

Board of Governors of the Federal Reserve System

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

Accessible Material

August 2012 Tealbook Tables and Charts

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August 2012 Tealbook A Tables and Charts[†]

Domestic Economic Developments and Outlook

Key Background Factors underlying the Baseline Staff Projection

Figure: Federal Funds Rate

Line chart, by percent, 2007 to 2014. Data are quarterly averages. There are three series, Current Tealbook, Previous Tealbook, Market expected rate. Current Tealbook begins in 2007:Q1 at about 5.25 and generally decreases to about 0.13 by 2009:Q1. From 2009:Q1 to 2014:Q3 it remains constant at about 0.13 until 2014:Q4. Previous Tealbook follows Current Tealbook almost exactly until 2014:Q4 when it moves to 0.50. It remains constant at 0.13 until 2013:Q4. Market expected rate begins in 2012:Q1 at about 0.13 and remains constant.

Figure: Long-Term Interest Rates

Line chart, by percent, 2007 to 2014. Data are quarterly averages. There are three series, "Current Tealbook: BBB corporate yield", "Current Tealbook: Conforming mortgage rate", and "Current Tealbook: 10-year Treasury yield". Current Tealbook: BBB corporate yield begins in 2007 at about 6.1 and generally increases to about 9.5 by late 2008. It then generally decreases to about 4.1 by mid-2012 and then generally increases to about 5.4 by late 2014. Current Tealbook: 10-year Treasury yield begins in 2007 at about 4.8 and fluctuates but generally decreases to about 1.3 by early 2012. It then generally increases to about 3.5 by early 2014.

Figure: Equity Prices

Line chart, by ratio scale where 2007:Q1 = 100, 2007 to 2014. Data are quarter-end. There is one series, Current Tealbook: Dow Jones U.S. Total Stock Market Index. The series begins in early 2007 at about 100 and generally increases to about 107 by mid-2007. It then decreases to about 56 by early 2009 and then increases to 120 by 2014.

Figure: House Prices

Line chart, by ratio scale, 2007:Q1 = 100, 2007 to 2014. Data are quarterly. There is one series, CoreLogic index. The series begins in 2007 at about 100 and generally decreases to about 72.5 by early 2009. It then generally increases to about 75 by early 2010 and then generally decreases to about 68 by late 2011. It increases to about 75 by 2014.

Figure: Crude Oil Prices

Line chart, by dollars per barrel, 2007 to 2014. Data are quarterly averages. There are two series, West Texas Intermediate and Imported Oil. West Texas Intermediate begins in early 2007 at about 59 and generally increases to about 125 by 2008. By 2009 it decreased to about 42 and by early 2011 it has generally increased to about 102. It then decreased to 81 by late 2014. Imported Oil begins in early 2007 at about 57, increases to about 118 by mid-2008. By 2009, it decreased to 41; however, it began an increase to about 112 by early 2012. By late 2014 it decreased to about 81.

Figure: Broad Real Dollar

Line chart, by scale where 2007:Q1 = 100, 2007 to 2014. Data are quarterly averages. There is one series begins in 2007 at about 100. In early 2008, it decreases to 89. It then increases to about 101 by early 2009. It began a decline in 2009 to 92.5; by 2014: Q4 it was at 85.

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

Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

Measure	2012:Q2		2012:Q3		2012:Q4	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
Real GDP	1.5	1.0	1.9	1.5	1.9	1.8
Private domestic final purchases	2.3	1.8	2.7	2.2	2.9	2.5
Personal consumption expenditures	1.9	1.1	2.5	2.1	2.7	2.4
Residential investment	11.5	8.9	8.3	12.3	6.8	3.3
Business fixed investment	2.5	5.1	2.8	.6	3.3	3.1
Government purchases	-2.0	-3.0	-1.9	-1.4	-1.2	-1.4
<i>Contributions to change in real GDP</i>						
Inventory investment ¹	.2	.0	.5	.3	.1	.3
Net exports ¹	-.3	.0	-.4	-.4	-.3	-.4
Unemployment Rate²	8.2	8.2	8.2	8.3	8.2	8.3
PCE Chain Price Index	.6	.8	.1	.8	1.5	1.5
Ex. food and energy	1.7	1.8	1.6	1.6	1.5	1.5

1. Percentage points. [Return to table](#)

2. Percent. [Return to table](#)

Recent Nonfinancial Developments (1)

Figure: Real GDP and GDI

Line chart, by 4-quarter percent change, 2003 to 2012. There is a horizontal line at zero. There are two series, Gross domestic product and Gross domestic income. Gross domestic product begins in 2004 at about 1.6 and increases to about 4.1 by 2004. It then generally decreases to about 1 by early 2007 and then increases to about 2.4 by mid-2007. By 2009 it has generally decreased to about -5.3 and by 2010 it has generally increased to about 3.5. It then decreases to about 1.5 by 2011:Q3. Gross domestic income begins in 2003 at about 1.1 and increases to about 4.1 by early 2004. From early 2004 to early 2006 it fluctuates between about 3.2 and 4.2. It then decreases to about -0.5 by late 2007 and then increases to about 0.7 by early 2008. By 2009 it has decreased to about -5.5 and by 2010 it has increased to about 4.1. It then decreases to about 1 by 2011:Q3.

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

Figure: Change in Private Payroll Employment

Line chart, by thousands of employees, 2003 to 2012. There is a horizontal line at zero. There are two series, Change in Private Payroll Employment and 3-month moving average. Change in Private Payroll Employment begins in early 2003 at about 40 and generally decreases to about -200 by mid-2003. It then generally increases to about 320 by early 2004. From early 2004 to early 2007 it fluctuates between about -10 and 350. By early 2009 it significantly decreased to about -900 and by November 2011 it has generally increased to about 130. 3-month moving average begins in early 2003 at about -40 and generally decreases to about -130 by mid-2003. By early 2006 it has generally increased to about 300 and by early 2009 it has generally decreased to about -800. It then generally increases to about 170 by November 2011.

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

Figure: Unemployment Rate

Line chart, by percent, 2003 to 2012. The series begins in early 2003 at about 5.9 and generally increases to about 6.2 by mid-2003. It then decreases to about 4.1. By 2009 it increases to about 10. By November 2011 it decreased to 8.1.

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

Figure: Manufacturing IP excluding Motor Vehicles and Parts

Line chart, by 3-month percent change, annual rate, 2004 to 2012. There is a horizontal line at zero. The series begins in early 2003 at about 0 and then generally increases to about 5 within a month or two. It then decreases to about -2 by mid-2003. By early 2005 it has generally increased to about 9 and by mid-2005 it ally decreased to about -6. Between 2005 and 2007 it fluctuated. By early 2009, it decreased to -26 but increased to 14 by mid-2010. It fluctuated from mid-2010 to 2012, ending at 2 in mid-2012.

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

[Box:] Skilled Labor Shortages in the Manufacturing Sector

Figure: Selected Reasons for Operating at Less than Capacity

Line chart, by percent of respondents, 1998 to 2012. There are two series, "Insufficient orders" and "Insufficient supply of local labor force/skills." The insufficient orders series begins at about 75 in 1998 and remains constant until it generally increases to end at about 85 in 2012. The Insufficient supply of local labor force/skills series begins at about 20 in 1998. It remains consistent and until it generally decreases to end at about 10 in 2012.

Note: Grey areas indicate recessions as defined by the National Bureau of Economic Research: March 2001-November 2001, and December 2007-June 2009. The data are fourth-quarter values from 1997 to 2006 and quarterly from the first quarter of 2008.

Source: Census Bureau.

Insufficient Supply of Local Labor Force/Skills as a Reason for Operating at Less than Capacity

(Selected years)

	Percent of respondents
1999	20.4
2002	7.6
2006	14.5
2009	1.5
2012:Q1	7.6

Note: The data are fourth-quarter values except for 2012.

Source: Census Bureau.

Figure: Insufficient Supply of Local Labor Force/Skills (Selected industry detail)

Line chart, by percent of respondents, 1998 to 2012. There are three series, "Fabricated metals," "Machinery," and "Total manufacturing." The fabricated metals series begins at about 30 in 1998. It generally decreases to about 10 in 2003. It generally increases to 25 in 2006 and generally decreases to end at about 15 in 2012. The machinery series begins at about 35 in 1998 and generally decreases to about 5 in 2002. It generally increases to about 15 in 2008 and generally decreases to end at about 10 in 2012. The total manufacturing series begins at about 20 in 1998 generally decreases to about 5 in 2002. It generally increases to about 10 in 2006 and generally decreases to end at about 8 in 2012.

Note: Grey areas indicate recessions as defined by the National Bureau of Economic Research: March 2001-November 2001, and December 2007-June 2009. The data are fourth-quarter values from 1997 to 2006 and quarterly from the first quarter of 2008.

Source: Census Bureau.

Recent Nonfinancial Developments (2)

Figure: Production of Light Motor Vehicles

Line chart, by millions of units, annual rate, 2003 to 2012. The series begins in 2003 at about 12.8. It then fluctuates, decreases to about 3.5 by early 2009 and then fluctuates. It increased to about 10 by June 2012.

Source: Ward's Auto Infobank

Figure: Sales of Light Motor Vehicles

Line chart, by millions of units, annual rate, 2003 to 2011. The series begins in early 2003 at about 16.2. From early 2003 to early 2005 it fluctuates between about 15.2 and 18.1. It then generally increases to about 20.5 by mid-2005 and then decreases to about 14.5 by late 2005. By early 2006 it has generally increased to about 18 and by early 2009 it has generally decreased to about 9.0. It then generally increases to about 14 by mid-2009 and within a month or so decreases to about 8.95. By November 2011 it increased to about 13.5.

Source: Ward's Auto Infobank.

Figure: Real PCE Goods excluding Motor Vehicles

Line chart, by billions of chained (2005) dollars, 2003 to 2012. The series begins in 2003 at about 2400 and generally increases to about 2950 by 2007. It then generally decreases to about 2800 by 2009 and then generally increases to about 3100 by June 2012.

Note: Figures for April, May, and June 2012 are staff estimates based on available source data.

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

Figure: Single-Family Housing Starts

Line chart, thousands of units, annual rate, 2003 to 2012. There are two series, Starts and Adjusted permits. Starts begins in 2003 at about 1520 and generally decreases to about 1280 within a month or so. It then fluctuates, but generally increases to about 1800 by 2006 and then generally decreases to about 350 by early 2009. By early 2010 it increased to about 580 and by June 2012. Adjusted permits begins in 2003 at about 1460 and generally increases to about 1840 by 2005. It then decreases to about 350 by early 2009 and then generally increases to about 575 by mid-2012.

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

Source: U.S. Census Bureau.

Figure: Single-Family Home Sales

Line chart, by thousands of units, annual rate, 2003 to 2012. There are two series, New and Existing. New begins in 2003 at about 1000 and fluctuates, but generally increases to about 1450 by 2005. It decreases to about 300 by June 2012. Existing begins in 2003 at about 5450 and fluctuates, but generally increases to about 6400 by 2005. It then decreases from 2005 to 2008 to 300. It fluctuates between 2008 and 2012 and ends at about 500.

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

Figure: Nondefense Capital Goods Excluding Aircraft

Line chart, by billions of dollars, 2003 to 2012. There are two series, Orders and Shipments. Orders begins in 2003 at about 49; increasing to 70 by mid-2008. It decreases to 45 by early 2009; fluctuating between early 2009 and 2012, ending at 65 by mid-2012. Shipments begins in 2003 at about 49.3. It steadily increases to 70 in mid-2008 but then fluctuates from mid-2008 to 2012 ending at 64.

Source: U.S. Census Bureau.

Recent Nonfinancial Developments (3)

Figure: Nonresidential Construction Put in Place

Line chart, by billions of chained (2005) dollars, 2003 to 2012. The series begins in 2003 at about 226. It increases to about 420 by 2008. It decreases to 210 by 2011; ending at 300 by May 2012.

Source: U.S. Census Bureau.

Figure: Inventory Ratios ex. Motor Vehicles

Line chart, by months, 2003 to 2012. There are two series, Staff flow-of-goods system and Census book-value data. Staff flow-of-goods system begins in 2003 at about 1.3. By mid-2009, it increases 1.65 then declines to 1.5 by June 2012. Census book-value data begins in 2003 at about 1.3. It fluctuates and increases to 1.4 by early 2009. It then ends at 1.25 by May 2012.

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

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

Figure: Defense Spending

Line chart, by billions of chained (2005) dollars, 2003 to 201. There are two series, "Unified" in which the data are monthly and "NIPA" in which the data are quarterly. Unified begins in 2003 at about 460 and begins to fluctuate between 430 and 680 from early 2003 to early 2011. In early 2012 it decreases to 520 before ending at 590 in June 2012. NIPA begins in 2003 at about 450 and increases to 640 by 2010 before ending at 580 in 2012:Q1.

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

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

Figure: Exports and Non-Oil Imports

Line chart, by billions of dollars, 2003 to 2012. There are two series, Non-oil imports and Exports. Non-oil imports begins in early 2003 at about 110. It then gradually increases to about 180 by 2008. It decreases to 130 in early 2009 before ending at about 195 in mid- 2012. Exports begins in early 2003 at about 85. It then generally increases to about 165 by 2008 and decreases to about 122 by 2009. It increased to 181 by May 2012.

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

Figure: Total PCE Prices

Line chart, by percent, 2003 to 2012. There is a horizontal line at zero. There are two series, 12-month change and 3-month change. 12-month change begins in 2003 at about 2.5 and fluctuates from 2003 to 2008; it then declines to -0.5. It begins an increase in early 2010 and ends at 2 in June 2012. 3-month change begins in early 2003 at 2.0. From 2003 to 2008, it fluctuates between 4 and -9. It begins an increase in 2009, ending at -.5 in June 2012.

Note: 3-month changes are at an annual rate. April, May, and June 2012 are staff estimates.

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

Figure: PCE Prices ex. Food and Energy

Line chart, by percent, 2003 to 2012. There are two series, 12-month change and 3-month change. 12-month change begins in early 2003 at about 1.8, and begins fluctuating between early 2003 and mid-2008 from 1.5 to 2.5. It begins to decrease between from 2.5 to 1 in 2010 before fluctuating and ending at 1.9 in June of 2012.

Note: 3-month changes are at an annual rate. April, May, and June 2012 are staff estimates.

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

Projections of Real GDP and Related Components

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

Measure	2011	2012		2013	2014
		H1	H2		
Real GDP	1.6	1.4	1.6	2.1	3.2
Previous Tealbook	1.6	1.8	1.9	2.2	3.1
Final sales	1.5	1.4	1.3	1.8	3.0
Previous Tealbook	1.5	1.6	1.6	1.9	2.9
Personal consumption expenditures	1.6	1.8	2.3	2.2	3.3
Previous Tealbook	1.6	2.4	2.6	2.3	3.2
Residential investment	3.5	14.3	7.7	10.0	11.2
Previous Tealbook	3.5	15.5	7.5	10.2	10.8
Nonresidential structures	4.4	1.2	-6	.8	1.6
Previous Tealbook	4.4	.1	-1.7	.7	2.1
Equipment and software	9.6	5.2	2.7	4.6	6.7
Previous Tealbook	9.6	3.6	4.9	5.6	5.9
Federal purchases	-3.2	-5.2	-2.5	-4.1	-4.2
Previous Tealbook	-3.2	-4.3	-3.1	-4.1	-4.2

State and local purchases	-2.5	-2.3	-6	.4	1.3
Previous Tealbook	-2.5	-2.1	-5	.5	1.3
Exports	4.7	4.3	3.2	3.7	5.6
Previous Tealbook	4.7	4.0	3.4	3.7	5.5
Imports	3.6	3.0	4.8	4.1	4.7
Previous Tealbook	3.6	3.7	5.0	4.2	4.5
	Contributions to change in real GDP (percentage points)				
Inventory change	.1	.1	.3	.3	.2
Previous Tealbook	.1	.2	.3	.3	.2
Net exports	.0	.1	-4	-.2	-.1
Previous Tealbook	.0	-.1	-4	-.2	.0

Figure: Real GDP

Line chart, by 4-quarter percent change, 1983 to 2014. There are two series, Current and Previous Tealbook. Current begins in early 1983 at about 3.8. By 1984 it has generally increased to about 8.5 and by 1991 it has generally decreased to about -1. It then fluctuates from 1991 to 2009 where it decreased to -5. By 2010, it increased to 3.5, but then began to fluctuate until 2014 ending at 3.5. Previous Tealbook follows the Current series almost exactly until 2014 where it ended at 3.

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

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

Components of Final Demand

Figure: Personal Consumption Expenditures

Line chart, by 4-quarter percent change, 2007 to 2014. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about 2.75 and generally decreases to about -3.1 by 2009:Q2. It then generally increases to about 3.0 by 2010:Q4 and then generally decreases to about 1.8 by 2011:Q4. By 2013:Q4 it increased to about 2 and by 2014:Q4, it increased to 3.25. Previous Tealbook follows the Current series almost exactly until 2011 when it begins increasing at a different rate. By 2012:Q4 it has generally increased to about 2.5, fluctuating from then until 2014:Q4 where it increased to about 3.

Figure: Residential Investment

Line chart, by 4-quarter percent change, 2007 to 2014. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about -18.5 and decreases to about -28 by 2009:Q2. It then generally increases to about 5 by 2010:Q2 and then generally decreases to about -8.5 by 2010:Q3. By 2011:Q1 it increased to about -2.5 and by 2011:Q2 it has generally decreased to about -7.5. It fluctuates from 2011:Q3 at about 1 to about 11 by 2014:Q4. Previous Tealbook follows the Current Tealbook series almost exactly until 2012:Q3 when it begins increasing at a different rate. By 2013 it increased to about 9.8 and by 2014:Q4 it was at 11.

Figure: Equipment and Software

Line chart, by 4-quarter percent change, 2007 to 2014. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about 3.5 and generally increases to about 4 by

2007:Q4. It then generally decreases to about -21 by 2009:Q1. By 2010:Q3 it has generally increased to about 17.5 and by 2012:Q3 it has generally decreased to about 2. It then generally increases to about 6 by 2013:Q4. Previous Tealbook follows the Current Tealbook series almost exactly until 2012:Q2 where it is at 8.5. By 2012:Q2 it has generally decreased to about 5.0. It then generally increases to about 5.5 by 2013:Q4 and by 2014:Q4 it was at about 5.

Figure: Nonresidential Structures

Line chart, by 4-quarter percent change, 2007 to 2014. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about 11 and generally increases to about 17.5 by 2007:Q4. By 2009:Q4 it has generally decreased to about -29.8 and by 2012:Q1 it has generally increased to about 9.5. It then generally decreases to about -1 by 2012:Q4 and then generally increases to about 1 by 2013:Q4. It remains at 1 by 2014:Q4. Previous Tealbook follows the Current Tealbook series almost exactly until 2012:Q3. It decreases slightly to -.5 and by 2014:Q4 it increases to 2.

Figure: Government Consumption & Investment

Line chart, by 4-quarter percent change, 2007 to 2014. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about 0.4 and generally increases to about 2.9 by 2008:Q1. By 2011:Q4 it has generally decreased to about -2.75. It then generally increases to about -3 by 2012:Q3 and then generally decreases to about -1.1 by 2014:Q4. Previous Tealbook begins in 2007:Q1 at about 0.4 and generally increases to about 2.9 by 2008:Q1. By 2011:Q4 it has generally decreased to about -2.7. It then decreased to -3 by 2012:Q3; then increased -1.1 by 2014:Q4.

