25 by 2006, decreases to between about -7.5 and -1 by 2009 and then increases to about -3 and 0.5 by 2010.

Short-Run and Medium-Run Measures

	Current Tealbook	Previous Tealbook
Short-Run Measures		
Single-equation model	-2.4	-2.7
Small structural model	-2.8	-3.1
EDO model	0.6	1.1
FRB/US model	-3.3	-2.5
Confidence intervals for four model-based estimates		
70 percent confidence interval	-4.0 to 0.4	
90 percent confidence interval	-5.0 to 1.8	
Tealbook-consistent measures		
EDO model	-3.7	-5.4
FRB/US model	-2.4	-2.3
Medium-Run Measures		
Single-equation model	1.1	1.0
Small structural model	1.2	1.3
Confidence intervals for two model-based estimates		
70 percent confidence interval	0.2 to 2.0	
90 percent confidence interval	-0.4 to 2.6	
TIPS-based factor model	2.0	2.0
Memo		
Actual real federal funds rate	-1.2	-1.4

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 there is no shift in the staff outlook 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", "Current Tealbook: Unconstrained", and "Previous Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2010:Q2 at about 0.25 and remains relatively constant here until 2013:Q4. It then generally increases to about 3 by 2015:Q4. Current Tealbook: Unconstrained begins in 2010:Q2 at about 0.25 and decreases to about -4 by 2011:Q4. It then increases to about 4.1 by 2015:Q4. Previous Tealbook: Unconstrained begins in 2010:Q2 at about 0.25 and decreases to about -4.75 by 2011:Q3. It then increases to about 4.75 by 2015:Q4.

Figure: Real Federal Funds Rate

Line chart, by percent, 2010 to 2015. There are three series, "Current Tealbook: Constrained", "Current Tealbook: Unconstrained", and "Previous Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2010:Q2 at about -1.3 and generally increases to about -0.8 by 2011:Q4. It then generally decreases to about -1.2 by 2014:Q2 and then generally increases to about 1.1 by 2015:Q4. Current Tealbook: Unconstrained begins in 2010:Q2 at about -1.3 and decreases to about -5.3 by 2011:Q4. It then increases to about 2 by 2015:Q4. Previous Tealbook: Unconstrained begins in 2010:Q2 at about -1.3 and decreases to about -6 by 2011:Q3. It then increases to about 2.5 by 2015:Q4.

Figure: Civilian Unemployment Rate

Line chart, by percent, 2010 to 2015. There are three series, "Current Tealbook: Constrained", "Current Tealbook: Unconstrained", and "Previous Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2010:Q2 at about 9.7 and generally decreases to about 4.9 by 2015:Q4. Current Tealbook: Unconstrained begins in 2010:Q2 at about 9.7 and generally decreases to about 5.1 by 2014:Q2. It then increases to about 5.6 by 2015:Q4. Previous Tealbook: Unconstrained begins in 2010:Q2 at about 9.7 and decreases to about 4.4 by 2014:Q2. It then increases to about 5 by 2015:Q4.

Figure: Core PCE Inflation

Line chart, by percent, 2010 to 2015. Data are four-quarter averages. There are three series, "Current Tealbook: Constrained", "Current Tealbook: Unconstrained", and "Previous Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2010:Q2 at about 1.47 and decreases to about 1.02 by 2011:Q4. It then generally increases to about 1.97 by 2015:Q4. Current Tealbook: Unconstrained begins in 2010:Q2 at about 1.47 and decreases to about 1.25 by 2010:Q4. It then increases to about 1.4 by 2011:Q4 and decreases to about 1.3 by 2011:Q4. By 2015:Q4 it has increased to about 2.1. Previous Tealbook: Unconstrained begins in 2010:Q2 at about 1.5 and generally decreases to about 1.32 by 2010:Q4. It then generally increases to about 2.18 by 2015:Q4.

The Policy Outlook in an Uncertain Environment

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

Line chart, by percent, 2010 to 2014. There are five series, "Current Tealbook", "Previous Tealbook", "Staff assumption", "70 percent confidence interval" and "90 percent confidence interval". The Current Tealbook begins at about 0.1 in 2010:Q2 and decreases to about 0 by 2010:Q3. It remains at 0 until 2013:Q4. It then increases to about 3.4 by 2014:Q4. The Previous Tealbook begins at about 0.1 in 2010:Q2 and decreases to about 0 by 2010:Q3. It remains constant at 0 until 2012:Q4. It then increases to about 3.8 by 2014:Q4. The staff assumption begins at about 0.1 in 2010:Q2 and decreases to about 0 by 2010:Q3. It remains constant at 0 until 2012:Q3. It then generally increases to about 2.98 by 2014:Q4. The other 2 series closely track the Current Tealbook series throughout the chart, with the 70 percent confidence interval being about 2% both lesser and greater than the Current Tealbook series, and the 90 Percent confidence interval being about 3% both lesser and greater than the Current Tealbook series at any given point.

Figure: Information from Financial Markets

Line chart, by percent, 2010 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 in 2010:Q3 and then increases to about 1.9 by 2014:Q4. The Previous Tealbook begins at about 0 in 2010:Q3 and then increases to about 2.2 by 2014:Q4. The other 2 series closely track the Current Tealbook series throughout the chart. The 70 percent confidence interval begins in 2010:Q3 being about 0.1% both lesser and greater than the Current Tealbook series. It then generally increases to about 1% both lesser and greater than the Current Tealbook series by the end of 2014. The 90 percent confidence interval begins in 2010:Q3 being about 0.2% both lesser and greater than the Current Tealbook series. It then generally increases to about 1.5% both lesser and greater than the Current Bluebook series by the end of 2014.

Note: In both panels, the dark and light shading represent the 70 and 90 percent confidence intervals respectively. Financial market quotes are as of September 15.

Near-Term Prescriptions of Simple Policy Rules

	Constrained Policy		Unconstrained Policy	
	2010Q4	2011Q1	2010Q4	2011Q1
Taylor (1993) rule	0.13	0.13	-0.92	-1.00
<i>Previous Tealbook</i>	0.13	0.13	-1.23	-1.28
Taylor (1999) rule	0.13	0.13	-4.51	-4.59
<i>Previous Tealbook</i>	0.13	0.13	-5.04	-5.03

Estimated outcome-based rule	0.13	0.13	-0.70	-1.64
<i>Previous Tealbook</i>	<i>0.13</i>	<i>0.13</i>	<i>-1.62</i>	<i>-2.49</i>
Estimated forecast-based rule	0.13	0.13	-0.71	-1.60
<i>Previous Tealbook</i>	<i>0.13</i>	<i>0.13</i>	<i>-1.72</i>	<i>-2.50</i>
First-difference rule	0.13	0.13	-0.19	-0.34
<i>Previous Tealbook</i>	<i>0.13</i>	<i>0.13</i>	<i>-0.38</i>	<i>-0.40</i>

Memo

	2010Q4	2011Q1
Staff assumption	0.13	0.13
Fed funds futures	0.16	0.14
Median expectation of primary dealers	0.13	0.13
Blue Chip forecast (September 1, 2010)	0.20	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](#)

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September 2010 Tealbook Book B Tables and Charts[†]