Figure: Exports and Imports

Line chart, by 4-quarter percent change, 2007 to 2014. There is a horizontal line at zero. There are four series, Exports Current Tealbook, Imports Current Tealbook, Exports Previous Tealbook and Imports Previous Tealbook. Exports Current Tealbook begins in 2007:Q1 at about 8 and generally increases to about 11.5 by 2008:Q2. It then generally decreases to about -14.8 by 2009:Q2 and then generally increases to about 14 by 2010:Q2. By 2013:Q4 it has generally decreased to about 4.5. By 2014:Q4 it increased to 5.1. Exports Previous begins in 2007:Q1 at about 8 and generally increases to about 11.5 by 2008:Q2. It then generally decreases to about -14.8 by 2009:Q2 and then generally increases to about 14 by 2010:Q2. By 2013:Q4 it has generally decreased to about 5.65. Imports Current Tealbook begins in 2007:Q1 at about 4 and generally decreases to about -19 by 2009:Q2. It then generally increases to about 17 by 2010:Q2 and then generally decreases to about 1.5 by 2011:Q3. By 2013:Q4 it has generally increased to about 4.5; and by 2014:Q4 it was at about 5.1. Imports Previous Tealbook begins in 2007:Q1 at about 4 and generally decreases to about -19 by 2009:Q2. It then generally increases to about 17 by 2010:Q2 and then generally decreases to about 2 by 2011:Q3. By 2014:Q4 it has generally increased to about 5.

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

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

Aspects of the Medium-Term Projection

Figure: Personal Saving Rate

Line chart, by percent, 1995 to 2015. There are two series, Current and Previous Tealbook. Current begins in 1995 at about 6. By 1997 it has generally decreased to about 4.4 and by 1998 it has generally increased to about 4.5. It then generally decreases to about 1.5 by late 2001 and then generally increases to about 4 by early 2002. By 2005 it has generally decreased to about 1.2 and by 2009 it has generally increased to about 6.3. It then generally decreases to about 4.5 by 2013. By 2015 it was at about. Previous Tealbook follows the Current Tealbook series almost exactly until 2011 when it begins decreasing at a slower rate. It generally decreases to about 5.1 by 2013. By 2015 it was about 3.9.

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

Figure: Wealth-to-Income Ratio

Line chart, by ratio, 1995 to 2015. There are two series, Current and Previous Tealbook. Current begins in 1995 at about 4.8. It then generally increases to about 6.15 by 2000 and then generally decreases to about 4.97 by 2002. By 2005 it has generally increased to about 6.45 and by 2009 it has generally decreased to about 4.60. It then generally increases to about 5.25 by early 2011 and then generally decreases to about 4.9 by late 2011. By late 2013 it has generally increased to about 5.4. Previous Tealbook begins in 1995 at about 4.88. It then generally increases to about 6.15 by 2000 and then generally decreases to about 5.0 by 2002. By 2005 it has generally increased to about 6.3 and by 2009 it has generally decreased to about 4.6. It then generally increases to about 5.0 by early 2011 and then generally decreases to about 4.8 by late 2011. It then generally increases to about 5.1 by late 2013. By 2015 it was about 5.4.

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

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

Figure: Single-Family Housing Starts

Line chart, by millions of units, 1995 to 2015. There are two series, Current and Previous Tealbook. Current begins in 1995 at about 1.05. It then generally increases to about 1.75 by 2006 and then generally decreases to about 0.50 by 2009. By early 2010 it has generally increased to about 7.25 and by 2011 it has generally increased to about 7.50. It then generally increases to about 7.75 by late 2013. By 2015 it was about 8.0. Previous Tealbook follows the Current Tealbook series almost exactly.

Source: U.S. Census Bureau.

Figure: Equipment and Software Spending

Line chart, by share of nominal GDP, 1995 to 2015. There are two series, Current and Previous Tealbook. Current begins in 1995 at about 8.15. It then generally increases to about 9.6 by 2000 and then generally decreases to about 7.75 by 2004. By 2006 it has generally increased to about 8.0 and by 2009 it has generally decreased to about 6.45. It then generally increases to about 7.75 by the end of 2013. By the end of 2014 it generally increased to 8. Previous Tealbook follows the Current Tealbook series almost exactly except that it ends in late 2014 at about 8.

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

Figure: Federal Surplus/Deficit

Line chart, by share of nominal GDP, 1995 to 2015. Data is 4-quarter moving average. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 1995 at about -2.5. It then generally increases to about 2.5 by 2000 and then generally decreases to about -3.8 by 2004. By 2007 it has generally increased to about -1.5 and by 2009 it has generally decreased to about -10.7. It has generally increased to about -5.4 by the end of 2013. By the end of 2014 it was at -4. Previous Tealbook follows the Current Tealbook series exactly.

Source: *Monthly Treasury Statement*.

Figure: Current Account Surplus/Deficit

Line chart, by share of nominal GDP, 1995 to 2015. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in early 1995 at about -1.75 and generally increases to about -1.5 by late 1995. It then generally decreases to about -6.7 by 2005 and then generally increases to about -2.35 by 2009. By 2010 it has generally decreased to about -3.25 and by 2012 it has generally increased to about -3.25. It then generally decreases to about -3.9 by the end of 2015. Previous Tealbook follows the Current Tealbook series almost exactly until 2012 when it begins increasing at a different rate. By the end of 2014 it has increased to about -3.75.

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

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

Decomposition of Potential GDP

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

Measure	1974-1995	1996-2000	2001-2010	2011	2012	2013	2014
Potential real GDP	3.0	3.4	2.2	1.7	1.8	2.0	2.1
Previous Tealbook	3.0	3.4	2.2	1.7	1.8	2.0	2.1
<i>Selected contributions¹</i>							
Structural labor productivity	1.4	2.6	2.2	1.5	1.4	1.6	1.7
Previous Tealbook	1.4	2.6	2.2	1.5	1.4	1.6	1.7
Capital deepening	.7	1.5	.7	.5	.5	.6	.7
Previous Tealbook	.7	1.5	.7	.5	.5	.6	.7
Multifactor productivity	.5	.8	1.2	.8	.8	.9	.9
Previous Tealbook	.5	.8	1.2	.8	.8	.9	.9
Structural hours	1.5	1.0	.6	.5	.6	.6	.6
Previous Tealbook	1.5	1.0	.6	.5	.6	.6	.6
Labor force participation	.4	.0	-.3	-.4	-.3	-.3	-.3
Previous Tealbook	.4	.0	-.3	-.4	-.3	-.3	-.3

Note: Components may not sum to totals because of rounding. For multiyear periods, the percent change is the annual average from Q4 of the year preceding the first year shown to Q4 of the last year shown.

1. Percentage points. [Return to table](#)

Figure: Structural and Actual Labor Productivity (Nonfarm business sector)

Line chart, by chained (2005) dollars per hour, 2001 to 2014. There are two series, Structural labor productivity and Actual labor productivity. Structural labor productivity begins in 2001 at about 44 and generally increases to about 57.5 by the end of 2014. Actual labor productivity begins in 2001 at about 43.5 and generally increases to about 58 by 2014.

Figure: Structural and Actual Labor Force Participation Rate

Line chart, by percent, 2001 to 2013. There are two series, Structural Labor Force Participation Rate and Actual Labor Force Participation Rate. Structural Labor Force Participation Rate begins in 2001 at about 66.75 and generally decreases to about 63.75 by the end of 2014. Actual Labor Force Participation Rate begins in 2001 at about 67.25 and generally decreases to about 66.25 by 2005. It then generally decreases to about 63.75 by the end of 2014.

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

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

The Outlook for the Labor Market and Resource Utilization

(Percent change from final quarter of preceding period)

Measure	2011	2012		2013	2014
		H1	H2		
Output per hour, nonfarm business	.4	-5	1.3	1.5	1.8
Previous Tealbook	.4	.2	.7	1.5	1.8
Nonfarm private employment ¹	175	159	110	122	200
Previous Tealbook	175	163	118	132	190
Labor force participation rate ²	64.0	63.7	63.8	63.7	63.7
Previous Tealbook	64.0	63.7	63.7	63.7	63.7
Civilian unemployment rate ²	8.7	8.2	8.3	8.1	7.8
Previous Tealbook	8.7	8.2	8.2	8.0	7.7
Memo:					
GDP gap ³	-4.5	-4.7	-4.8	-4.6	-3.6
Previous Tealbook	-4.5	-4.5	-4.5	-4.3	-3.4

1. Thousands, average monthly changes. [Return to table](#)

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

3. Percent difference between actual and potential GDP in the final quarter of the period indicated. A negative number indicates that the economy is operating below potential. [Return to table](#)

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

Figure: Nonfarm Private Employment (Average monthly changes)

Line chart, by thousands, 1995 to 2015. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 1995 at about 225. From 1995 to 2005 it fluctuates from 225 to 300. It then generally decreases to about -800 by 2009 and then generally increases to about 225 by 2015. Previous Tealbook follows the Current Tealbook series almost exactly until 2014. By the end of 2014 it is about 200.

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

Figure: Unemployment Rate

Line chart, by percent, 1995 to 2015. There are four series, Current Tealbook, Previous Tealbook, NAIRU, and NAIRU with EEB adjustment. Current Tealbook begins in early 1995 at about 5.5 and generally increases to about 5.75 by mid-1995. It then generally decreases to about 3.95 by 2000 and then generally increases to about 6.2 by 2003. By 2007 it has generally decreased to about 4.5 and by 2009 it has generally increased to about 10. It then generally decreases to about 7.9 by the end of 2015. Previous Tealbook follows Current Tealbook exactly except that it ends in late 2015 at about 7.75. NAIRU begins in 1995 at about 5.0 and remains constant at 5.0 until 2008. It then generally increases to about 6.50 by 2009 and remains constant here until the end of 2014. NAIRU with EEB adjustment begins in 1995 at about 5.1 and remains relatively constant at 5 until 2001. It then increases to about 5.1 by 2002. It then generally decreases to about 5 by 2004 and remains constant here until 2008. By 2010 it has increased to about 6.85 and by the end of 2013 it has generally decreased to about 6.0.

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

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

Figure: GDP Gap

Line chart, by percent, 1995 to 2015. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 1995 at about -2. It then generally increases to about 3.5 by 2000 and then generally decreases to about -2.7 by 2003. By 2006 it has generally increased to about 1 and by 2009 it has generally decreased to about -7.5. It then generally increases to about -5 by the end of 2013. It then increased to -3.9 by the end of 2014. Previous Tealbook follows Current Tealbook exactly until 2012. By the end of 2014 it has generally increased to about -3.75.

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

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

Figure: Manufacturing Capacity Utilization Rate

Line chart, by percent, 1995 to 2015. There is a horizontal line at about 79 which represents the average rate from 1972 to 2011. There are two series, Current and Previous Tealbook. Current begins in 1995 at about 84.3 and generally decreases to about 82 by 1996. It then generally increases to about 84 by 1997 and then generally decreases to about 71.5 by 2001. By 2007 it has generally increased to about 79.7 and by 2009 it has generally decreased to about 64.5. It then generally increases to about 77.5 by the end of 2013. Previous Tealbook follows the Current Tealbook series almost exactly until 2012 when it begins increasing at a faster rate. By the end of 2014 it has generally increased to about 80.

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

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

Inflation Projections

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

Measure	2011	2012		2013	2014
		H1	H2		
PCE chain-weighted price index	2.7	1.7	1.1	1.5	1.4
Previous Tealbook	2.7	1.5	.8	1.5	1.5
Food and beverages	5.2	1.0	2.7	2.4	.9
Previous Tealbook	5.2	1.4	1.6	1.5	1.4
Energy	12.8	-3.4	-6.7	-1.2	-1.7
Previous Tealbook	12.8	-4.8	-10.1	.7	-.4
Excluding food and energy	1.8	2.1	1.5	1.6	1.6
Previous Tealbook	1.8	1.9	1.5	1.6	1.6
Prices of core goods imports ¹	4.3	1.1	-5	1.1	1.4
Previous Tealbook	4.3	1.2	-1.0	1.4	1.6

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

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

Figure: Total PCE Prices

Line chart, by 4-quarter percent change, 1995 to 2015. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in early 1995 at about 2.4. It then generally decreases to about 2.0 by late 1995 and then generally increases to about 2.4 by 1996. It then generally decreases to about 1 by 1998 and then generally increases to about 2.7 by 2000. By 2002 it has generally decreased to about 0.7 and by 2005 it has generally increased to about 3. It then generally decreases to about 1.7 by 2006 and then generally increases to about 4.4 by 2008. By 2009 it has generally decreased to about -0.9 and by early 2010 it has generally increased to about 2.5. It then generally decreases to about 1.1 by late 2010 and then increases to about 2.9 by 2011. By the end of 2013 it has generally decreased to about 1.5. By the end of 2014 it decreased slightly to 1.33. Previous Tealbook follows the Current series almost exactly except it ends in late 2013 at about 1.5.

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

Figure: PCE Prices excluding Food and Energy

Line chart, by 4-quarter percent change, 1995 to 2015. There are four series, Current Tealbook, Previous Tealbook, Current Tealbook: Market based, and Previous Tealbook: Market based. Current Tealbook begins in early 1995 at about 2.4. It then generally decreases to about 1.3 by 1998 and then generally increases to about 2.6 by 2007. By late 2010 it has generally decreased to about 0.95 and by early 2012 it has generally increased to about 1.9. It then generally decreases to about 1.55 by late 2013, as was the same by 2014:Q4. Previous Tealbook follows Current Tealbook almost exactly until 2011. By early 2012 it has generally increased to about 1.8 and by late 2014 it has generally decreased to about 1.66. Current Tealbook: Market based begins in early 1995 at about 2.15. It then generally decreases to about 0.95 by 1998 and then generally increases to about 1.9 by 2001. By 2003 it has generally decreased to about 1.2 and by 2008 it has generally increased to about 2.50. It then generally decreases to about 0.8 by late 2010 and then generally increases to about 1.8 by early 2012. It then generally decreases to about 1.5 by the end of 2013. By the end of 2014 it generally increased slightly to 1.55. Previous Tealbook: Market based follows Current Tealbook: Market based almost exactly until 2014. By early 2014 it has generally increased to about 1.56.

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

Figure: Compensation per Hour

Line chart, by 4-quarter percent change, 1995 to 2015. There is a horizontal line at zero. There are four series, Current Productivity and Costs, Previous Productivity and Costs, Current Employment cost index, and Previous Employment cost index. Current Productivity and Costs begins in early 1995 at about 1.2 and generally increases to about 3.75 by 1996. It then generally decreases to about 2.5 by 1997 and then generally increases to about 7 by 1998. By 1999 it has generally decreased to about 3 and by 2000 it has generally increased to about 8.7. It then generally decreases to about 2.5 by 2002 and then generally increases to about 5.7 by 2003. By 2009 it has generally decreased to about 0 and by 2010 it has generally increased to about 1.75. It then generally increases to about 2.75 by the end of 2014. Previous Productivity and Costs follows Current Productivity and Costs almost exactly until the end of 2014. By late 2014 it has generally increased to about 2.76. Current Employment cost index begins in 1995 at about 2.8. It then generally increases to about 4.25 by 2000 and then generally decreases to about 1 by 2009. By the end of 2013 it has generally increased to about 2.5. Previous Employment cost index follows the Current Employment cost index almost exactly.

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

Figure: Long-Term Inflation Expectations

Line chart, by percent, 1995 to 2015. There are two series, Thomson Reuters/Michigan next 5 to 10 yrs. and SPF next 10 yrs. Thomson Reuters/Michigan begins in early 1995 at about 3.25. It then generally decreases to about 2.75 by 2000. From 2000 to early 2005 it fluctuates between about 2.75 and 3.25. From early 2005 to late 2010 it fluctuates between about 2.4 and 3.4. By July 2012 it is at about 2.7. SPF begins in early 2007 at about 2.0 and generally increases to about 2.25 by 2009. It then decreases to about 2.0 by 2010 and then generally increases to about 2.25 by 2012.

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

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

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

The Long-Term Outlook

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

Measure	2012	2013	2014	2015	2016	2017
Real GDP	1.5	2.1	3.2	3.6	3.5	3.1
Previous Tealbook	1.9	2.2	3.1	3.5	3.4	3.2
Civilian unemployment rate ¹	8.3	8.1	7.8	7.2	6.5	5.9
Previous Tealbook	8.2	8.0	7.7	7.1	6.5	5.9
PCE prices, total	1.4	1.5	1.4	1.6	1.7	1.8
Previous Tealbook	1.2	1.5	1.5	1.6	1.7	1.8
Core PCE prices	1.8	1.6	1.6	1.7	1.7	1.8
Previous Tealbook	1.7	1.6	1.6	1.7	1.8	1.8
Federal funds rate ¹	.1	.1	.4	1.5	2.6	3.3
Previous Tealbook	.1	.1	.5	1.6	2.6	3.4
10-year Treasury yield ¹	1.7	2.9	3.5	3.8	4.0	4.2
Previous Tealbook	1.9	3.1	3.6	3.8	4.1	4.2

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

Figure: Real GDP

Line chart, by 4-quarter percent change, 2004 to 2020. There is a horizontal line at zero. There are four series, Current Real GDP, Previous Real GDP, Current Potential GDP, and Previous Potential GDP. Current Real GDP begins in 2004 at about 4 and generally decreases to about -5 by 2009. It generally increases to about 3.5 by 2010 and then decreases to about 1.75 by 2011. It generally increases to about 3.8 by 2014 and then generally decreases to about 2.3 by 2020. Previous Real GDP generally follows the same path as Current Real GDP. Current Potential GDP begins in 2004 at about 2.5 and generally decreases to about 1 by 2008. It then generally increases to about 2.3 by 2020. Previous Potential GDP generally follows the same path as Current Potential GDP but begins increasing at a slightly faster rate in 2008. It then generally increases to about 2.6 by 2020.

Figure: Unemployment Rate

Line chart, by percent, 2004 to 2020. There are four series, Current Tealbook, Previous Tealbook, NAIU, and NAIU with EEB adjustment. Current Tealbook begins in 2004 at about 5.75 and generally decreases to about 4.4 by 2007. It generally increases to about 10 by 2010 and then generally decreases to about 5.3 by 2020. Previous Tealbook generally follows the same path as Current Tealbook until it begins decreasing at a faster rate in 2012. It ends in 2020 at about 5.25. NAIU begins in 2004 at about 5 where it remains relatively constant until 2008. It increases to about 6 by 2009 and remains relatively constant here until 2014. It then decreases to about 5.3 by 2017 where it remains relatively constant until 2020. NAIU with EEB adjustment begins in 2004 at about 5 where it

remains relatively constant until 2008. It increases to about 6.4 by 2010 and then decreases to about 6 by 2013. It remains relatively constant here until 2014. It then decreases to about 5.3 by 2017 where it remains relatively constant until 2020.

Figure: PCE Prices

Line chart, by 4-quarter percent change, 2004 to 2020. There are four series, Current Total PCE prices, Previous PCE prices, Current PCE prices excluding food and energy, and Previous PCE prices excluding food and energy. Current Total PCE Prices begins in 2004 at about 2 and generally increases to about 4.2 by 2007. It decreases to about -0.8 by 2009 and then generally increases to about 2.9 by 2011. It generally decreases to about 1 by 2012 and then generally increases to about 2 by 2020. Previous Total PCE prices generally follows the same pattern as Current Total PCE prices. Current PCE prices excluding food and energy begins in 2004 at about 1.9 and generally decreases to about 1 by 2011. It generally increases to about 1.9 by 2011 and then decreases to about 1.75 by 2012. It then generally increases to about 2 by 2020. Previous PCE prices excluding food and energy generally follows the same path as Current PCE prices excluding food and energy.

Figure: Interest Rates

Line chart, by percent, 2004 to 2020. There are six series, Current BBB corporate, Previous BBB corporate, Current 10-year Treasury, Previous 10-year Treasury, Current Federal funds rate, and Previous Federal funds rate. Current BBB corporate begins in 2004 at about 5.4 and generally increases to about 9.5 by 2008. It generally decreases to about 4.5 by 2012 and then increases to about 6.2 by 2020. Previous BBB corporate generally follows the same path as Current BBB corporate. Current 10-year Treasury begins in 2004 at about 4.1 and generally increases to about 5 by 2006. It generally decreases to about 1.9 by 2012 and then generally increases to about 5.7 by 2020. Previous 10-year Treasury generally follows the same path as Current 10-year Treasury. Current Federal funds rate begins in 2004 at about 1 and generally increases to about 5.2 by 2007. It generally decreases to about 0.1 by 2009 where it remains relatively constant until 2013. It then increases to about 4.1 by 2020. Previous Federal funds rate generally follows the same path as Current Federal funds rate.

Note: In each panel, shading represents the projection period, which begins in 2012:Q2; dashed lines are the previous Tealbook.

Evolution of the Staff Forecast

Figure: Change in Real GDP

Line chart, by percent, quarter 4 over quarter 4, January 2010 to December 2012. The x-axis represents Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about 4.8 and generally decrease to about 3.4 by September 15, 2010. It increases to about 3.8 by January 19, 2011 and then generally decreases to about 1.4 by September 14, 2011. It generally increases to about 1.5 by June 13, 2012. 2012 begins on September 15, 2011 at about 4.3 and generally decreases to about 2 by January 18, 2012. It generally increases to about 2.5 by April 18, 2012 and then generally decreases to about 1.8 by June 13, 2012. 2013 begins on September 14, 2011 at about 3.25 and generally decreases to about 2.2 by January 18, 2012. It generally increases to about 2.8 by April 18, 2012 and then decreases to about 2 by June 13, 2012. 2014 begins on April 18, 2012 at about 3.25 and decreases to about 3.05 by June 13, 2012.

Figure: Unemployment Rate

Line chart, by percent, fourth quarter, January 2010 to December 2012. The x-axis represents Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about 8.2 and generally increase to about 9.15 by September 15, 2010. It generally decreases to about 8.6 by March 9, 2011 and then increases to about 9.1 by August 3, 2011. It then generally decreases to about 8.6 by June 13, 2012. 2012 begins on September 15, 2010 at about 8 and generally decreases to about 7.5 by March 9, 2011. It generally increases to about 8.5 by September 14, 2012 and then generally decreases to about 8.2 by June 13, 2012. 2013

begins on September 14, 2011 and generally decreases to about 7.7 by April 18, 2012. It then generally increases to about 8 by June 13, 2012. 2014 begins on April 18, 2012 at about 7.5 and increases to about 7.75 by June 13, 2012.

Figure: Change in PCE Prices excluding Food and Energy

Line chart, by percent, Quarter 4 over Quarter 4, January 2010 to December 2012. The x-axis represents the Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about 1.1 and generally decreases to about 0.8 by June 16, 2010. It generally increases to about 1.85 by September 14, 2011 and then generally decreases to about 1.75 by June 13, 2012. 2012 begins on September 15, 2010 at about 0.9 and generally increases to about 1.75 by April 18, 2012. It then decreases to about 1.6 by June 13, 2012. 2013 begins on September 14, 2011 at about 1.25 and generally increases to about 1.55 by April 18, 2012. It then decreases to about 1.5 by June 13, 2012. 2014 begins on April 18, 2012 at about 1.55 and decreases to about 1.5 by June 13, 2012.

International Economic Developments and Outlook

Recent Foreign Indicators

Figure: Nominal Exports

Line chart, by log scale where January 2008 = 100, 2008 to 2012. There is a horizontal line at 100. There are three series, Foreign, AFE, and EME. Foreign begins in 2008 at about 100 and generally decreases to about 69 by 2009. It then generally increases to about 118 by 2012. AFE begins in 2008 at about 100 and generally decreases to about 68 by 2009. It then generally increases to about 105 by 2012. EME begins in 2008 at about 100 and generally decreases to about 70. It then generally increases to about 131 by 2012.

Note: EME excludes Venezuela.

Figure: Industrial Production

Line chart, by log scale where January 2008 = 100, 2008 to 2012. There is a horizontal line at 100. There are three series, Foreign, AFE, and EME. Foreign begins in 2008 at about 100 and generally decreases to about 86 by 2009. It then generally increases to about 102.5 by 2012. AFE begins in 2008 at about 100 and generally decreases to about 85 by 2009. It then generally increases to about 94 by 2012. EME begins in 2008 at about 100 and generally decreases to about 88 by 2009. It then generally increases to about 114 by 2012.

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

Figure: Retail Sales

Line chart, by 12-month percent change, 2008 to 2012. There is a horizontal line at zero. There are three series, Foreign, AFE, and EME. Foreign begins in 2008 at about 5 and generally decreases to about -1.5 by 2009. It generally increases to about 6 by 2010 and then decreases to about 2.5 by 2012. AFE begins in 2008 at about 4.2 and generally decreases to about -4 by 2009. It generally increases to about 5 by 2010 and then generally decreases to about 2.5 by 2012. EME begins in 2008 at about 8 and generally decreases to about 3 by 2009. It generally increases to about 11 by 2010 and then decreases to about 7.5 by 2012.

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

Figure: Employment

Line chart, by 4-quarter percent change, 2008 to 2012. There is a horizontal line at zero. There are three series, Foreign, AFE, and EME. Foreign begins in 2008 at about 2 and generally decreases to about -1 by 2009. It increases to about 1.6 by 2010 and then decreases to about 1.2 by 2012. AFE begins in 2008 at about 1.85 and

generally decreases to about -1.8 by 2009. It generally increases to about 1 by 2010 and then decreases to about 0.5 by 2012. EME begins in 2008 at about 3 and generally decreases to about 0.4 by 2009. It generally increases to about 3 by 2011 and then decreases to about 2 by 2012.

Note: EME excludes Argentina and Mexico.

Figure: Consumer Prices: Advanced Foreign Economies

Line chart, by 12-month percent change, 2008 to 2012. There is a horizontal line at zero. There are two series, Headline and Core. Headline begins in early 2008 at about 2.1 and increases to about 3.6 by late 2008. It decreases to about -0.9 by 2009 and then generally increases to about 2 by 2012. Core begins in 2008 at about 1.05 and generally decreases to about 0.8 by 2010. It then generally increases to about 1.4 by 2012.

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

Source: Haver Analytics and CEIC.

Figure: Consumer Prices: Emerging Market Economies

Line chart, by 12-month percent change, 2008 to 2012. There is a horizontal line at zero. There are three series, Headline, Excluding food - East Asia, and Excluding food - Latin America. Headline begins in early 2008 at about 5.6 and generally increases to about 6.6 by late 2008. It generally decreases to about 0.8 by 2009 and then increases to about 5.75 by 2011. It then generally decreases to about 3.8 by 2012. Excluding food - East Asia begins in early 2008 at about 3 and generally increases to about 4 by late 2008. It decreases to about -2 by 2009 and then increases to about 2.8 by 2011. It decreases to about 2 by 2012. Excluding food - Latin America begins in 2008 at about 3.8 and generally increases to about 5.8 by 2009. It then generally decreases to about 3.3 by 2012.

The Foreign Outlook

(Percent change, annual rate)

	2011	2012				2013			2014
		Q1	Q2	Q3	Q4	Q1	Q2	H2	
Real GDP									
Total foreign	2.8	3.3	2.3	2.4	2.2	2.5	2.6	2.9	3.2
Previous Tealbook	2.8	3.4	2.5	2.5	2.3	2.5	2.6	2.8	3.2
Advanced foreign economies	1.3	1.5	.7	.8	.5	.7	1.0	1.4	2.0
Previous Tealbook	1.3	1.5	1.0	.9	.5	.8	1.0	1.4	1.9
Emerging market economies	4.5	5.2	3.9	4.1	4.2	4.3	4.4	4.5	4.6
Previous Tealbook	4.5	5.5	4.1	4.2	4.2	4.3	4.3	4.4	4.6
Consumer Prices									
Total foreign	3.4	2.6	2.0	2.2	2.3	2.3	2.3	2.3	2.5
Previous Tealbook	3.4	2.6	2.3	2.0	2.2	2.2	2.2	2.3	2.5
Advanced foreign economies	2.2	2.2	.6	1.4	1.5	1.3	1.2	1.2	1.5
Previous Tealbook	2.2	2.2	1.4	1.1	1.3	1.2	1.2	1.2	1.5
Emerging market economies	4.3	3.0	3.0	2.9	3.0	3.1	3.1	3.1	3.2
Previous Tealbook	4.3	3.0	3.0	2.8	2.9	3.0	3.1	3.1	3.2

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

Figure: Real GDP

Line chart, by percent change, annual rate, 2008 to 2014. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 2008 at about 3 and generally decreases to about -9.5 by 2009. It generally increases to about 5.5 by 2010 and then generally decreases to about 2.4 by 2012. It then increases to about 3 by 2014. Previous Tealbook generally follows the same path as Current Tealbook.

There is a second line chart, by percent change, annual rate, 2008 to 2014. There is a horizontal line at zero. There are four series, Current Emerging market economies, Previous Emerging market economies, Current Advanced foreign economies, and Previous Advanced foreign economies. Current Emerging market economies begins in 2008 at about 5 and generally decreases to about -9 by early 2009. It generally increases to about 10 by mid-2009 and then generally decreases to about 4.8 by 2014. Previous Emerging market economies generally follows the same path as Current Emerging market economies. Current Advanced foreign economies begins in 2008 at about 1 and generally decreases to about 4 by 2010. It generally decreases to about 0 by 2011 and then generally increases to about 2.5 by 2014. Previous Advanced foreign economies generally follows the same path as Current Advanced foreign economies.

Figure: Consumer Prices

Line chart, by percent change, annual rate, 2008 to 2014. There is a horizontal line at zero. There are two series, Current Total foreign and Previous Total Foreign. Current Total foreign begins in 2008 at about 5 and generally decreases to about -1 by 2009. It then generally increases to about 4.75 by 2010 and then generally decreases to about 2.25 by 2014. Previous Total foreign generally follows the same path as Current Total foreign.

There is a second line chart, by percent change, annual rate, 2008 to 2014. There is a horizontal line at zero. There are four series, Current Emerging market economies, Previous Emerging market economies, Current Advanced foreign economies, and Previous Advanced foreign economies. Current Emerging market economies begins in 2008 at about 7 and generally decreases to about -0.4 by 2009. It generally increases to about 6.2 by 2010 and then generally decreases to about 3.25 by 2014. Previous Emerging market economies generally follows the same path as Current Emerging market economies. Current Advanced foreign economies begins in early 2008 at about 2.6 and increases to about 4 by late 2008. It decreases to about -2.1 by 2009 and then generally increases to about 3.25 by 2010. It then generally decreases to about 1.6 by 2014. Previous Advanced foreign economies generally follows the same path as Current Advanced foreign economies.

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

[Box:] Recent Developments in the Euro Area

Figure: 10-Year Sovereign Bond Spreads

Line chart, by basis points, 2011 to 2012. There are three series, Greece, Portugal, and Ireland. Greece begins in early 2011 at about 1800 and generally increases to about 3500 by mid-2011. It generally decreases to about 2600 to end in 2012. Portugal begins in early 2011 at about 900 and generally increases to about 1800 by mid-2011. It generally decreases to end at about 1000 by early 2012. Ireland begins in early 2011 at about 900 and generally remains constant to end at about 800 in 2012.

Note: Relative to Germany.

Source: Bloomberg.

Figure: 10-Year Sovereign Bond Spreads

Line chart, by basis points, 2011 to 2012. There are four series, Spain, Italy, Belgium, and France. Spain begins in

early 2011 at about 240 and generally increases to about 470 by late 2011. It generally decreases to about 300 by early 2011 and then generally increases to about 525 by mid-2012. Italy begins in early 2011 at about 190 and generally increases to about 550 by late 2011. It generally decreases to about 290 by early 2012 and then increases to about 480 by mid-2012. Belgium begins in early 2011 at about 100 and generally increases to about 385 by late 2011. It generally decreases to about 120 by early 2012 and then increases to about 175 by mid-2012. France begins in early 2011 at about 40 and generally increases to about 200 by late 2011. It then generally decreases to about 125 by mid-2012.

Note: Relative to Germany.

Source: Bloomberg.

Evolution of Staff's International Forecast

Figure: Total Foreign GDP

Line chart, by percent change, Quarter 4 over Quarter 4, January 2010 to December 2012. The x-axis represents Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about 4 and generally decreases to about 3.5 by June 15, 2011. It then generally decreases to about 3 by June 13, 2012. 2012 begins on September 15, 2010 at about 3.5 and generally decreases to about 2.5 by December 7, 2011. It then generally increases to about 2.7 by June 13, 2012. 2013 begins on September 14, 2011 at about 3.3 and generally decreases to about 3 by December 7, 2011. It then increase to about 3.2 by April 18, 2012 and then decreases to about 2.7 by June 13, 2012. 2014 begins on April 18, 2012 at about 3.6 and generally decreases to about 3.1 by June 13, 2012.

Figure: Total Foreign CPI

Line chart, by percent change, Quarter 4 over Quarter 4, January 2010 to December 2012. The x-axis represents Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about 2 and generally increases to about 3.2 by April 20, 2011. It then increases to about 3.5 by June 13, 2012. 2012 begins on September 14, 2011 at about 2.2 where it remains relatively constant until about January 18, 2012. It increase to about 2.55 by March 7, 2012 and then decreases to about 2.3 by June 13, 2012. 2013 begins on September 14, 2011 at about 2.3 and generally decreases to about 2.25 by December 7, 2011. It remains relatively constant here until it decreases to about 2.2 by June 13, 2012. 2014 begins on April 18, 2012 at about 2.3 and generally increases to about 2.5 by June 13, 2012.

Figure: U.S. Current Account Balance

Line chart, by percent of GDP, January 2010 to December 2012. The x-axis represents Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about -3.1 and generally decrease to about -3.5 by December 8, 2010. It generally increases to about -2.8 by June 15, 2011 and then generally decreases to about -3.4 by June 13, 2012. 2012 begins on September 15, 2010 at about -2.9 and generally increases to about -2 by June 15, 2011. It then generally decreases to about -3 by June 13, 2012. 2013 begins on September 14, 2011 at about -2 and generally decreases to about -3.75 by June 13, 2012. 2014 begins on April 18, 2012 at about -3.5 and generally decreases to about -4 by June 13, 2012.

Financial Developments

Policy Expectations and Treasury Yields

Figure: Selected Interest Rates

Line chart, by percent, June 2012 to July 2012. There is a vertical line on June 20 marking the April FOMC, June 28 marking the EU Summit, July 2 marking the June ISM manufacturing report, and July 6 marking the June employment report. There are two series, 10-year Treasury yield (left scale) and 2-year Treasury yield (right scale). 10-year Treasury yield begins on June 19 at about 1.6 and generally decreases to about 1.5 by July 16. It generally decreases to end at about 1.4 on July 24. 2-year Treasury yield begins on June 19 at about 0.27 and generally increases to about .3 by July 4. It then generally decreases to end at about 0.2 by July 24.

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

Source: Bloomberg.

Figure: Implied Federal Funds Rate

Line chart, by percent, 2013 to 2016. There are four series, Mean: July 24, 2012, Mean: June 19, 2012, Mode: July 24, 2012, and Mode: June 19, 2012. All four series begins at about 0.1 in 2013 and generally increases to end in 2016 at Mean: July 24, 2012 series at 0.6, Mean: June 19, 2012 series at 0.9, Mode: July 24, 2012 series at 0.0 and Mode June 19, 2012 series at 0.3.

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

Source: Bloomberg and CME group.

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

Bar chart, by percent, 2013 to 2016. There are two series, Recent: 21 respondents and June FOMC: 21 respondents. Recent: 21 respondents begins in 2013:Q3 at about 5 and remains at 5 in 2013:Q4. It decreases to 0 in 2014:Q1 and then generally increases to 23 by 2014:Q3. It then generally decreases to about 5 by 2015:Q2. It increases to 15 by 2015:Q3 and then decreases to 0 in 2015:Q4. It ends in 2016:Q1 at about 5. June FOMC: 21 respondents begins in 2013:Q1 at 0 and generally increases to 5 by 2013:Q3. It stays at 5 until 2013:Q4 when it decreases to 0 and then increases to about 15 by 2014:Q4. It increases to about 25 by 2015:Q3 and then decreases to about 10 by 2015:Q3. It decreases to end at 10 in 2016:Q1.

Source: Desk's Dealer Survey from July 23, 2012.

Figure: Treasury Yield Curve

Line chart, by percent, 1 to 20 years ahead. There are two series, Most recent: July 24, 2012 and Last FOMC: June 19, 2012. Both series start at 0.5 percent at 1 year ahead and increase together to end at 2.5 for the Last FOMC series and 2.4 for the Most recent series.

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

Source: Federal Reserve Board.

Figure: Inflation Compensation

Line chart, by percent, 2010 to 2012. Data are daily. There is a vertical line on June 20, 2012 representing the June FOMC. There are two series, 5 to 10 years ahead and Next 5 years. 5 to 10 years ahead begins in early 2010 at about 3.25 and generally decreases to about 2.25 by mid-2010. It increases to about 3.2 by 2011 and then decreases to about 2.6 by June 2012. Next 5 years begins in early 2012 at about 2 and generally decreases to about 1.25 by mid-2010. It increases to about 2.25 by 2011 and then decreases to about 1.9 by July 24, 2012.

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

Source: Barclays PLC and staff estimates.

Foreign Developments

Figure: Euro-Area 10-Year Government Bond Spreads

Line chart, by percentage points, 2011 to 2012. Data are daily. There is a vertical line on June 2012 marking the June FOMC. There are four series, Portugal, Spain, Ireland, and Italy. Portugal begins in early 2011 at about 4 and generally increases to about 16 by early 2012. It then decreases to about 9.3 by June 2012. Spain begins in early 2011 at about 2.4 and generally increases to about 4.3 by late 2011. It then increases to about 5.2 by June 2012. Ireland begins in early 2011 at about 6 and generally increases to about 11 by mid-2011. It then generally decreases to about 6 by June 2012. Italy begins in early 2011 at about 2 and generally increases to about 6 by late 2011. It then decreases to about 4.5 by June 2012.

Note: Spread over German bunds.

Source: Bloomberg.

Figure: 10-Year Nominal Benchmark Yields

Line chart, by percent, 2011 to 2012. Data are daily. There is a vertical line on June 2012 representing the June FOMC. There are four series, Germany, United Kingdom, Japan, and Canada. Germany begins in early 2011 at about 2.99 and generally decreases to about 1.6 by late 2011. It then decreases to about 1.3 by June 2012. United Kingdom begins in early 2011 at about 3.5 and generally decreases to about 2.25 by late 2011. It then decreases to about 1.6 by June 2012. Japan begins in 2011 at about 1.15 and generally decreases to about 0.9 by June 2012. Canada begins in early 2011 at about 3.15 and generally decreases to about 2 by late 2011. It then decreases to about 1.8 by June 2012.

Source: Bloomberg.

Figure: Two-Year Nominal Yields

Line chart, by percent, 2011 to 2012. Data are daily. There is a vertical line on June 2012 representing the June FOMC and at zero. There are four series, Germany, United Kingdom, Japan, and Netherlands. Germany begins in early 2011 at about .9 and generally increases to about 1.6 by late 2011. It then decreases to about -.1 by June 2012. United Kingdom begins in early 2011 at about 1.2 and generally decreases to about .5 by late 2011. It then decreases to about .1 by June 2012. Japan begins in 2011 at about 0.1 and generally remains constant to end at 0.1. Netherlands begins in early 2011 at about 0.9 and generally increases to about 1.6 by late 2011. It then decreases to about -.1 by June 2012.