Monetary Policy Alternatives

Table 1: Overview of Alternatives for the September 21 FOMC Statement

Key Components	August Statement	September Alternatives			
		A1	A2	B	C
Economic Activity					
<i>Recent Developments</i>	pace of recovery has slowed in recent months	pace of recovery has slowed in recent months			economic recovery is proceeding
<i>Labor Market</i>	pace of recovery in employment has slowed; high unemployment; employers remain reluctant to add to payrolls	pace of recovery in employment has slowed; high unemployment; employers remain reluctant to add to payrolls			economic recovery is proceeding
<i>Outlook</i>	gradual return to higher resource utilization w/ price stability; pace of recovery likely more modest in near term than had been anticipated	gradual return to higher resource utilization, although...	gradual return to higher resource utilization w/ price stability, although...		although pace of recovery likely modest in near term, gradual return to higher resource utilization w/ price stability
		pace of recovery likely modest in near term			
Financial Conditions					
<i>Recent Developments</i>	bank lending has continued to contract	bank lending has continued to contract		bank lending has continued to contract, but at a reduced rate in recent months	
Inflation					
<i>Recent Developments</i>	trended lower; and...	trended lower; underlying inflation running below 2 percent PCE inflation	trended below mandate-consistent levels	trended somewhat below mandate-consistent levels; and...	stayed subdued; and...
	substantial slack; stable inflation expectations	n.a.		substantial slack; stable inflation expectations	stable inflation expectations
<i>Outlook</i>	subdued for some time	n.a.		subdued for some time before rising toward mandate-consistent levels	gradual return to higher resource utilization in a context of price stability
Target Federal Funds Rate					
<i>Intermeeting Period</i>	0 to ¼ percent	0 to ¼ percent			
<i>Forward Guidance</i>	exceptionally low levels for an extended period	exceptionally low levels for an extended period			low levels for some time
SOMA Portfolio Policy					
<i>Approach</i>	<i>keep constant:</i> reinvest principal payments in Treasuries	<i>increase:</i> purchase \$500 billion of Treasuries over next six months; maintain existing reinvestment policy		<i>keep constant:</i> maintain existing reinvestment policy	<i>keep constant:</i> for the time being, maintain existing reinvestment policy
Future Policy Action					
<i>Approach</i>	employ tools as necessary	act as needed	act as needed | each time it meets, determine needed adjustment, up or down	prepared to provide additional accommodation as needed	employ tools as necessary

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 four series, Alt A1 and Alt A2, Baseline (Alt B), Alt C, and Baseline (August Tealbook). Alt A1 and Alt A2 begins in 2006 at about 800 and generally increases slowly to about 950 by August 2008. It then steeply inclines to about 2250 by November 2008 and then generally decreases to about 1800 by December 2008. By 2011 it has generally increased to about 2750 and by July 2016 it has generally decreased to about 1490. It then increases to about 1800 by the end of 2020. Baseline (Alt B) begins in 2006 at about 800 and generally increases slowly to about 950 by August 2008. It then steeply inclines to about 2250 by November 2008 and then generally decreases to about 1800 by December 2008. By 2010 it has generally increased to about 2300 and by December 2015 it has generally decreased to about 1450. It then increases to about 1800 by the end of 2020. Alt C begins in 2006 at about 800 and generally increases slowly to about 950 by August 2008. It then steeply inclines to about 2250 by November 2008 and then generally decreases to about 1800 by December 2008. By 2010 it has generally increased to about 2300 and by August 2015 it has generally decreased to about 1400. It then increases to about 1800 by the end of 2020. Baseline (August Tealbook) begins in 2006 at about 800 and generally increases slowly to about 950 by August 2008. It then steeply inclines to about 2250 by November 2008 and then generally decreases to about 1800 by December 2008. By 2010 it has generally increased to about 2300 and by January 2015 it has generally decreased to about 1350. It then increases to about 1800 by the end of 2020.

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

Growth Rates for the Monetary Base

Date	Baseline	Alternatives A1 and A2	Alternative C
	Percent, annual rate		
	Monthly		
Jan-10	-17.8	-17.8	-17.8
Feb-10	72.2	72.2	72.2
Mar-10	-19.7	-19.7	-19.7
Apr-10	-37.6	-37.6	-37.6
May-10	-2.0	-2.0	-2.0
Jun-10	-5.8	-5.8	-5.8
Jul-10	-2.2	-2.2	-2.2
Aug-10	-2.3	-2.3	-2.3
Sep-10	1.5	23.0	1.5
Oct-10	13.3	55.3	13.3
Nov-10	0.8	41.1	0.8
Dec-10	-16.5	23.9	-16.5
	Quarterly		
2010 Q1	14.0	14.0	14.0
2010 Q2	-10.4	-10.4	-10.4
2010 Q3	-2.6	-0.2	-2.6
2010 Q4	2.8	36.0	2.8
	Annual - Q4 to Q4		
2009	41.5	41.5	41.5
2010	0.9	9.8	0.9
2011	-0.4	14.3	-4.8
2012	-3.5	-2.8	-11.6
2013	-12.9	-12.8	-12.9
2014	-16.7	-18.0	-15.6
2015	-8.2	-21.1	3.5

Note: Not seasonally adjusted.