Source: Bloomberg.

Figure: Dollar Exchange Rates

Line chart, by ratio scale where January 3, 2011 = 100, 2011 to 2012. Data are daily. There is a horizontal line at June 2012 representing the June FOMC. There are three series, Broad (right scale), Euro (left scale) and Yen (right scale). Broad begins in early 2011 at about 100 and generally decreases to about 95 by mid-2011. It generally increases to about 104.5 by June 2012. Euro begins in early 2011 at about 0.75 and generally decreases to about 0.8 by mid-2011. It generally increases to about 0.85 at the end of 2012. Yen begins in early 2011 at about 100 and generally increases to about 105 by mid-2011. It generally decreases to about 93 by late 2011 and then increases to about 104.5 by early 2012. It ends in June 2012 at about 97.5.

Source: Federal Reserve Board; Bloomberg.

Figure: Stock Prices Indexes

Line chart, by ratio scale where January 3, 2011 = 100, 2011 to 2012. There is a vertical line on June 2012 representing the June FOMC. Data are daily. There are four series, DJ Euro, Topix, DJ Euro Banks, and MSCI Emerging Markets. DJ Euro begins in early 2011 at about 100 and generally decreases to about 75 by late 2011. It generally increases to about 90 by early 2012 and then decreases to about 78 by June 2012. Topix begins in early 2011 at about 100 and generally decreases to about 80 by late 2011. It increases to about 95 by early 2012 and then decreases to about 80 by June 2012. DJ Euro Banks begins in early 2011 at about 100 and generally increases to about 120 by mid-2011. It generally decreases to about 55 by late 2011 and then increases to about

73 by early 2012. It ends in June 2012 at about 50. MSCI Emerging Markets begins in early 2011 at about 100 and generally decreases to about 75 by late 2011. It generally increases to about 90 by early 2012 and then decreases to about 79 by June 2012.

Source: Bloomberg.

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

Bar chart, by billions of dollars, annual rate, 2010 to 2012. There is a horizontal line at zero. There are two series, Official and Private. Approximate values are: 2010: Official 400 and Private 250; 2011:H1: Official 240 and Private -1; 2011:H2: Official 25 and Private 450; 2012:Q1: Official 500 and Private -5; April 2012: Official 225 and Private 200.

Source: Treasury International Capital data adjusted for staff estimates.

[Box:] The Effects of the European Central Bank's Deposit Rate Cut

Figure: Three-month Interest Rates

Line chart, by percent, June 1, 2012 to July 20, 2012. Data are daily. There is a horizontal line at zero. There are three series, France, Netherlands, and Germany. France begins at about 0.09 on June 1, 2012 and generally decreases to end at about -0.01 on July 20, 2012. Netherlands begins at about 0.00 on June 1, 2012 and generally decreases to end at about -0.05 on July 20, 2012. Germany begins at about -0.01 on June 1, 2012 and generally decreases to -0.15 on July 6, 2012 and generally increases to end at about -0.10 on July 20, 2012.

Source: Bloomberg.

Figure: Two-Year Sovereign Bond Yields

Line chart, by percent, June 1, 2012 to July 20, 2012. Data are daily. There is a horizontal line at zero. There are four series, France, Netherlands, Germany, and Switzerland. France begins at about 0.40 on June 1, 2012 and generally decreases to end at about 0.30 on July 20, 2012. Netherlands begins at about 0.25 on June 1, 2012 and generally decreases to end at about 0.10 on July 20, 2012. Germany begins at about 0.00 on June 1, 2012 and generally decreases to end about -0.15 on July 20, 2012. Switzerland begins at about -0.25 on June 1, 2012 and generally decreases to end at about -0.50 on July 20, 2012.

Source: Bloomberg.

[Box:] The Bank of England's Funding for Lending Scheme

Figure: FLS Fee on Amount Borrowed from BOE

Line chart, by percent, Net lending growth over the reference period -6 to 6. There is a vertical line at zero. The series begins at about 1.50 at -6. The series remains constant to begin to decrease at -4. It generally decreases to 0.25 at about 0 and remains constant to end at 0.25 at 6.

Source: Bank of England.

Figure: Sterling Interest Rates

Line chart, by percent, January to July. There are three series, BOE Bank Rate, 6-month gilt repo rate, and 1-year gilt repo rate. The BOE Bank Rate series is represented by horizontal line at 0.5. The 6-month series begins at about 0.47 in January and generally decreases to end at about 0.41 in July. The 1-year series begins at about 0.45 in January and generally decreases to end at about 0.38 in July.

Source: Bank of England.

Short-Term Dollar Funding Markets and Financial Institutions

Figure: Dollar Funding Spread

Line chart, by basis points, 2010 to 2012. Data are daily. There is a vertical line at June 2012 representing the June FOMC. The series, 3-month euro-dollar implied basis swap, begins in April 2010 at about 26 and generally decreases to about 10 by June 2011. It generally increases to about 150 by October 2011 and then decreases to about 48 by June 2012.

Source: Bloomberg.

Figure: Selected Spreads

Line chart, by basis points, 2010 to 2012. Data are daily. There is a vertical line at April 2012 representing the April FOMC. There are two series, 3-month LIBOR over OIS and USD 3x6 FRA-OIS. 3-month LIBOR over OIS begins in January 2010 at about 10 and generally increase to about 32 by September 2010. It decreases to about 10 by October 2010 and then generally increases to about 50 by January 2012. It ends in June 2012 at about 30. USD 3x6 FRA-OIS begins in January 2010 at about 12 and generally increases to about 69 by May 2010. It decreases to about 18 by March 2011 and then generally increases to about 68 by November 2011. It ends in June 2012 at about 35.

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

Source: Bloomberg.

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

Line chart, by days, 2010 to 2012. Data are weekly. There is a vertical line at June 2012 representing the June FOMC. There are two series, U.S. parent and European parent. U.S. parent begins in January 2010 at about 40 and generally decreases to about 35 by May 2010. It generally increases to about 50 by February 2011. It then increases to about 63 by April 2012 and ends in June 2012 at about 53. European parent begins in January 2010 at about 40 and generally decreases to about 35 by May 2010. It generally increases to about 56 by October 2010 and then generally decreases to about 32 by January 2012. It then increases to about 50 by June 2012.

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

Figure: Treasury GCF Repo Rate

Line chart, by basis points, 2011 to 2012. Data are daily. The series begins at about 15 in March 2011 it generally increases to about 28 in August 2011. It generally decreases to end at about 20 on July 24, 2012.

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

Source: Depository Trust & Clearing Corporation.

Figure: Asset-Backed Commercial Paper Overnight Spreads

Line chart, by basis points, 2011 to 2012. Data are 5-day moving averages. There is a vertical line at June 2012 representing the June FOMC. There are three series, United States, Europe, and Other. United States begins in January 2011 at about 5 and generally increases to about 24 by January 2012. It then decreases to about 9 by June 2012. Europe begins in January 2011 at about 5 and generally increases to about 66 by December 2011. It then generally decreases to about 14.5 by June 2012. Other begins in January 2011 at about 4 and generally increases to about 7 by June 2012.

Note: Spreads computed over the AA nonfinancial unsecured rate. Other institutions include nonbanking institutions and banks domiciled outside Europe and the United States.

Source: Depository Trust & Clearing Corporation.

Figure: CDS Spreads of Large Bank Holding Companies

Line chart, by basis points, 2010 to 2012. Data are daily. There is a vertical line at June 2012 representing the June FOMC. There are six series, Citigroup, JPMorgan Chase, Wells Fargo, Goldman Sachs, Bank of America, and Morgan Stanley. Citigroup begins in January 2010 at about 150 and generally increases to about 380 by October 2011. It then decreases to about 280 by June 2012. JPMorgan Chase begins in January 2010 at about 45 and generally increases to about 190 by October 2011. It decreases to about 100 by March 2012 and then increases to about 175 by June 2012. Wells Fargo begins in January 2010 at about 90 and generally increases to about 180 by October 2011. It then decrease to about 110 by June 2012. Goldman Sachs begins in January 2010 at about 90 and generally increases to about 410 by November 2011. It then generally decreases to about 310 by June 2012. Bank of America begins in January 2010 at about 100 and generally increase to about 600 by September 2011. It then generally decrease to about 410 by June 2012.

Source: Markit.

Other Domestic Asset Market Developments

Figure: S&P 500 Stock Price Index

Line chart, by log scale where November 1, 2011 = 100, 2010 to 2012. Data are daily. There is a vertical line at June 2012 representing the June FOMC. The series begins in January 2010 at about 94 and generally increases to about 110 by March 2011. It decreases to about 90 by August 2011 and then increases to about 117 by February 2012. It ends in June 2012 at about 109.

Source: Bloomberg.

Figure: Equity Risk Premium

Line chart, by percent, 1992 to 2012. Data are monthly. There is a vertical line at June 2012 representing the June FOMC. There are two series, Expected 10-year real equity return and Expected real yield on 10-year Treasury. Expected 10-year real equity return begins in 1992 at about 7.9 and generally decreases to about 2.2 by 2000. It generally increases to about 12 by 2008 and then decreases to about 9 by June 2012. Expected real yield on 10-year Treasury begins in 1992 at about 4.2 and generally decreases to about 2.2 by 1999. It then decreases to about 0.75 by June 2012.

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

Source: Thomson Financial.

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

Line chart, by percent, log scale, 2007 to 2012. Data are daily. There is a vertical line at June 2012 representing the June FOMC. The series begins in 2007 at about 7 and generally increases to about 80 by 2012. It decreases to about 17 by 2010 and then increases to about 50 by 2011. It then ends in June 2012 at about 25.

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

Source: Chicago Board Options Exchange.

Figure: Revisions to S&P 500 Earnings per Share

Line chart, by percent, 1997 to 2012. Data are monthly. There is a horizontal line at zero. The series begins in 1997 at about 0 and generally decreases to about -6 by 2002. It decreases to about -13 by 2009 and then generally increases to end at about -1 by 2012:Q1.

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

Source: Thomson Financial.

Figure: Corporate Bond Spreads

Line chart, by basis points, 2007 to 2012. Data are daily. There is a vertical line at June 2012 representing the June FOMC. There are two series, 10-year high-yield (right scale) and 10-year BBB (left scale). 10-year high-yield begins in 2007 at about 260 and generally increases to about 1650 by 2008. It then generally decrease to about 600 by June 2012. 10-year BBB begins in 2007 at about 125 and generally increases to about 640 by 2008. It generally decreases to about 175 by 2010 and then increases to about 300 by June 2012.

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

Source: Merrill Lynch and staff estimates.

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

Line chart, by basis points, 2009 to 2012. Data are 5-day moving averages. There is a vertical line at June 2012 representing the June FOMC. The series begins in March 2009 at about 95 and generally decreases to about 15 by March 2010. It then generally increases to about 35 by June 2012.

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

Source: Depository Trust & Clearing Corporation.

Business Finance

Figure: Financial Ratios for Nonfinancial Corporations

Line chart, by ratio, 1992 to 2012. There are two series, Debt over total assets (left scale) and Liquid assets over total assets (right scale). Debt over total assets begins in 1992 at about 0.33 and generally decreases to about 0.275 by 1996. It generally increases to about 0.3 by 2001 and then decreases to about 0.24 by 2004. It increases to about 0.285 by 2008 and then decreases to about 0.255 by 2012:Q1 preliminary. Liquid assets over total assets begins in 1992 at about 0.055 and generally increases to about 0.1 by 2004. It decreases to about 0.089 by 2008 and then increases to about 0.109 by 2012:Q1 preliminary.

Note: Data are annual through 1999 and quarterly thereafter.

Source: Compustat.

Figure: Bond Ratings Changes of Nonfinancial Firms

Bar chart, by percent of outstandings, 1991 to 2012. Data are annual rate. There is a horizontal line at zero. There are two series, Upgrades and Downgrades. Upgrades begins in 1991 at about 10 and generally increases to about 20 by 1994. It decreases to about 5 by 2003 and then increases to about 10 by 2006. It increases to about 19 by May 2012. Downgrades begins in 1991 at about -33 and generally decreases to about -43 by 1992. It then increases to about -10 by 1997 and then decreases to about -38 by 2003. It increases to about -15 by 2008 and then increases to about -5 by May 2012.

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

Figure: Selected Components of Net Debt Financing, Nonfinancial Firms

Bar chart, by billions of dollars, 2008 to 2012. Data are monthly rate. There are three series, C&I loans, Commercial paper, and Bonds. There is also a Total series presented as a line chart. The approximate values are: 2008: Bonds 18, C&I loans 28, Commercial paper 29, Total 29; 2009: Bonds 30, C&I loans -25, Commercial paper -30, Total 0; 2010: Bonds 31, C&I loans -5, Commercial paper 32, Total 29; 2011:H1: Bonds 31, C&I loans 40, Commercial paper 42, Total 42; 2011:H2: Bonds 27, C&I loans 40, Commercial paper 42, Total 42; 2012:Q1: Bonds: 40, C&I loans 50, Commercial paper 0; Total 50; 2012:Q2 : Bonds 18, C&I loans 30, Commercial paper 38, Total 38; July 2012: Bonds 35, C&I loans 43, Commercial paper -10, Total 43.

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

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

Figure: Gross Issuance of Institutional Leveraged Loans

Bar chart, by billions of dollars, 2008 to 2012. Data are monthly rate. The series begins in 2008 at about 5 and decreases to about 4 by 2009. It increases to about 18 by 2010 and then increases to about 34 by 2011:H1. It decreases to about 10 by 2011:H2 and then increase to about 20 by 2012:Q1 and 23 by 2012:Q2.

Source: Reuters Loan Pricing Corporation.

Figure: Selected Components of Net Equity Issuance, Nonfinancial Firms

Bar chart, by billions of dollars, 2008 to 2012. There is a horizontal line at zero. There are four series, Public issuance, Private issuance, Repurchases, and Cash mergers. There is also a Total series presented as a line chart. The approximate values are: 2008: Public issuance 25, Private issuance 24, Repurchases -26, Cash mergers -49, Total -24; 2009: Public issuance 20, Private issuance 18, Repurchases -15, Cash mergers -25, Total -1; 2010: Public issuance 19, Private issuance 15, Repurchases -25, Cash mergers -30, Total -25; 2011:H1: Public issuance 20, Private issuance 15, Repurchases -27, Cash mergers -40, Total -27; 2011:H2: Public issuance 17, Private issuance 15, Repurchases -30, Cash mergers -52, Total -34; 2012:Q1 estimate: Public issuance 20, Private issuance 15, Repurchases -32, Cash mergers -48, Total -31.

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

Figure: CMBS Issuance

Bar chart, by billions of dollars, 2007 to 2012. Data are annual rate. There is a horizontal line at zero. The series begins in 2007 at about 230 and decreases in 2008 at about 12 and decreases to about 2 by 2009. It increases to about 10 in 2010 and then increases to about 32 by 2011:H1. It decreases to about 28 by 2011:H2 and then decreases to about 17 by 2012:Q1. It increases to about 40 by 2012:Q2.

Source: Commercial Mortgage Alert.

Household Finance

Figure: Mortgage Rate and MBS Yield

Line chart, by percent, 2007 to 2012. There is a vertical line at June 2012 representing the June FOMC. There are two series, 30-year conforming fixed mortgage rate and MBS yield. 30-year conforming fixed mortgage rate begins in 2007 at about 6.3 and generally decreases to about 3.6 by June 2012. MBS yield begins in 2007 at about 5.65 and generally decreases to about 3.6 by 2008 and then generally decreases to about 2.6 by June 2012.

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

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

Figure: Refinance Activity

Line chart, by log scale where March 16, 1990 = 100, 2002 to 2012. Data are weekly. There is a vertical line at June 2012 marking the June FOMC. The series begins in 2002 at about 1900 and generally increases to about 10,600 by 2003. It generally decreases to about 2000 by 2006 and then increases to about 6000 by 2009. It decrease to about 2000 by 2010 and then generally increases to about 5,300 by June 2012.

Note: Seasonally adjusted by FRB staff.

Source: Mortgage Bankers Association.

Figure: Prices of Existing Homes

Line chart, by index peak normalized to 100, 2005 to 2012. Data are monthly. The series begins in 2005 at about 86 and generally increases to about 100 by 2006. It generally decreases to about 73 by 2009 and then decrease to

about 70 by May 2012.

Source: CoreLogic.

Figure: Delinquencies on Prime Mortgages, Transition Rate

Line chart, by percent of loans, 2004 to 2012. There are two series, 3-month moving average and Monthly rate. 3-month moving average begins in 2004 at about 1.2 and generally decreases to about 0.82 by 2006. It generally increases to about 1.48 by 2009 and then decreases to about 1.05 by April 2012. Monthly rate begins in 2004 at about 1.08 and generally decreases to about 0.8 by 2006. It generally increases to about 1.77 by 2009 and then generally decreases to about 0.9 by May 2012.

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

Source: LPS Applied Analytics.

Figure: Consumer Credit

Line chart, by percent change, annual rate, 2004 to 2012. There is a horizontal line at zero. Data are 3-month moving averages. There are two series, Nonrevolving and Revolving. Nonrevolving begins in 2004 at about 5 and generally decrease to about -4 by 2008. It generally increases to about 12 by 2011 and then decreases to about 8 by May 2012. Revolving begins in 2004 at about 3 and generally increases to about 11 by 2007. It generally decreases to about -14 by 2010 and then increases to about 4 by May 2012.

Source: Federal Reserve Board.

Figure: Gross Consumer ABS Issuance

Bar chart, by billions of dollars, 2007 to 2012. Data are monthly. There are three series, Student loan, Credit card, and Auto. The approximate values are: 2007: Student loan 19, Credit card 14, Auto 6.5; 2008: Student loan 11, Credit card 8, Auto 3; 2009: Student loan: 11, Credit card 9, Auto 4.5; 2010: Student loan 6, Credit card 5, Auto 4.5; 2011: Student Loan 7, Credit card 6, Auto 5; 2012:Q1: Student loan 9, Credit card 8, Auto 7; 2012:A Student loan 13, Credit card 12; Auto 10; 2012:Q2: Student loan 9, Credit card 4.5, Auto 3; 2012:J: Student loan 7, Credit card 1, Auto 4.

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

Commercial Banking and Money

Figure: Changes in Bank Credit

Line chart, by percent, 2005 to 2012. Data are 3-month change, a.r. There is a horizontal line at zero. There are two series, Total bank credit and C&I loans. Total bank credit begins in 2005 at about 10 and generally decreases to about -10 by 2009. It then generally increases to about 3 by June 2012. C&I loans begins in 2005 at about 12 and generally increases to about 28 by 2007. It decreases to about -27 by 2009 and then increases to about 11 by June 2012.

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

Source: Federal Reserve Board.

Figure: Weighted Changes in Standards and Demand across All Loan Categories

Line chart, by net percent, 1990 to 2012. Data are quarterly. There is a horizontal line at zero. There is a vertical line marking the April survey. There are two series, Standards and Demands. Standards begins in 1990 at about 38 and generally decreases to about -10 by 1994. It generally increases to about 44 by 2002 and then generally decrease to about -20. It increase to about 93 by 2008 and then generally decreases to about -5 by 2012. Demand begins in 1991 -25 and generally increases to about 40 by 1998. It decreases to about -40 by 2001 and then increases to about 35 by 2005. It generally decreases to about -58 by 2008 and then increases to about 22 by

2012.

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

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

Figure: Spreads of C&I Loan Rates over Cost of Funds

Line chart, by net percent, 1991 to 2011. Data are quarterly. There is a horizontal line at zero. There is a vertical line marking the April survey. There are two series, Large/middle-market firms and Small firms. Large/middle-market firms begins in 1991 at about 10 and generally increases to about 60 by 2000. It generally decreases to about -65 by 2004 and then increases to about 100 by 2008. It then generally decreases to about -60 by 2012. Small firms begins in 1991 at about 11 and generally increases to about 40 by 2001. It generally decreases to about -45 by 2004. It increases to about 100 by 2008 and then generally decreases to about -40 by 2012.

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

Figure: Level of Standards on Select Loans

Stacked bar chart, by percent of respondents from Syndicated non-investment grade, small firms, Prime conforming mortgages, credit card prime, and credit card subprime. There are seven series, Tightest, Significantly tighter, somewhat tighter, midpoint, easiest, significantly easier, and somewhat easier. Significantly easier at about 25, Midpoint at 75, Somewhat tighter at about 90 and significantly tight at 100 in Syndicated non-investment grade. Significantly easier at about 25, Midpoint at 80, and Somewhat tighter at about 100 in small firms. Midpoint at about 10, Somewhat tighter at about 35, significantly tighter at about 85, and tightest at about 100 in prime conforming mortgages. Midpoint at about 50 and significantly tighter at about 50 in credit card prime. Midpoint at about 45, somewhat tighter at about 60, and significantly tighter at 100 in credit card subprime

Note: Banks were asked to describe their current level of standards in relation to the midpoint of the range of standards at their bank between 2005 and the present. Responses weighted by survey respondents' holdings of relevant loan types, as reported on the March 31, 2012, Call Report.

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

Growth of M2 and Its Components

Percent, s.a.a.r.

	M2	Liquid deposits	Small time deposits	Retail MMFs	Curr.
2011	9.7	15.4	-18.5	-2.1	8.8
2012:H1	6.9	10.4	-16.5	-7.2	9.4
2012:Q2	4.9	7.8	-19.3	-4.7	8.0
May	4.3	6.8	-19.8	1.3	5.1
June(p)	5.7	8.3	-16.7	-0.9	6.8
July(e)	6.2	9.4	-19.9	-4.5	7.2

Note: Retail MMFs are retail money market funds.

p Preliminary. [Return to table](#)

e Estimate. [Return to table](#)

Source: Federal Reserve Board.

Figure: Level of Liquid Deposits

Line chart, by trillions of dollars, 2008 to 2012. Data are weekly. There is a vertical line at June 2012 representing the June FOMC. The series begins in 2008 at about 4.5 and generally increases to about 7.7 by July 16, 2012.

Note: Seasonally adjusted.

Source: Federal Reserve Board.

Note: The shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research: July 1990-March 1991, March 2001-November 2001, and December 2007-June 2009.

[Box:] Balance Sheet Developments over the Intermeeting Period

Federal Reserve Balance Sheet

Billions of dollars

	Change since last FOMC	Current (07/23/12)
Total assets	-10	2,856
Selected assets:		
Liquidity programs for financial firms	3	27
Primary, secondary, and seasonal credit	+0	+0
Foreign central bank liquidity swaps	3	27
Term Asset-Backed Securities Loan Facility (TALF)	-2	4
Net portfolio holdings of Maiden Lane LLCs	-7	8
Maiden Lane	-1	2
Maiden Lane II	-0	+0
Maiden Lane III	-6	6
Securities held outright*	-14	2,603
U.S. Treasury securities	-17	1,645
Agency debt securities	-1	91
Agency mortgage-backed securities	4	867
Total liabilities	-10	2,801
Selected liabilities:		
Federal Reserve notes in circulation	2	1,068
Reverse repurchase agreements	1	84
Foreign official and international accounts	1	84
Others	0	0
Reserve balances of depository institutions**	82	1,550
Term deposits held by depository institutions	3	3
U.S. Treasury, General Account	-91	48
U.S. Treasury, Supplementary Financing Account	0	0
Other deposits	-0	30
Total capital	+0	55

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

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

** Includes required clearing balances through July 11, 2012. Also includes overdrafts and excludes as-of adjustments. [Return to table](#)

Appendix Senior Loan Officer Opinion Survey on Bank Lending Practices

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

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

Line chart, 1990 to 2012. Unit is percent. The April survey is marked by a vertical line and there is a horizontal line at zero. There are two series, "Loans to large and medium-sized firms" and "Loans to small firms." Loans to large and medium-sized firms begins at about 60 and generally decreases to about -20 in 1993:Q3. It fluctuates but generally increases to about 60 in 2001:Q1. It generally decreases to about -20 in 2004:Q2 then generally increases to about 85 in 2009:Q1. It generally decreases ending at about -10. Loans to small firms begins at about 75 in 1990:Q2 and generally decreases to about -20 in 1993:Q3. It generally increases to about 40 in 2001:Q1 then generally decreases to about -20 in 2005:Q2. It generally increases to about 75 in 2009:Q1 then generally decreases ending at about -5.

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

Line chart, 1990 to 2012. Unit is percent. The April survey is marked by a vertical line and there is a horizontal line at zero. There are two series, "Loans to large and medium-sized firms" and "Loans to small firms." Loans to large and medium sized firms begins at about 10 and generally increases to about 60 in 1991:Q1. It generally decreases to about -60 in 1993:Q4. It fluctuates but generally increases to about 60 in 2002:Q1 then generally decreases to about -75 in 2005:Q2. It generally increases to about 100 in 2008:Q4 then generally decreases ending at about -60. Loans to small firms begins at about 10 and generally increases to about 40 in 1991:Q1. It generally decreases to about -40 in 1997:Q4 then generally increases to about 40 in 2001:Q4 then generally decreases to about -60 in 2005:Q2. It generally increases to about 95 in 2008:Q4 then generally decreases ending at about -40.

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

Line chart, 1990 to 2012. Unit is percent. The April survey is marked by a vertical line and there is a horizontal line at zero. There are two series, "Loans to large and medium-sized firms" and "Loans to small firms." Loans to large and medium-sized firms begins at about -30 and generally increases to about 35 in 1994:Q2. It fluctuates but generally decreases to about -75 in 2001:Q4 then generally increases to about 40 in 2005:Q1. It generally decreases to about -60 in 2009:Q1 then generally increases to about 30 in 2011:Q1. It generally decreases ending at about 20. Loans to small firms begins at about -30 and generally increases to about 35 in 1994:Q2. It generally decreases to about -50 in 2001:Q4 then generally increases to about 40 in 2004:Q1. It generally decreases to about -60 in 2009:Q2. It generally increases ending at about 5.

Level of Standards on Loans to Businesses*

Figure: Commercial and Industrial Loans at Domestic Banks

Stacked bar chart. Unit is percent of respondents. There are seven series, Tightest, Significantly tighter, somewhat tighter, midpoint, easiest, significantly easier, and somewhat easier. Approximate values are: 2011 Syndicated

investment-grade: significantly easier 5, somewhat easier 25, midpoint 80, somewhat tighter 90, and significantly tighter 100. 2012 Syndicated investment-grade: significantly easier 10, somewhat easier 20, midpoint 85, and somewhat tighter 100. 2011 Syndicated non-investment-grade: significantly easier 10, somewhat easier 30, midpoint 75, somewhat tighter 80, and significantly tighter 100. 2012 Syndicated non-investment-grade: somewhat easier 25, midpoint 75, somewhat tighter 90, significantly tighter 95, and tightest 100. 2011 Nonsyndicated large: somewhat easier 20, midpoint 75, somewhat tighter 90, and significantly tighter 100. 2012 Nonsyndicated large: somewhat easier 10, midpoint 85, and somewhat tighter 100. 2011 Nonsyndicated small: somewhat easier 20, midpoint 80, somewhat tighter 90, and significantly tighter 100. 2012 Nonsyndicated small: somewhat easier 25, midpoint 75, and somewhat tighter 100.

Note: Banks were asked to describe their current level of standards in relation to the midpoint of the range of standards at their bank between 2005 and the present. Responses are weighted by survey respondents' holdings of relevant loan types, as reported on the March 31, 2011 and 2012, Call Reports where relevant.

Figure: Commercial and Industrial Loans at Foreign Banks

Stacked bar chart. Unit is percent of respondents. There are seven series, Tightest, Significantly tighter, somewhat tighter, midpoint, easiest, significantly easier, and somewhat easier. Approximate values are: 2011 Syndicated investment-grade: easiest 5, significantly easier 25, somewhat easier 40, midpoint 70, somewhat tighter 80, and significantly tighter 100. 2012 Syndicated investment-grade: somewhat easier 40, midpoint 80, somewhat tighter 95, and tightest 100. 2011 Syndicated non-investment-grade: significantly easier 10, somewhat easier 25, midpoint 60, somewhat tighter 80, and significantly tighter 100. 2012 Syndicated non-investment-grade: somewhat easier 30, midpoint 55, somewhat tighter 90, significantly tighter 95, and tightest 100. 2011 Nonsyndicated large: somewhat easier 5, significantly easier 10, midpoint 75, somewhat tighter 80, and significantly tighter 85, tightest 100. 2012 Nonsyndicated large: midpoint 70, somewhat tighter 80, significantly tighter 95, and tightest 100.

Note: Banks were asked to describe their current level of standards in relation to the midpoint of the range of standards at their bank between 2005 and the present. Responses are weighted by survey respondents' holdings of relevant loan types, as reported on the March 31, 2011 and 2012, FFIEC 002 where relevant.

Figure: Commercial Real Estate Loans at Domestic Banks

Stacked bar chart. Unit is percent of respondents. There are seven series, Tightest, Significantly tighter, somewhat tighter, midpoint, easiest, significantly easier, and somewhat easier. Approximate values are: 2011 Construction and land development: midpoint 50, somewhat tighter 55, and significantly tighter 80 and tightest 100. 2012 Construction and land development: somewhat easier 20, midpoint 25, somewhat tighter 55, significantly tighter 80, and tightest 100. 2011 nonfarm nonresidential: significantly easier 2, somewhat easier 10, midpoint 60, somewhat tighter 70, and significantly tighter 90 and tightest 100. 2012 nonfarm nonresidential: significantly easier 25, midpoint 60, somewhat tighter 80, and significantly tighter 100. 2011 Multifamily: somewhat easier 5, significantly easier 10, midpoint 45, somewhat tighter 55, and significantly tighter 100. 2012 Multifamily: significantly easier 15, somewhat easier 25, midpoint 50, somewhat tighter 95, and tightest 100.

Note: Banks were asked to describe their current level of standards in relation to the midpoint of the range of standards at their bank between 2005 and the present. Responses are weighted by survey respondents' holdings of relevant loan types, as reported on the March 31, 2011 and 2012, Call Reports where relevant.

* Relative to their range from 2005 to the present. [Return to text](#)

Special Questions on Lending to and Competition from European Banks

Figure: Changes in Standards and Terms for Lending to European Banks

Bar chart, by net percent, Data are tightening when above zero and easing when below zero. There are four series, 2011:Q4, 2012:Q1, 2012: Q2, and 2012:Q3. Approximate values are Domestic respondents: 2011:Q4 68, 2012:Q1 58, 2012:Q2 30, and 2012:Q3 64. Foreign respondents: 2011:Q4 56, 2012:Q1 71, 2012:Q2 18, and 2012:Q3 43.

Note: Includes affiliates and subsidiaries.

Figure: Changes in Loan Demand by European Banks

Bar chart, by net percent, Data are strengthening when above zero and weakening when below zero. There are four series, 2011:Q4, 2012:Q1, 2012: Q2, and 2012:Q3. Approximate values are Domestic respondents: 2011:Q4 -12, 2012:Q1 4, 2012:Q2 -4, and 2012:Q3 5. Foreign respondents: 2011:Q4 13, 2012:Q1 7, 2012:Q2 -12, and 2012:Q3 -7.

Note: Includes affiliates and subsidiaries.

Figure: Increase in Domestic Bank Business from Decreased Competition from European Banks

Stacked bar chart, by percent of respondents. There are four series, Increased a considerable amount, Increased to some extent, No appreciable increase, and No decrease in competition. Approximate values are: 2012:Q1: No decrease 10, No appreciable 50, Increased to some 95, Increased a considerable 100. 2012:Q2: No decrease 20, No appreciable 35, Increased to some 100. 2012:Q3: No decrease 5, No appreciable 45, Increased to some 100.

Note: Responses are weighted by survey respondents' holdings of C&I loans.

Figure: Willingness to Accommodate Business (in the second half of 2012) arising from European Banks

Stacked bar chart, by percent of respondents. There are three series, not willing at about 20, somewhat willing at about 70, and very willing at about 100.

Figure: Portion of Recent C&I Loans Attributable to Purchases from European Banks

Stacked bar chart, by percent of respondents. There are three series, none at all at about 55, A small portion at about 80, and A moderate portion at about 100.

Note: "Recent" means over the first six months of 2012, if outstanding C&I loans have increased over that time period. Responses are weighted by survey respondents' holdings of C&I loans.

Measures of Supply and Demand for Commercial Real Estate Loans

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

Line chart, 1990 to 2012. Unit is percent. The April 2012 survey is marked by a vertical line. The series begins at about 70 and generally decreases to about -5 in 1994:Q2. It generally increases to about 45 in 1999:Q1 then generally decreases to about 10 in 1999:Q2. It generally increases to about 45 in 2002:Q1 then generally decreases to about -20 in 2005:Q1. It generally increases to about 90 in 2009:Q1 then generally decreases ending at about -10.

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

Line chart, 1990 to 2012. Unit is percent. The April 2012 survey is marked by a vertical line. The series begins at about 10 in 1995:Q1 and generally decreases to about 0 in 1995:Q4. It fluctuates but generally decreases to about -55 in 2001:Q4 then generally increases to about 20 in 2005:Q1. It generally decreases to about -65 in 2009:Q2 then generally increases to about 35 in 2011:Q2. It generally increases ending at about 25.

Special Questions on Residential Real Estate Lending

Figure: Proportion of Refinance Applications Attributable to HARP 2.0

Stacked bar chart, by percent of respondents. There are five series, Little participation at about 10, Less than 10% at about 5, Between 10% and 30% at about 45, Between 30% and 50% at about 80, and Between 50% and 70% at about 100.

Note: Responses are weighted by survey respondents' holdings of residential real estate loans (excluding multifamily loans and HELOCs).

Figure: Share of HARP 2.0 Applications Anticipated to Be Completed

Stacked bar chart, by percent of respondents. There are six series, More than 80%, Between 60% and 80%, Between 40% and 60%, Between 20% and 40%, Less than 20%, and Little participation. Approximate values are: 2012:Q2 Little participation at about 20, Between 40% and 60% at about 5, Between 60% and 80% at about 50, and More than 80% at about 100. 2012:Q3: Little participation at about 10, Between 20% and 40% at about 5, Between 40% and 60% at about 35, Between 60% and 80% at about 85, and More than 80% at about 100.

Note: Responses are weighted by survey respondents' holdings of residential real estate loans (excluding multifamily loans and HELOCs).

Figure: Factors Affecting Willingness or Ability to Offer Refinance Loans through HARP 2.0

Stacked bar chart, by percent of respondents. There are four series, The most important, Very important, Somewhat important, and Not important. Approximate values are: High LTV ratios: Not important 50, Somewhat important 85, Very important 95, and the most important 100. Low FICO scores: Not important 55, Somewhat important 90, Very important 95, and the most important 100. Documentation of income / assets: Not important 80, Somewhat important 90, very important 96, and the most important 100. Restrict to mortgages already serviced or held: Not important 25, somewhat important 45, Very important 75, and the most important 100. High volume exceeds capacity: Not important at about 20, Somewhat important 35, Very important 60, the most important at about 100.

Note: Responses are weighted by survey respondents' holdings of residential real estate loans (excluding multifamily loans and HELOCs).

Measures of Supply and Demand for Residential Mortgage Loans

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

Line chart, 1990 to 2006. Unit is percent. Data are all residential. The series begins at about 10 and generally increases to about 35 in 1991:Q1. It generally decreases to about -15 in 1993:Q4 then generally increases to about 15 in 2003:Q1. It fluctuates but generally decreases to about -10 in 2006:Q4 then generally increases ending at about 20. There is a second panel, a line chart from 2007 to 2011. Unit is percent. There are three series, "Prime," "Nontraditional," and "Subprime." Prime begins at about 18 and generally increases to about 75 in 2008:Q3 then generally decreases to about -10 in 2010:Q3. It generally increases to about 10 in 2010:Q4 then generally decreases ending at about 1. Nontraditional begins at about 40 and generally increases to about 90 in 2009:Q1. It generally decreases to about 5 in 2010:Q1 then generally increases to about 15 in 2011:Q1. It generally decreases ending at about 1. Subprime begins at about 55 and generally increases to about 100 in 2009:Q1. It generally decreases ending at about 45 in 2009:Q2.

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

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

Line chart, 1990 to 2006. Unit is percent. Data are all residential. The series begins at about -50 and generally increases to about 60 in 1991:Q1. It fluctuates but generally decreases to about -80 in 1995:Q1. It fluctuates but generally increases to about 60 in 1998:Q3 then generally decreases to about -70 in 2000:Q1. It fluctuates but generally increases to about 45 in 2003:Q4 then generally decreases to about -40 in 2004:Q1. It generally increases to about 20 in 2005:Q4 then generally decreases to about -60 in 2006:Q4. It generally increases ending at about -35. There is a second panel, a line chart from 2007 to 2011. Unit is percent. There are three series, "Prime," "Nontraditional," and "Subprime." Prime begins at about -20 and generally increases to about -10 in 2007:Q4. It generally decreases to about -60 in 2008:Q1 then generally increases to about -25 in 2008:Q2. It generally decreases to about -55 in 2008:Q4 then generally increases to about 40 in 2009:Q1. It generally decreases to about -35 in 2011:Q2 then generally increases ending at about 0. Nontraditional begins at about -20 and generally

decreases to about -75 in 2007:Q4. It generally increases to about -25 in 2008:Q2 then generally decreases to about -75 in 2008:Q4. It fluctuates but generally increases to about 0 in 2010:Q4. It generally decreases to about -20 in 2011:Q2 then generally increases ending at about -10. Subprime begins at about -20 and generally decreases to about -70 in 2008:Q1. It generally increases to about -25 in 2008:Q3. It generally decreases to about -100 in 2008:Q4 then generally increases ending at about -55 in 2009:Q1.

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

Measures of Supply and Demand for Consumer Loans

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

Line chart, 1990 to 2011. Unit is percent. There are two series, "Credit Card Loans" and "Other Consumer Loans." Credit card loans begins at about 20 and generally increases to about 40 in 1996:Q4. It generally decreases to about 0 in 2000:Q4 then generally increases to about 20 in 2001:Q1. It generally decreases to about -15 in 2007:Q2 then generally increases to about 60 in 2008:Q2. It generally decreases ending at about -10. Other consumer loans begins at about 10 and generally decreases to about 0 in 1999:Q1. It generally increases to about 20 in 2001:Q4 then generally decreases to about -10 in 2005:Q2. It generally increases to about 70 in 2008:Q1 then generally decreases to about -15 in 2010:Q3. It generally increases ending at about 0. There is a second panel, a line chart from 2011:Q2 to 2012:Q3. Unit is percent. There are three series, "Credit card loans," "Auto Loans," and "Other consumer loans." Credit card loans begins at about -20 and generally increases ending at about -10. Auto loans begins at about -15 and generally decreases ending at about -20. Other consumer loans begins at about -5 and generally decreases ending at about -10.