Growth Rates for M2

(Percent, seasonally adjusted annual rate)

Tealbook Forecast *	
Monthly Growth Rates	
Jan-10	-7.9
Feb-10	8.7
Mar-10	-3.4
Apr-10	-3.9
May-10	11.6
Jun-10	4.4
Jul-10	0.0
Aug-10	6.6
Sep-10	4.8
Oct-10	1.1
Nov-10	1.1
Dec-10	1.2
Quarterly Growth Rates	
2010 Q1	0.0
2010 Q2	2.0
2010 Q3	4.2
2010 Q4	2.5
Annual Growth Rates	
2009	5.1
2010	2.2
2011	1.3
2012	4.5

* This forecast is consistent with nominal GDP and interest rates in the Tealbook forecast. Actual data through August 2010; projections thereafter. [Return to table](#)

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

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September 2010 Tealbook Book B Tables and Charts

Explanatory Notes

A. Measures of the Equilibrium Real Rate

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

Proxy used for expected inflation	Actual real federal funds rate (current value)	Tealbook-consistent FRB/US-based measure of the equilibrium real funds rate (current value)	Average actual real funds rate (twelve-quarter average)
Lagged core inflation	-1.2	-2.4	-0.6
Lagged headline inflation	-1.3	-2.5	-0.7
Projected headline inflation	-1.1	-2.5	-0.7

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

Federal Reserve Balance Sheet End-of-Year Projections -- Baseline Scenario (Alternative B)

	End-of-Year						
	Aug 01, 2010	2010	2012	2014	2016	2018	2020
	\$ Billions						
Total assets	2,308	2,292	2,172	1,653	1,471	1,631	1,820
Selected assets:							
Liquidity programs for financial firms	0	0	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0	0
Central bank liquidity swaps	0	0	0	0	0	0	0
Lending through other credit facilities	37	37	11	2	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	37	37	11	2	0	0	0
Support for specific institutions	114	100	49	9	2	0	0
Credit extended to AIG	46	47	20	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III	68	53	29	9	2	0	0

Securities held outright	2,046	2,054	2,024	1,565	1,399	1,564	1,757
U.S. Treasury securities	786	906	1,311	1,124	1,228	1,564	1,757
Agency debt securities	157	147	77	39	16	0	0
Agency mortgage-backed securities	1,103	1,000	636	402	154	0	0
Special drawing rights certificate account	5	5	7	7	7	7	7
Net portfolio holdings of TALF LLC	1	1	1	1	0	0	0
Total other assets	111	100	87	76	70	67	64
Total liabilities	2,250	2,233	2,094	1,550	1,334	1,450	1,582
Selected liabilities:							
Federal Reserve notes in circulation	908	917	978	1,109	1,226	1,342	1,474
Reverse repurchase agreements with foreign official and international accounts	60	60	59	59	59	59	59
Deposits with Federal Reserve Banks	1,264	1,237	1,041	367	35	35	35
Reserve balances held by depository institutions	984	964	831	157	25	25	25
U.S. Treasury, general account	76	70	5	5	5	5	5
U.S. Treasury, supplementary financing account	200	200	200	200	0	0	0
Other balances ¹	2	2	5	5	5	5	5
Total capital	57	59	78	103	136	180	239

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

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

1. The staff forecast for end-of-month U.S. Treasury operating cash balances includes forecasts of both the TGA and balances associated with the U.S. Treasury's Tax and Loan program. Because balances associated with the Tax and Loan program are \$2 billion, for the time being, this forecast is a good proxy for the level of TGA balances. [Return to table](#)