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

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

Line chart, 1990 to 2012. Unit is percent. There is a vertical line at the April 2012 survey. The series begins at about 10 and generally decreases to about -15 in 1991:Q1. It generally increases to about 25 in 1994:Q1 then generally decreases to about -5 in 1996:Q2. It generally increases to about 15 in 1999:Q3 then generally decreases to about -10 in 2001:Q1. It generally increases to about 20 in 2005:Q4 then generally decreases to about -60 in 2008:Q4. It generally increases ending at about 20 in 2012:Q3.

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

Line chart, 1990 to 2011. Unit is percent. Data are all consumer loans. The series begins at about -40 and generally increases to about 40 in 1994:Q1. It fluctuates but generally decreases to about -40 in 2001:Q1. It fluctuates but generally increases to about 40 in 2003:Q3 then fluctuates but generally decreases to about -60 in 2009:Q1. It generally increases ending at about 10 in 2011:Q1. There is a second panel, a line chart from 2011:Q2 to 2012:Q3. Unit is percent. There are three series, "Credit card loans," "Auto Loans," and "Other Consumer Loans." Credit card loans begins at about -1 and generally increases ending at about 2. Auto loans begins at about 25 and generally increases ending at about 40. Other consumer loans begins at about 0 and remains about constant to increase to end at about 2 in 2012:Q3.

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

Level of Standards on Loans to Households at Domestic Banks*

Figure: Residential Real Estate Loans

Stacked bar chart. Unit is percent of respondents. There are seven series, Tightest, Significantly tighter, somewhat

tighter, midpoint, easiest, significantly easier, and somewhat easier. Approximate values are: 2011 Prime conforming: Significantly easier 5, midpoint 15, somewhat tighter 55, significantly tighter 70 and tightest 100. 2012 Prime conforming: midpoint 15, somewhat tighter 30, significantly tighter 80, and tightest 100. 2011 Prime jumbo: Significantly easier 5, midpoint 15, somewhat tighter 55, significantly tighter 65, and tightest 100. 2012 Prime jumbo: midpoint 15, somewhat tighter 30, significantly tighter 80, and tightest 100. 2011 Nontraditional: somewhat easier 5, significantly easier 10, midpoint 20, somewhat tighter 25, significantly tighter 60, and tightest 100. 2012 Nontraditional: midpoint 5, somewhat tighter 30, significantly tighter 60 and tightest 100. 2011 Home equity lines of credit: Significantly easier 5, midpoint 15, somewhat tighter 25, significantly tighter 75, and tightest 100. 2012 Home equity lines of credit: midpoint 10, somewhat tighter 30, significantly tighter 90, and tightest 100.

Note: Banks were asked to describe their current level of standards in relation to the midpoint of the range of standards at their bank between 2005 and the present. Responses are weighted by survey respondents' holdings of relevant loan types, as reported on the March 31, 2011 and 2012, Call Reports where relevant.

Figure: Consumer Loans

Stacked bar chart. Unit is percent of respondents. There are seven series, Tightest, Significantly tighter, somewhat tighter, midpoint, easiest, significantly easier, and somewhat easier. Approximate values are: 2011 Credit card: midpoint 15, somewhat tighter 17, and significantly tighter 100. 2012 Prime: significantly easier 2, midpoint 50, and significantly tighter 100. 2012 subprime: midpoint 50, somewhat tighter 60, significantly tighter 95, and tightest 100. 2011 Auto: somewhat easier 25, midpoint 50, somewhat tighter 55, and significantly tighter 100. 2012 Auto: Somewhat easier 10, midpoint 25, somewhat tighter 80, and significantly tighter 100. 2011 Other consumer: significantly easier 10, midpoint 15, somewhat tighter 25, and significantly tighter 100. 2012 Other consumer: somewhat easier 10, midpoint 25, somewhat tighter 60, significantly tighter 95, and tightest 100.

Note: Banks were asked to describe their current level of standards in relation to the midpoint of the range of standards at their bank between 2005 and the present. Responses are weighted by survey respondents' holdings of relevant loan types, as reported on the March 31, 2011 and 2012, Call Reports where relevant.

* Relative to their range from 2005 to the present. [Return to text](#)

Risks and Uncertainty

Alternative Scenarios

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

Measure and scenario	2012		2013	2014	2015	2016-17
	H1	H2				
<i>Real GDP</i>						
Extended Tealbook baseline	1.4	1.6	2.1	3.2	3.6	3.3
Fiscal cliff	1.4	1.6	.9	2.4	3.8	4.2
Faster recovery	1.4	2.6	4.1	3.4	2.7	2.6
Damaged labor market	1.4	1.4	2.0	2.7	2.9	2.4
Disinflation	1.4	1.6	1.8	2.6	3.3	3.8
European crisis with severe spillovers	1.4	-2.7	-3.3	2.1	4.5	4.4
Hard landing in China	1.4	1.1	1.2	2.9	3.9	3.7
<i>Unemployment rate¹</i>						

Extended Tealbook baseline	8.2	8.3	8.1	7.8	7.2	5.9
Fiscal cliff	8.2	8.3	8.6	8.8	8.3	6.0
Faster recovery	8.2	8.2	7.1	6.4	6.2	5.9
Damaged labor market	8.2	8.3	8.3	8.1	7.9	7.5
Disinflation	8.2	8.3	8.2	8.2	7.8	6.0
European crisis with severe spillovers	8.2	8.8	10.8	11.2	10.2	7.9
Hard landing in China	8.2	8.4	8.5	8.4	7.8	6.2
<i>Total PCE prices</i>						
Extended Tealbook baseline	1.7	1.1	1.5	1.4	1.6	1.7
Fiscal cliff	1.7	1.1	1.5	1.2	1.2	1.3
Faster recovery	1.7	1.1	1.6	1.6	2.0	2.1
Damaged labor market	1.7	1.2	1.8	1.9	2.3	2.4
Disinflation	1.7	.9	1.1	.6	.5	.4
European crisis with severe spillovers	1.7	-1.1	-6	.8	1.8	2.1
Hard landing in China	1.7	.5	.7	.9	1.4	1.8
<i>Core PCE prices</i>						
Extended Tealbook baseline	2.1	1.5	1.6	1.6	1.7	1.8
Fiscal cliff	2.1	1.5	1.6	1.4	1.3	1.4
Faster recovery	2.1	1.5	1.7	1.8	2.1	2.2
Damaged labor market	2.1	1.6	1.9	2.1	2.4	2.5
Disinflation	2.1	1.3	1.2	.8	.6	.5
European crisis with severe spillovers	2.1	.6	.3	.9	1.6	2.0
Hard landing in China	2.1	1.3	1.2	1.2	1.5	1.8
<i>Federal funds rate¹</i>						
Extended Tealbook baseline	.2	.1	.1	.4	1.5	3.3
Fiscal cliff	.2	.1	.1	.1	.2	3.0
Faster recovery	.2	.2	1.5	2.6	2.9	3.6
Damaged labor market	.2	.1	.4	1.6	3.1	4.5
Disinflation	.2	.1	.1	.1	.1	1.3
European crisis with severe spillovers	.2	.1	.1	.1	.1	1.2
Hard landing in China	.2	.1	.1	.1	.7	2.4

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

Forecast Confidence Intervals and Alternative Scenarios

Confidence Intervals Based on FRB/US Stochastic Simulations

Figure: Real GDP

Line chart, by 4-quarter percent change, 2008 to 2017. There is a horizontal line at zero. There are nine series, Extended Tealbook baseline, Fiscal cliff, Faster recovery, Damaged labor market, Disinflation, European crisis with severe spillovers, Hard landing in China, 90 percent interval, and 70 percent interval. Extended Tealbook baseline begins in 2008 at about 2 and generally decreases to about -5 by 2009. It increases to about 3.5 by 2010 and then generally decreases to about 1.5 by 2011. It then generally increases to about 3.2 by 2017. Fiscal cliff begins in 2012 at about 2 and generally decreases to about 1 by 2014. It then generally increases to about 4 by 2017. Faster recovery begins in 2012 at about 2 and generally increases to about 4 by 2013. It then generally decreases to about 2.6 by 2017. Damaged labor market begins in 2012 at about 2 and generally increases to about 3 by 2014. It then decreases to about 2.5 by 2017. Disinflation damage begins in 2012 at about 2 and generally increases to about 4 by 2017. European crisis with severe spillovers begins in 2012 at about 2 and generally decreases to about -4 by 2013. It then generally increases to about 4.95 by 2017. Hard landing in China begins in 2012 at about 2 and generally decreases to about 1 by 2013. It then generally increases to about 3.95 by 2017. The other two series closely track each other throughout the chart, with the 90 percent interval being about 1.2 less than and greater than the 70 percent interval. The 70 percent interval starts at about 0.75 and 3 and increase to between 1.3 and 5 by 2014. It ends in 2017 at about 1.5 and 5.25.

Figure: Unemployment Rate

Line chart, by percent, 2008 to 2017. There are nine series, Extended Tealbook baseline, Fiscal cliff, Faster recovery, Damaged labor market, Disinflation, European crisis with severe spillovers, Hard landing in China, 90 percent interval, and 70 percent interval. Extended Tealbook baseline begins in 2008 at about 5 and generally increases to about 10 by 2009. It then generally decreases to about 6 by 2017. Fiscal cliff begins in 2012 at about 8.25 and generally increases to about 8.6 by 2015. It then generally decreases to about 6 by 2017. Faster recovery begins in 2012 at about 8.25 and generally decreases to about 5.8 by 2017. Damaged labor market begins in 2012 at about 8.25 and generally decreases to about 7.5 by 2017. Disinflation begins in 2012 at about 8.25 and generally decreases to about 6 by 2017. European crisis with severe spillovers begins in 2012 at about 8.25 and generally increase to about 11.5 by 2014. It then decreases to about 8 by 2017. Hard landing in China begins in 2012 at about 8.25 and generally increases to about 8.5 by 2014. It then generally decreases to about 6.3 by 2017. The other two series closely track each other throughout the chart, with the 90 percent interval being about 1.1 less than and 2 greater than the 70 percent interval. The 70 percent interval starts in 2012 at about 8 and 8.25 and generally increases to about 6.5 and 8.75 by 2014. It ends in 2017 at about 5 and 7.1.

Figure: PCE Prices excluding Food and Energy

Line chart, by 4-quarter percent change, 2008 to 2017. There is a horizontal line at zero. There are nine series, Extended Tealbook baseline, Fiscal cliff, Faster recovery, Damaged labor market, Disinflation, European crisis with severe spillovers, Hard landing in China, 90 percent interval, and 70 percent interval. Extended Tealbook baseline begins in 2008 at about 2.35 and generally decreases to about 1 by 2010. It generally increases to about 2 by 2012 and then decreases to about 1.8 by 2017. Fiscal cliff begins in 2012 at about 2 and generally decreases to about 1.5 by 2017. Faster recovery begins in 2012 at about 2 and generally increases to about 2.25 by 2017. Damaged labor market begins in 2012 at about 2 and generally increases to about 2.5 by 2017. Disinflation begins in 2012 at about 2 and generally decreases to about 0.5 by 2017. European crisis with severe spillovers begins in 2012 at about 2 and generally decreases to about 0.2 by 2013. It then generally increases to about 2.1 by 2017. Hard landing in China begins in 2012 at about 2 and generally decreases to about 1.15 by 2013. It then generally increases to about 1.9 by 2017. The other two series closely track each other throughout the series, with the 90 percent interval being about 1 less than and greater than the 70 percent interval. The 70 percent interval begins in 2012 at about 1.5 and 2.25 and increases to about 0.8 and 2.5. It ends in 2017 at about 0.9 and 2.75.

Figure: Federal Funds Rate

Line chart, by percent, 2008 to 2017. There are nine series, Extended Tealbook baseline, Fiscal cliff, Faster recovery, Damaged labor market, Disinflation, European crisis with severe spillovers, Hard landing in China, 90 percent interval, and 70 percent interval. Extended Tealbook baseline begins in 2008 at about 3.1

and generally decreases to about 0.1 by 2009. It remains constant here until about 2014 when it begins increasing. It ends in 2017 at about 3.3. Fiscal cliff begins in 2012 at about 0.1 where it remains constant until about 2015 when it begins increasing. It ends in 2017 at about 3. Faster recovery begins in 2012 at about 0.1 and generally increases to about 3.75 by 2017. Damaged labor market begins in 2012 at about 0.1 where it remains constant until about 2013. It begins increasing and ends in 2017 at about 4.75. Disinflation begins in 2012 at about 0.1 where it remains constant until about 2014 when it begins increasing. It ends in 2017 at about 1. European crisis with severe spillovers begins in 2012 at about 0.1 where it remains constant until about 2016. It increases to about 1 by 2017. Hard landing in China begins in 2012 at about 0.1 where it remains constant until about 2015 when it begins increasing. It ends in 2017 at about 2.1. The other two series closely track each other throughout the series with the 90 percent interval being about 1.3 less than and greater than the 70 percent interval. The 70 percent interval begins in 2012 at about 0.1 and 0.5 and increases to about 0.1 and 3 by 2014. It ends in 2017 at about 1.3 and 5.2.

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

Measure	2012	2013	2014	2015	2016	2017
<i>Real GDP (percent change, Q4 to Q4)</i>						
Projection	1.5	2.1	3.2	3.6	3.5	3.1
Confidence interval						
Tealbook forecast errors	.2-2.8	.3-3.9	...	...	...	...
FRB/US stochastic simulations	.7-2.5	.6-3.9	1.2-4.8	1.5-5.3	1.5-5.6	1.2-5.2
<i>Civilian unemployment rate (percent, Q4)</i>						
Projection	8.3	8.1	7.8	7.2	6.5	5.9
Confidence interval						
Tealbook forecast errors	7.8-8.8	7.3-8.9	...	...	...	...
FRB/US stochastic simulations	8.0-8.6	7.2-8.9	6.7-9.0	6.1-8.5	5.5-7.8	4.9-7.1
<i>PCE prices, total (percent change, Q4 to Q4)</i>						
Projection	1.4	1.5	1.4	1.6	1.7	1.8
Confidence interval						
Tealbook forecast errors	.6-2.1	.3-2.7	...	...	...	...
FRB/US stochastic simulations	.8-2.0	.5-2.5	.2-2.5	.4-2.7	.5-2.8	.6-3.0
<i>PCE prices excluding food and energy (percent change, Q4 to Q4)</i>						
Projection	1.8	1.6	1.6	1.7	1.7	1.8
Confidence interval						
Tealbook forecast errors	1.3-2.3	.9-2.3	...	...	...	...
FRB/US stochastic simulations	1.4-2.2	.8-2.4	.7-2.4	.7-2.6	.8-2.7	.9-2.8
<i>Federal funds rate (percent, Q4)</i>						
Projection	.1	.1	.4	1.5	2.6	3.3
Confidence interval						

FRB/US stochastic simulations	.1-.5	.1-1.4	.1-2.6	.1-3.5	.7-4.5	1.4-5.3
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Note: Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1969-2009 set of model equation residuals.

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

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

Alternative Projections

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

Measure and projection	2012		2013		2014	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
<i>Real GDP</i>						
Staff	1.9	1.5	2.2	2.1	3.1	3.2
FRB/US	1.5	1.4	1.7	2.2	3.4	3.6
EDO	2.6	2.3	3.3	3.3	3.1	3.1
Blue Chip	2.1	2.0	2.6	2.5	...	...
<i>Unemployment rate¹</i>						
Staff	8.2	8.3	8.0	8.1	7.7	7.8
FRB/US	8.3	8.4	8.8	8.8	8.2	8.2
EDO	8.0	8.0	7.5	7.6	7.3	7.3
Blue Chip	8.0	8.1	7.6	7.7	...	...
<i>Total PCE prices</i>						
Staff	1.2	1.4	1.5	1.5	1.5	1.4
FRB/US	1.0	1.2	1.1	1.1	1.1	1.0
EDO	1.5	1.6	1.5	1.6	1.6	1.6
Blue Chip ²	2.0	1.7	2.2	2.2	...	...
<i>Core PCE prices</i>						
Staff	1.7	1.8	1.6	1.6	1.6	1.6
FRB/US	1.5	1.6	1.2	1.2	1.2	1.2
EDO	1.7	1.8	1.5	1.6	1.6	1.6
Blue Chip	...	...	...	...	...	...
<i>Federal funds rate¹</i>						
Staff	.1	.1	.1	.1	.5	.4
FRB/US	.0	.0	.0	.1	1.0	1.3
EDO	.6	.6	1.4	1.5	2.1	2.1
Blue Chip ³	.1	.1	.3	.3	...	...

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

1. Percent, average for Q4. [Return to table](#)

2. Consumer price index. [Return to table](#)

3. Treasury bill rate. [Return to table](#)

... Not applicable. The Blue Chip forecast typically extends about 2 years. [Return to table](#)

Tealbook Forecast Compared with Blue Chip

(Blue Chip survey released July 10, 2012)

Figure: Real GDP

Line chart, by percent change, annual rate, 2008 to 2013. There is a horizontal line at zero. There are three series, Blue chip consensus, Staff forecast, and Blue Chip top 10 and bottom 10 averages. Blue chip consensus begins in 2008:Q1 at about -1.9 and generally decreases to about -9 by 2008:Q4. It generally increases to about 3.9 by 2009:Q4 and then generally decreases to about 0.3 by 2011:Q1. It generally increases to about 3 by 2011:Q4 and then decreases 2.8 by 2013:Q4. Staff forecast generally follows the same path as Blue Chip consensus and ends in 2013:Q4 at about 2.5. Blue Chip top 10 and bottom 10 averages begins in 2011:Q4 between 1.8 and 2.6 and generally increases to between 2 and 4 by 2013:Q4.

Figure: Real PCE

Line chart, by percent change, annual rate, 2008 to 2013. There is a horizontal line at zero. There are three series, Blue chip consensus, Staff forecast, and Blue Chip top 10 and bottom 10 averages. Blue chip consensus begins in 2008:Q1 at about -1 and generally decreases to about -5.2 by 2008:Q4. It generally increases to about 3.8 by 2010:Q4 and then decreases to about 1 by 2011:Q1. It then generally increases to about 2.5 by 2013:Q4. Staff forecast generally follows the same exact path as Blue chip consensus. Blue Chip top 10 and bottom 10 averages begins in 2011:Q4 at about 1.75 and 3 and increases to about 0.3 and 3 by 2012:Q4. It ends in 2013:Q4 at about 1.9 and 3.2.

Figure: Unemployment Rate

Line chart, by percent, 2008 to 2013. There is a horizontal line at zero. There are three series, Blue chip consensus, Staff forecast, and Blue Chip top 10 and bottom 10 averages. Blue chip consensus begins in 2008 at about 5 and generally increases to about 9.85 by 2009. It then generally decreases to about 7.6 by 2013. Staff forecast follows the same path as Blue chip consensus until about 2012 when it starts decreases at a slower rate. It ends in 2013 at about 8. Blue chip top 10 and bottom 10 averages begins in 2012:Q1 at about 7.9 and 8.1 and increases to about 7.6 and 8 by 2012:Q4. It ends in 2013 at about 7 and 8.

Figure: Consumer Price Index

Line chart, by percent change, annual rate, 2008 to 2013. There is a horizontal line at zero. There are three series, Blue chip consensus, Staff forecast, and Blue Chip top 10 and bottom 10 averages. Blue chip consensus begins in 2008:Q1 at about 4.15 and generally decreases to about -9.5 by 2008:Q4. It then generally fluctuates between -0.2 and 4 from 2009:Q1 to 2011:Q3. It then decreases to about 1.9 by 2013:Q4. Staff forecast generally follows the same path as Blue chip consensus until 2012 when it begins decreases at a faster rate. It ends in 2013:Q4 at about 1.8. Blue Chip top 10 and bottom 10 averages begins in 2012 at about 0.1 and 2.2 and ends in 2013:Q4 at about 1.8 and 3.1.

Figure: Treasury Bill Rate

Line chart, by percent, 2008 to 2013. There is a horizontal line at zero. There are three series, Blue chip consensus, Staff forecast, and Blue Chip top 10 and bottom 10 averages. Blue chip consensus begins in 2008 at

about 2.1 and generally decreases to about 0.1 by 2009. It then generally increases to about 0.4 by 2013. Staff forecast generally follows the same exact path as Blue chip consensus until it begins increasing at a slower rate in 2012. It ends in 2013 at about 0.2. Blue chip top 10 and bottom 10 averages begins in 2012:Q1 at about 0 and 0.2 and increases to about 0.1 and 0.5 by 2012:Q4. It then increases to about 0.1 and 0.85 by 2013:Q4.

Figure: 10-Year Treasury Yield

Line chart, by percent, 2008 to 2013. There is a horizontal line at zero. There are three series, Blue chip consensus, Staff forecast, and Blue Chip top 10 and bottom 10 averages. Blue chip consensus begins in 2008 at about 3.6 and generally decreases to about 2.1 by 2011. It then generally increases to about 2.75 by 2013. Staff forecast generally follows the same exact path as Blue chip consensus until 2012 when it begins increasing at a faster rate. It ends in 2013 at about 2.9. Blue chip top 10 and bottom 10 averages begins in 2012:Q1 at about 1.6 and 2.1 and increases to about 1.8 and 2.5 by 2012:Q3. It then increases to about 2.1 and 3.5 by 2013:Q4.

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

Assessment of Key Macroeconomic Risks (1)

Probability of Inflation Events

(4 quarters ahead--2013:Q2)

Probability that the 4-quarter change in total PCE prices will be ...	Staff	FRB/US	EDO	BVAR
<i>Greater than 3 percent</i>				
Current Tealbook	.05	.03	.10	.04
Previous Tealbook	.04	.01	.09	.04
<i>Less than 1 percent</i>				
Current Tealbook	.33	.49	.31	.23
Previous Tealbook	.40	.63	.33	.24

Probability of Unemployment Events

(4 quarters ahead--2013:Q2)

Probability that the unemployment rate will ...	Staff	FRB/US	EDO	BVAR
<i>Increase by 1 percentage point</i>				
Current Tealbook	.04	.17	.17	.02
Previous Tealbook	.03	.25	.17	.01
<i>Decrease by 1 percentage point</i>				
Current Tealbook	.02	.00	.32	.19
Previous Tealbook	.04	.00	.31	.24

Probability of Near-Term Recession

Probability that real GDP declines in each of 2012:Q3 and 2012:Q4	Staff	FRB/US	EDO	BVAR	Factor Model

Current Tealbook	.07	.10	.05	.07	.21
Previous Tealbook	.04	.14	.05	.04	.27

Note: "Staff" represents Tealbook forecast errors applied to the Tealbook baseline; baselines for FRB/US, BVAR, EDO, and the factor model are generated by those models themselves, up to the current-quarter estimate. The current quarter is taken as data from the staff estimate for the second Tealbook in each quarter, otherwise the preceding quarter is taken as the latest historical observation.

Assessment of Key Macroeconomic Risks (2)

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

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

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

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

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

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

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

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

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

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

Note: See notes on facing page, Assessment of Key Macroeconomic Risks (1). Recession and inflation probabilities for FRB/US and the BVAR are real-time estimates. See Robert J. Tetlow and Brian Ironside (2007), "Real-Time Model Uncertainty in the United States: The Fed, 1996-2003," *Journal of Money and Banking*, vol. 39 (October). pp. 1533-61.

Greensheets

Changes in GDP, Prices, and Unemployment

(Percent, annual rate except as noted)

Interval		Nominal GDP		Real GDP		PCE price index		Core PCE price index		Unemployment rate ¹	
		06/13/12	07/25/12	06/13/12	07/25/12	06/13/12	07/25/12	06/13/12	07/25/12	06/13/12	07/25/12
<i>Quarterly</i>											
2011:	Q1	3.1	3.1	.4	.4	3.9	3.9	1.6	1.6	9.0	9.0
	Q2	4.0	4.0	1.3	1.3	3.3	3.3	2.3	2.3	9.1	9.1
	Q3	4.4	4.4	1.8	1.8	2.3	2.3	2.1	2.1	9.1	9.1
	Q4	3.8	3.8	3.0	3.0	1.2	1.2	1.3	1.3	8.7	8.7
2012:	Q1	3.9	3.9	2.2	1.9	2.4	2.6	2.1	2.3	8.2	8.2
	Q2	2.8	1.8	1.5	1.0	.6	.8	1.7	1.8	8.2	8.2
	Q3	4.2	3.8	1.9	1.5	.1	.8	1.6	1.6	8.2	8.3
	Q4	3.5	3.7	1.9	1.8	1.5	1.5	1.5	1.5	8.2	8.3
2013:	Q1	3.4	3.2	1.7	1.6	1.6	1.6	1.6	1.6	8.1	8.2
	Q2	3.6	3.6	2.1	2.0	1.6	1.6	1.6	1.6	8.1	8.2
	Q3	3.8	3.7	2.3	2.2	1.5	1.5	1.6	1.6	8.0	8.1
	Q4	4.0	4.0	2.5	2.5	1.5	1.4	1.6	1.6	8.0	8.1
<i>Two-quarter²</i>											
2011:	Q2	3.5	3.5	.8	.8	3.6	3.6	1.9	1.9	-5	-5
	Q4	4.1	4.1	2.4	2.4	1.8	1.8	1.7	1.7	-4	-4
2012:	Q2	3.3	2.8	1.8	1.4	1.5	1.7	1.9	2.1	-5	-5
	Q4	3.8	3.7	1.9	1.6	.8	1.1	1.5	1.5	.0	.1
2013:	Q2	3.5	3.4	1.9	1.8	1.6	1.6	1.6	1.6	-1	-1
	Q4	3.9	3.9	2.4	2.4	1.5	1.4	1.6	1.6	-1	-1
<i>Four-quarter³</i>											
2010:Q4		4.7	4.7	3.1	3.1	1.3	1.3	1.0	1.0	-3	-3
2011:Q4		3.8	3.8	1.6	1.6	2.7	2.7	1.8	1.8	-9	-9
2012:Q4		3.6	3.3	1.9	1.5	1.2	1.4	1.7	1.8	-5	-4
2013:Q4		3.7	3.6	2.2	2.1	1.5	1.5	1.6	1.6	-2	-2
2014:Q4		4.6	4.7	3.1	3.2	1.5	1.4	1.6	1.6	-3	-3
<i>Annual</i>											
2010		4.2	4.2	3.0	3.0	1.8	1.8	1.4	1.4	9.6	9.6

2011	3.9	3.9	1.7	1.7	2.5	2.5	1.4	1.4	8.9	8.9
2012	3.7	3.5	2.0	1.8	1.5	1.7	1.8	1.9	8.2	8.2
2013	3.6	3.5	2.0	1.8	1.3	1.4	1.6	1.6	8.0	8.2
2014	4.2	4.3	2.7	2.8	1.5	1.4	1.6	1.6	7.9	8.0

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

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

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

Changes in Real Gross Domestic Product and Related Items

(Percent, annual rate except as noted)

Item	2011			2012				2013		
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Real GDP	1.3	1.8	3.0	1.9	1.0	1.5	1.8	1.6	2.0	2.2
<i>Previous Tealbook</i>	1.3	1.8	3.0	2.2	1.5	1.9	1.9	1.7	2.1	2.3
Final sales	1.6	3.2	1.1	1.8	.9	1.2	1.5	1.4	1.8	2.0
<i>Previous Tealbook</i>	1.6	3.2	1.1	2.1	1.2	1.4	1.9	1.7	1.8	2.1
Priv. dom. final purch.	1.9	3.3	2.7	3.0	1.8	2.2	2.5	2.2	2.7	2.8
<i>Previous Tealbook</i>	1.9	3.3	2.7	3.3	2.3	2.7	2.9	2.4	2.8	3.0
Personal cons. expend.	.7	1.7	2.1	2.5	1.1	2.1	2.4	2.0	2.2	2.3
<i>Previous Tealbook</i>	.7	1.7	2.1	2.9	1.9	2.5	2.7	2.1	2.3	2.4
Durables	-5.3	5.7	16.1	13.7	-3.4	5.2	8.3	5.9	7.0	6.5
Nondurables	.2	-5	.8	2.1	1.4	1.1	1.9	1.3	1.6	1.6
Services	1.9	1.9	.4	.8	1.7	2.0	1.7	1.6	1.7	1.8
Residential investment	4.2	1.3	11.6	20.0	8.9	12.3	3.3	6.8	11.6	10.8
<i>Previous Tealbook</i>	4.2	1.3	11.6	19.7	11.5	8.3	6.8	10.4	10.3	10.1
Business fixed invest.	10.3	15.7	5.2	3.1	5.1	.6	3.1	1.9	3.5	4.5
<i>Previous Tealbook</i>	10.3	15.7	5.2	2.8	2.5	2.8	3.3	2.8	4.3	5.0
Equipment & software	6.2	16.2	7.5	3.5	6.8	1.5	3.9	2.2	4.5	5.9

<i>Previous Tealbook</i>	6.2	16.2	7.5	3.7	3.4	4.6	5.1	3.7	5.6	6.6
Nonres. structures	22.6	14.4	-9	1.9	.5	-1.8	.7	1.0	.8	.8
<i>Previous Tealbook</i>	22.6	14.4	-9	.3	-2	-1.8	-1.5	.4	.7	.7
Net exports ²	-416	-403	-411	-407	-405	-417	-429	-434	-442	-444
<i>Previous Tealbook²</i>	-416	-403	-411	-408	-415	-429	-440	-445	-454	-458
Exports	3.6	4.7	2.7	4.2	4.4	3.7	2.8	3.2	3.6	3.9
Imports	1.4	1.2	3.7	2.7	3.3	5.1	4.5	3.6	4.2	3.6
Gov't. cons. & invest.	-9	-1	-4.2	-4.0	-3.0	-1.4	-1.4	-1.2	-1.2	-1.4
<i>Previous Tealbook</i>	-9	-1	-4.2	-4.0	-2.0	-1.9	-1.2	-1.0	-1.3	-1.6
Federal	1.9	2.1	-6.9	-5.9	-4.5	-1.9	-3.1	-3.6	-3.6	-4.4
Defense	7.0	5.0	-12.1	-8.3	-5.5	-1.6	-3.4	-4.2	-4.1	-5.3
Nondefense	-7.6	-3.8	4.5	-.8	-2.4	-2.4	-2.5	-2.4	-2.5	-2.5
State & local	-2.8	-1.6	-2.2	-2.7	-1.9	-1.0	-.2	.3	.4	.5
Change in bus. inventories ²	39	-2	52	54	59	69	79	84	93	100
<i>Previous Tealbook²</i>	39	-2	52	58	65	79	81	83	91	100
Nonfarm ²	51	6	61	64	59	72	82	83	92	99
Farm ²	-9	-6	-6	-7	0	-3	-3	1	1	1

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

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

Changes in Real Gross Domestic Product and Related Items

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

Item	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Real GDP	2.8	2.4	2.2	-3.3	-.5	3.1	1.6	1.5	2.1	3.2
<i>Previous Tealbook</i>	2.8	2.4	2.2	-3.3	-.5	3.1	1.6	1.9	2.2	3.1
Final sales	2.7	2.8	2.4	-2.6	-.8	2.4	1.5	1.4	1.8	3.0
<i>Previous Tealbook</i>	2.7	2.8	2.4	-2.6	-.8	2.4	1.5	1.6	1.9	2.9
Priv. dom. final purch.	3.2	2.4	1.2	-4.5	-2.5	3.6	2.5	2.4	2.6	3.8

<i>Previous Tealbook</i>	3.2	2.4	1.2	-4.5	-2.5	3.6	2.5	2.8	2.8	3.6
Personal cons. expend.	2.8	3.2	1.7	-2.5	-.2	3.0	1.6	2.0	2.2	3.3
<i>Previous Tealbook</i>	2.8	3.2	1.7	-2.5	-.2	3.0	1.6	2.5	2.3	3.2
Durables	2.8	7.0	4.6	-13.0	3.0	10.9	6.8	5.7	6.7	7.7
Nondurables	3.1	2.9	.8	-3.1	.6	3.5	.5	1.6	1.5	2.6
Services	2.7	2.6	1.4	-.5	-.9	1.6	1.2	1.6	1.8	2.7
Residential investment	5.3	-15.7	-20.7	-24.4	-12.9	-6.3	3.5	11.0	10.0	11.2
<i>Previous Tealbook</i>	5.3	-15.7	-20.7	-24.4	-12.9	-6.3	3.5	11.5	10.2	10.8
Business fixed invest.	4.5	7.8	7.9	-9.4	-14.4	11.1	8.2	2.9	3.6	5.3
<i>Previous Tealbook</i>	4.5	7.8	7.9	-9.4	-14.4	11.1	8.2	2.9	4.2	4.9
Equipment & software	6.2	6.0	3.9	-13.6	-5.8	16.6	9.6	3.9	4.6	6.7
<i>Previous Tealbook</i>	6.2	6.0	3.9	-13.6	-5.8	16.6	9.6	4.2	5.6	5.9
Nonres. structures	-.1	13.0	17.3	-1.2	-29.3	-1.8	4.4	.3	.8	1.6
<i>Previous Tealbook</i>	-.1	13.0	17.3	-1.2	-29.3	-1.8	4.4	-.8	.7	2.1
Net exports ¹	-723	-729	-649	-495	-359	-422	-414	-414	-443	-462
<i>Previous Tealbook</i> ¹	-723	-729	-649	-495	-359	-422	-414	-423	-456	-473
Exports	6.7	10.2	10.1	-2.5	-.1	8.8	4.7	3.8	3.7	5.6
Imports	5.2	4.1	.8	-5.9	-6.5	10.7	3.6	3.9	4.1	4.7
Gov't. cons. & invest.	.7	1.5	1.9	2.7	1.1	.1	-2.8	-2.4	-1.4	-.8
<i>Previous Tealbook</i>	.7	1.5	1.9	2.7	1.1	.1	-2.8	-2.3	-1.4	-.9
Federal	1.2	2.2	3.1	8.8	4.6	2.9	-3.2	-3.8	-4.1	-4.2
Defense	.4	4.4	2.6	9.8	3.5	1.5	-3.6	-4.8	-4.9	-5.0
Nondefense	2.6	-2.3	4.2	6.8	6.9	5.7	-2.5	-2.0	-2.5	-2.7
State & local	.4	1.2	1.2	-.9	-1.1	-1.7	-2.5	-1.5	.4	1.3
Change in bus. inventories ¹	50	59	28	-36	-145	59	35	65	99	140

<i>Previous Tealbook</i> ¹	50	59	28	-36	-145	59	35	71	98	133
Nonfarm ¹	50	63	29	-38	-144	61	44	69	98	139
Farm ¹	0	-4	-1	1	-1	-1	-7	-3	1	1

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

Contributions to Changes in Real Gross Domestic Product

(Percentage points, annual rate except as noted)

Item	2011				2012				2013		
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
Real GDP	1.3	1.8	3.0	1.9	1.0	1.5	1.8	1.6	2.0	2.2	
<i>Previous Tealbook</i>	1.3	1.8	3.0	2.2	1.5	1.9	1.9	1.7	2.1	2.3	
Final sales	1.6	3.2	1.2	1.8	.9	1.2	1.5	1.4	1.8	2.0	
<i>Previous Tealbook</i>	1.6	3.2	1.2	2.0	1.2	1.4	1.8	1.7	1.8	2.0	
Priv. dom. final purch.	1.6	2.8	2.3	2.5	1.5	1.9	2.1	1.8	2.2	2.4	
<i>Previous Tealbook</i>	1.6	2.8	2.3	2.8	1.9	2.2	2.4	2.0	2.3	2.5	
Personal cons. expend.	.5	1.2	1.5	1.7	.8	1.5	1.7	1.4	1.6	1.6	
<i>Previous Tealbook</i>	.5	1.2	1.5	2.1	1.4	1.7	1.9	1.5	1.6	1.7	
Durables	-.4	.4	1.2	1.0	-.3	.4	.6	.5	.5	.5	
Nondurables	.0	-.1	.1	.3	.2	.2	.3	.2	.3	.3	
Services	.9	.9	.2	.4	.8	.9	.8	.8	.8	.9	
Residential investment	.1	.0	.3	.4	.2	.3	.1	.2	.3	.3	
<i>Previous Tealbook</i>	.1	.0	.3	.4	.3	.2	.2	.2	.3	.3	
Business fixed invest.	1.0	1.5	.5	.3	.5	.1	.3	.2	.4	.5	
<i>Previous Tealbook</i>	1.0	1.5	.5	.3	.3	.3	.3	.3	.4	.5	
Equipment & software	.4	1.1	.6	.3	.5	.1	.3	.2	.3	.4	
<i>Previous Tealbook</i>	.4	1.1	.6	.3	.3	.3	.4	.3	.4	.5	

<i>Tealbook</i>	15.0	3.3	-3.2	7.9	-16.1	-21.0	2.4	2.3	.7	.0
Food	6.4	4.7	3.3	1.3	.7	2.1	3.3	3.4	3.2	2.2
<i>Previous Tealbook</i>	6.4	4.7	3.3	1.3	1.5	1.7	1.5	1.5	1.5	1.4
Ex. food & energy	2.3	2.1	1.3	2.3	1.8	1.6	1.5	1.6	1.6	1.6
<i>Previous Tealbook</i>	2.3	2.1	1.3	2.1	1.7	1.6	1.5	1.6	1.6	1.6
Ex. food & energy, market based	2.4	2.3	1.4	2.1	1.7	1.5	1.4	1.5	1.5	1.5
<i>Previous Tealbook</i>	2.4	2.3	1.4	2.0	1.6	1.4	1.4	1.5	1.5	1.5
CPI	4.4	3.1	1.3	2.5	.8	.7	1.6	1.7	1.7	1.5
<i>Previous Tealbook</i>	4.4	3.1	1.3	2.5	.6	-.4	1.6	1.8	1.7	1.6
Ex. food & energy	2.4	2.5	1.9	2.1	2.6	2.1	1.5	1.7	1.7	1.7
<i>Previous Tealbook</i>	2.4	2.5	1.9	2.1	2.5	1.8	1.5	1.7	1.7	1.7
ECI, hourly compensation ²	3.2	1.4	2.1	1.7	2.3	2.5	2.5	2.6	2.5	2.6
<i>Previous Tealbook</i> ²	3.2	1.4	2.1	1.7	2.3	2.5	2.5	2.6	2.5	2.6
Nonfarm business sector										
Output per hour	-.3	1.8	1.2	-.8	-.1	1.2	1.5	.9	1.7	1.7
<i>Previous Tealbook</i>	-.3	1.8	1.2	-.4	.8	.4	1.1	1.4	1.4	1.5
Compensation per hour	-.5	5.7	-.4	.5	2.1	2.2	2.6	2.6	2.6	2.7
<i>Previous Tealbook</i>	-.5	5.7	-.4	.4	2.3	1.6	2.7	2.7	2.7	2.8
Unit labor costs	-.1	3.9	-1.5	1.3	2.3	1.0	1.2	1.7	.9	1.0
<i>Previous Tealbook</i>	-.1	3.9	-1.5	.9	1.5	1.2	1.7	1.3	1.3	1.2
Core goods imports chain-wt. price index ³	7.2	2.4	-.4	.4	1.7	-1.1	.1	.8	1.2	1.3
<i>Previous Tealbook</i> ³	7.2	2.4	-.4	.4	2.0	-1.6	-.3	.9	1.4	1.6