Federal Reserve Balance Sheet End-of-Year Projections -- Alternatives A1 and A2

	End-of-Year						
	Aug 01, 2010	2010	2012	2014	2016	2018	2020
	\$ Billions						
Total assets	2,308	2,578	2,672	1,978	1,471	1,631	1,820
Selected assets:							
Liquidity programs for financial firms	0	0	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0	0
Central bank liquidity swaps	0	0	0	0	0	0	0
Lending through other credit facilities	37	37	11	2	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	37	37	11	2	0	0	0
Support for specific institutions	114	100	49	9	2	0	0
Credit extended to AIG	46	47	20	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III	68	53	29	9	2	0	0
Securities held outright	2,046	2,340	2,524	1,890	1,399	1,564	1,757
U.S. Treasury securities	786	1,192	1,811	1,449	1,228	1,564	1,757
Agency debt securities	157	147	77	39	16	0	0
Agency mortgage-backed securities	1,103	1,000	636	402	154	0	0
Special drawing rights certificate account	5	5	7	7	7	7	7
Net portfolio holdings of TALF LLC	1	1	1	1	0	0	0
Total other assets	111	100	87	76	70	67	64
Total liabilities	2,250	2,519	2,594	1,875	1,334	1,450	1,582
Selected liabilities:							
Federal Reserve notes in circulation	908	917	978	1,109	1,226	1,342	1,474
Reverse repurchase agreements with foreign official							

and international accounts	60	60	59	59	59	59	59
Deposits with Federal Reserve Banks	1,264	1,522	1,541	692	35	35	35
Reserve balances held by depository institutions	984	1,250	1,331	482	25	25	25
U.S. Treasury, general account	76	70	5	5	5	5	5
U.S. Treasury, supplementary financing account	200	200	200	200	0	0	0
Other balances ¹	2	2	5	5	5	5	5
Total capital	57	59	78	103	136	180	239

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

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

1. The staff forecast for end-of-month U.S. Treasury operating cash balances includes forecasts of both the TGA and balances associated with the U.S. Treasury's Tax and Loan program. Because balances associated with the Tax and Loan program are \$2 billion, for the time being, this forecast is a good proxy for the level of TGA balances. [Return to table](#)

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

	End-of-Year						
	Aug 01, 2010	2010	2012	2014	2016	2018	2020
	\$ Billions						
Total assets	2,308	2,292	1,931	1,496	1,471	1,631	1,820
Selected assets:							
Liquidity programs for financial firms	0	0	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0	0
Central bank liquidity swaps	0	0	0	0	0	0	0
Lending through other credit facilities	37	37	11	2	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	37	37	11	2	0	0	0
Support for specific institutions	114	100	49	9	2	0	0
Credit extended to AIG	46	47	20	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III	68	53	29	9	2	0	0
Securities held outright	2,046	2,054	1,783	1,408	1,399	1,564	1,757
U.S. Treasury securities	786	906	1,070	968	1,228	1,564	1,757
Agency debt securities	157	147	77	39	16	0	0
Agency mortgage-backed securities	1,103	1,000	636	402	154	0	0
Special drawing rights certificate account	5	5	7	7	7	7	7
Net portfolio holdings of TALF LLC	1	1	1	1	0	0	0
Total other assets	111	100	87	76	70	67	64
Total liabilities	2,250	2,233	1,853	1,393	1,334	1,450	1,582
Selected liabilities:							
Federal Reserve notes in circulation	908	917	978	1,109	1,226	1,342	1,474
Reverse repurchase agreements with foreign official and international accounts	60	60	59	59	59	59	59
Deposits with Federal Reserve Banks	1,264	1,237	800	211	35	35	35
Reserve balances held by depository institutions	984	964	590	25	25	25	25
U.S. Treasury, general account	76	70	5	5	5	5	5
U.S. Treasury, supplementary financing account	200	200	200	176	0	0	0
Other balances ¹	2	2	5	5	5	5	5
Total capital	57	59	78	103	136	180	239

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

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

1. The staff forecast for end-of-month U.S. Treasury operating cash balances includes forecasts of both the TGA and balances associated with the U.S. Treasury's Tax and Loan program. Because balances associated with the Tax and Loan program are \$2 billion, for the time being, this forecast is a good proxy for the level of TGA balances. [Return to table](#)