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

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

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

Changes in Prices and Costs

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

Item	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GDP chain-wt. price index	3.5	2.9	2.6	2.1	.7	1.6	2.1	1.7	1.5	1.5
<i>Previous Tealbook</i>	3.5	2.9	2.6	2.1	.7	1.6	2.1	1.7	1.5	1.5
PCE chain-wt. price index	3.2	1.9	3.5	1.7	1.5	1.3	2.7	1.4	1.5	1.4
<i>Previous Tealbook</i>	3.2	1.9	3.5	1.7	1.5	1.3	2.7	1.2	1.5	1.5
Energy	21.5	-3.7	19.3	-8.8	2.6	6.2	12.8	-5.1	-1.2	-1.7
<i>Previous Tealbook</i>	21.5	-3.7	19.3	-8.8	2.6	6.2	12.8	-7.5	.7	-4
Food	1.5	1.7	4.7	7.0	-1.7	1.3	5.2	1.8	2.4	.9
<i>Previous Tealbook</i>	1.5	1.7	4.7	7.0	-1.7	1.3	5.2	1.5	1.5	1.4
Ex. food & energy	2.3	2.3	2.4	2.0	1.7	1.0	1.8	1.8	1.6	1.6
<i>Previous Tealbook</i>	2.3	2.3	2.4	2.0	1.7	1.0	1.8	1.7	1.6	1.6
Ex. food & energy, market based	2.0	2.2	2.1	2.2	1.7	.7	1.8	1.7	1.5	1.5
<i>Previous Tealbook</i>	2.0	2.2	2.1	2.2	1.7	.7	1.8	1.6	1.5	1.5
CPI	3.7	2.0	4.0	1.6	1.5	1.2	3.3	1.4	1.6	1.4
<i>Previous Tealbook</i>	3.7	2.0	4.0	1.6	1.5	1.2	3.3	1.1	1.6	1.5
Ex. food & energy	2.1	2.7	2.3	2.0	1.7	.6	2.2	2.0	1.7	1.7
<i>Previous Tealbook</i>	2.1	2.7	2.3	2.0	1.7	.6	2.2	1.9	1.7	1.7
ECI, hourly compensation ¹	2.9	3.2	3.0	2.4	1.2	2.1	2.2	2.3	2.6	2.8
<i>Previous Tealbook</i> ¹	2.9	3.2	3.0	2.4	1.2	2.1	2.2	2.3	2.6	2.8
Nonfarm business sector										
Output per hour	1.6	.8	2.5	-1.1	5.3	2.3	.4	.4	1.5	1.8
<i>Previous Tealbook</i>	1.6	.8	2.5	-1.1	5.3	2.3	.4	.5	1.5	1.8
Compensation per hour	3.5	4.5	3.6	2.5	1.8	1.4	2.5	1.9	2.6	2.9

<i>Previous Tealbook</i>	3.5	4.5	3.6	2.5	1.8	1.4	2.5	1.8	2.7	2.9
Unit labor costs	1.9	3.6	1.1	3.7	-3.3	-9	2.1	1.4	1.1	1.0
<i>Previous Tealbook</i>	1.9	3.6	1.1	3.7	-3.3	-9	2.1	1.3	1.2	1.1
Core goods imports chain-wt. price index ²	2.2	2.5	2.9	3.7	-1.7	2.6	4.3	.3	1.1	1.4
<i>Previous Tealbook</i> ²	2.2	2.5	2.9	3.7	-1.7	2.6	4.3	.1	1.4	1.6

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

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

Other Macroeconomic Indicators

Item	2011			2012				2013			C
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
<i>Employment and production</i>											
Nonfarm payroll employment ²	.6	.3	.5	.7	.3	.2	.3	.3	.3	.3	.4
Unemployment rate ³	9.1	9.1	8.7	8.2	8.2	8.3	8.3	8.2	8.2	8.2	8.1
<i>Previous Tealbook</i> ³	9.1	9.1	8.7	8.2	8.2	8.2	8.2	8.1	8.1	8.1	8.0
NAIRU ³	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
<i>Previous Tealbook</i> ³	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
GDP gap ⁴	-4.8	-4.8	-4.5	-4.5	-4.7	-4.8	-4.8	-4.9	-4.9	-4.9	-4.8
<i>Previous Tealbook</i> ⁴	-4.8	-4.8	-4.5	-4.4	-4.5	-4.5	-4.5	-4.5	-4.5	-4.5	-4.4
Industrial production ⁵	1.2	5.6	5.1	5.8	2.2	3.4	2.5	2.5	2.4	2.5	
<i>Previous Tealbook</i> ⁵	1.2	5.6	5.0	5.7	3.6	3.7	2.4	2.2	2.3	2.7	
Manufacturing industr. prod. ⁵	.2	5.1	5.6	9.8	1.4	1.2	2.2	1.8	2.4	2.7	
<i>Previous Tealbook</i> ⁵	.2	5.1	5.6	9.8	1.7	2.7	2.5	2.1	2.3	2.9	
Capacity utilization rate - mfg. ³	74.4	75.2	76.1	77.6	77.6	77.5	77.7	77.7	77.8	77.9	
<i>Previous Tealbook</i> ³	74.4	75.2	76.1	77.7	77.8	78.1	78.4	78.5	78.7	78.9	

Housing starts ⁶	.6	.6	.7	.7	.7	.8	.8	.9	.9	1.0
Light motor vehicle sales ⁶	12.1	12.4	13.4	14.5	14.1	14.3	14.4	14.5	14.8	15.0
<i>Income and saving</i>										
Nominal GDP ⁵	4.0	4.4	3.8	3.9	1.8	3.8	3.7	3.2	3.6	3.7
Real disposable pers. income ⁵	-5	.7	.2	.7	2.6	3.3	3.5	-1.9	2.7	2.9
<i>Previous Tealbook⁵</i>	-5	.7	.2	.5	3.2	3.4	3.5	-1.3	2.8	2.9
Personal saving rate ³	4.8	4.6	4.2	3.7	4.1	4.3	4.6	3.6	3.7	3.8
<i>Previous Tealbook³</i>	4.8	4.6	4.2	3.6	3.9	4.0	4.2	3.4	3.5	3.6
Corporate profits ⁷	13.7	6.9	3.5	-1.3	-2.3	-.7	1.7	-3.8	-1.6	-.7
Profit share of GNP ³	12.7	12.8	12.8	12.7	12.5	12.4	12.4	12.1	12.0	11.9
Net federal saving ⁸	-1,275	-1,161	-1,114	-988	-1,023	-970	-961	-763	-751	-739
Net state & local saving ⁸	-40	-83	-81	-84	-63	-54	-50	-44	-26	-22
Gross national saving rate ³	12.4	12.9	13.0	12.9	13.0	13.4	13.5	13.4	13.5	13.5
Net national saving rate ³	-.4	.2	.3	.0	.3	.8	.8	.8	.8	.8

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

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

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

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

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

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

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

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

Other Macroeconomic Indicators

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

Item	2005	2006	2007	2008	2009	2010	2011	2012	2013
------	------	------	------	------	------	------	------	------	------

<i>Employment and production</i>									
Nonfarm payroll employment ¹	2.4	2.1	1.2	-2.8	-5.6	.8	1.8	1.6	1.4
Unemployment rate ²	5.0	4.5	4.8	6.9	9.9	9.6	8.7	8.3	8.1
<i>Previous Tealbook²</i>	5.0	4.5	4.8	6.9	9.9	9.6	8.7	8.2	8.0
NAIRU ²	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0	6.0
<i>Previous Tealbook²</i>	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0	6.0
GDP gap ³	.6	.8	.9	-4.5	-6.1	-4.4	-4.5	-4.8	-4.6
<i>Previous Tealbook³</i>	.6	.8	.9	-4.5	-6.1	-4.4	-4.5	-4.5	-4.3
Industrial production ⁴	2.3	2.1	2.5	-9.0	-5.7	6.3	4.1	3.5	2.5
<i>Previous Tealbook⁴</i>	2.3	2.1	2.5	-9.0	-5.7	6.3	4.0	3.9	2.4
Manufacturing industr. prod. ⁴	3.4	1.8	2.8	-11.8	-6.5	6.5	4.2	3.6	2.5
<i>Previous Tealbook⁴</i>	3.4	1.8	2.8	-11.8	-6.5	6.5	4.2	4.1	2.5
Capacity utilization rate - mfg. ²	78.4	78.2	78.2	69.7	67.0	73.1	76.1	77.7	78.2
<i>Previous Tealbook²</i>	78.4	78.2	78.2	69.7	67.0	73.1	76.1	78.4	79.2
Housing starts ⁵	2.1	1.8	1.4	.9	.6	.6	.6	.8	.9
Light motor vehicle sales ⁵	16.9	16.5	16.1	13.1	10.3	11.5	12.7	14.3	14.9
<i>Income and saving</i>									
Nominal GDP ⁴	6.4	5.3	4.9	-1.2	.0	4.7	3.8	3.3	3.6
Real disposable pers. income ⁴	.6	4.6	1.6	1.0	-2.4	3.5	.4	2.5	1.7
<i>Previous Tealbook⁴</i>	.6	4.6	1.6	1.0	-2.4	3.5	.4	2.6	1.9
Personal saving rate ²	1.6	2.8	2.5	6.2	4.3	5.2	4.2	4.6	4.0
<i>Previous Tealbook²</i>	1.6	2.8	2.5	6.2	4.3	5.2	4.2	4.2	3.7
Corporate profits ⁶	19.6	3.7	-8.1	-33.5	61.8	18.2	7.0	-6	-1.7
Profit share of GNP ²	11.8	11.6	10.1	6.8	11.0	12.4	12.8	12.4	11.8
Net federal saving ⁷	-283	-204	-245	-613	-1218	-1274	-1188	-985	-745
Net state & local saving ⁷	26	51	12	-72	-78	-25	-66	-63	-27
Gross national saving rate ²	15.6	16.5	13.9	12.6	11.3	12.3	13.0	13.5	13.7
Net national saving rate ²	3.6	4.4	1.7	-6	-1.9	-.4	.3	.8	1.0

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

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

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

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

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

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

investment ³	-1260	-1031	-793	-681	-1227	-1298	-1185	-1132	-997	-1027
Fiscal indicators⁴										
High-employment (HEB) surplus/deficit	-994	-777	-509	-429	-966	-1030	-917	-871	-748	-775
Change in HEB, percent of potential GDP	-0.3	-1.6	-1.8	-0.6	-0.7	.3	-0.8	-0.3	-0.8	.1
Fiscal impetus (FI), percent of GDP	-0.4	-0.8	-1.2	-0.5	-0.7	0.2	-0.1	-0.9	-0.9	-1.1
<i>Previous Tealbook</i>	-0.3	-0.8	-1.2	-0.5	-0.6	0.4	-0.1	-1.0	-1.0	-0.8

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

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

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

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

a Actual. [Return to table](#)

Change in Debt of the Domestic Nonfinancial Sectors

(Percent)

Period ¹	Households					State and local governments	Federal government	Memo: Nominal GDP
	Total	Total	Home mortgages	Consumer credit	Business			
Year								
2007	8.4	6.6	6.8	5.9	13.6	5.4	4.9	4.9
2008	5.9	-0.1	-0.5	.8	6.1	.7	24.2	-1.2
2009	3.1	-1.7	-1.4	-4.5	-2.3	3.9	22.7	.0
2010	4.1	-2.2	-2.9	-1.3	.8	2.2	20.2	4.7
2011	3.6	-1.5	-2.3	4.0	4.5	-1.9	11.4	3.8
2012	4.8	.6	-1.2	6.4	5.0	.6	11.2	3.3
2013	4.1	2.2	.7	7.3	4.3	.9	7.0	3.6
2014	4.1	2.5	1.0	7.4	4.5	1.0	6.3	4.7

Quarter										
2010:	1	3.7	-2.8	-4.4	-3.1	.1	2.4	20.6	5.5	
	2	3.7	-2.2	-2.6	-3.5	-2.0	-5	22.5	5.4	
	3	4.0	-2.2	-3.0	-6	2.7	2.1	16.0	3.9	
	4	4.6	-1.5	-1.7	2.2	2.3	4.8	16.4	4.2	
2011:	1	2.4	-1.6	-2.2	3.5	4.1	-3.3	7.9	3.1	
	2	2.4	-3.0	-3.1	3.3	5.0	-3.5	8.6	4.0	
	3	4.5	-1.1	-2.3	2.3	3.8	.0	14.1	4.4	
	4	4.9	-.2	-1.7	6.7	4.9	-1.0	13.1	3.8	
2012:	1	4.7	-.4	-2.9	5.9	5.2	-1.8	12.4	3.9	
	2	5.1	.2	-1.4	6.0	5.4	1.0	11.6	1.8	
	3	4.1	.9	-.6	6.3	4.5	1.9	7.8	3.8	
	4	5.2	1.5	.1	6.7	4.4	1.1	11.2	3.7	
2013:	1	4.6	2.1	.7	7.0	4.3	1.0	8.8	3.2	
	2	3.7	2.1	.7	7.1	4.1	.9	5.7	3.6	
	3	3.2	2.1	.7	7.1	4.2	.8	4.1	3.7	
	4	4.6	2.2	.7	7.2	4.3	.8	8.6	4.0	

Note: Quarterly data are at seasonally adjusted annual rates.

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

Flow of Funds Projections: Highlights

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

Category	2011	2012	2013	2014	2011		2012				C
					Q3	Q4	Q1	Q2	Q3	Q4	
<i>Domestic nonfinancial sectors</i>											
Net funds raised											
Total	854.8	1456.0	1305.1	1353.3	1070.5	1391.0	1470.1	1468.3	1209.9	1675.9	1
Net equity issuance	-473.4	-393.5	-340.0	-360.0	-617.7	-440.2	-340.8	-493.1	-380.0	-360.0	-
Net debt issuance	1328.2	1849.5	1645.1	1713.3	1688.2	1831.2	1810.9	1961.4	1589.9	2035.9	1
Borrowing indicators											
Debt (percent of GDP) ¹	248.6	250.3	252.8	252.3	247.3	247.8	248.4	250.3	250.8	251.4	
Borrowing (percent of GDP)	8.8	11.8	10.2	10.2	11.1	12.0	11.7	12.6	10.1	12.9	

Households											
Net borrowing ²	-191.0	75.4	280.0	327.3	-136.4	-26.6	-53.0	32.2	121.4	200.8	
Home mortgages	-232.6	-117.9	68.1	93.1	-230.0	-168.0	-286.7	-136.5	-58.3	9.7	
Consumer credit	96.6	160.5	193.5	212.9	56.5	164.8	149.1	153.9	164.1	174.7	
Debt/DPI (percent) ³	112.3	108.5	106.6	104.2	111.2	110.7	109.7	108.8	107.9	106.9	
Business											
Financing gap ⁴	-196.8	-86.4	90.7	204.4	-252.9	-191.3	-128.5	-96.6	-78.1	-42.4	
Net equity issuance	-473.4	-393.5	-340.0	-360.0	-617.7	-440.2	-340.8	-493.1	-380.0	-360.0	-
Credit market borrowing	509.8	586.9	529.6	575.6	440.9	565.7	617.5	649.8	541.4	538.8	
State and local governments											
Net borrowing	-58.6	17.3	26.8	29.8	1.0	-29.1	-53.5	31.0	57.8	33.8	
Current surplus ⁵	224.9	195.4	226.4	255.9	212.1	215.3	208.0	182.0	192.5	199.1	
Federal government											
Net borrowing	1067.9	1168.5	808.8	780.6	1382.6	1321.2	1300.0	1248.4	869.3	1262.5	1
Net borrowing (n.s.a.)	1067.9	1168.5	808.8	780.6	389.1	326.0	398.3	198.2	260.7	311.3	
Unified deficit (n.s.a.)	1249.6	1127.9	749.1	700.6	326.3	321.7	457.3	125.3	227.5	317.9	
Depository institutions											
Funds supplied	195.0	393.8	503.4	610.2	499.1	575.1	276.6	321.0	512.5	465.0	

Note: Data after 2012:Q1 are staff projections.

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

2. Includes change in liabilities not shown in home mortgages and consumer credit. [Return to table](#)

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

4. For corporations, excess of capital expenditures over U.S. internal funds. [Return to table](#)

5. NIPA state and local government saving plus consumption of fixed capital and net capital transfers. [Return to table](#)

n.s.a. Not seasonally adjusted. [Return to table](#)

Foreign Real GDP and Consumer Prices: Selected Countries

(Quarterly percent changes at an annual rate)

Measure and country	Projected									
	2011				2012				2013	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Real GDP¹										
Total foreign	3.6	2.3	3.9	1.5	3.3	2.3	2.4	2.2	2.5	2.6
<i>Previous Tealbook</i>	3.5	2.3	3.9	1.6	3.4	2.5	2.5	2.3	2.5	2.6
Advanced foreign economies	1.7	-.1	3.3	.4	1.5	.7	.8	.5	.7	1.0
Canada	3.6	-1.0	4.5	1.9	1.9	2.1	1.9	1.8	1.7	1.8
Japan	-7.7	-1.7	7.8	.1	4.7	2.3	1.0	.5	.8	1.1
United Kingdom	1.9	-.4	2.4	-1.4	-1.3	-2.8	2.9	.1	1.2	1.5
Euro area	2.9	.7	.4	-1.3	.1	-1.1	-1.4	-1.5	-.9	-.4
Germany	5.5	1.1	2.3	-.7	2.1	.6	-.2	-.5	-.2	.3
Emerging market economies	5.6	5.0	4.5	2.7	5.2	3.9	4.1	4.2	4.3	4.4
Asia	7.7	5.2	4.9	2.5	5.9	4.9	5.2	5.2	5.5	5.5
Korea	5.3	3.4	3.4	1.3	3.5	2.8	3.1	3.2	3.3	3.5
China	9.1	10.0	9.5	7.8	6.6	7.4	7.7	7.7	7.9	7.9
Latin America	3.2	4.9	4.0	3.0	4.6	2.7	2.8	3.1	3.1	3.2
Mexico	2.0	5.7	4.8	2.9	5.3	2.8	2.8	3.0	3.0	3.0
Brazil	3.5	1.9	-.6	.6	.8	2.0	2.6	3.2	3.3	3.4
Consumer prices²										
Total foreign	4.2	3.5	3.0	2.8	2.6	2.0	2.2	2.3	2.3	2.3
<i>Previous Tealbook</i>	4.2	3.5	3.0	2.8	2.6	2.3	2.0	2.2	2.2	2.2
Advanced foreign economies	3.0	2.3	1.1	2.5	2.2	.6	1.4	1.5	1.3	1.2
Canada	3.3	3.4	1.0	2.9	2.1	.1	1.7	1.8	1.7	1.6
Japan	.0	-.7	.1	-.7	2.3	-.6	-.2	-.2	-.2	-.2
United Kingdom	6.9	3.9	3.8	4.2	2.1	1.0	1.3	3.2	2.0	1.4

Euro Area	3.6	2.8	1.4	3.9	2.6	1.9	2.1	1.9	1.6	1.6
Germany	3.4	2.4	1.9	2.8	2.5	1.3	2.5	2.4	2.1	2.0
Emerging market economies	5.1	4.5	4.5	3.0	3.0	3.0	2.9	3.0	3.1	3.1
Asia	5.5	5.2	4.9	2.2	2.4	3.1	2.2	2.7	2.8	2.9
Korea	5.5	3.4	4.4	2.6	1.6	1.2	2.2	2.6	2.7	2.8
China	5.1	6.1	5.7	1.4	2.0	2.5	1.7	2.4	2.6	2.8
Latin America	3.7	2.9	3.9	5.2	4.6	2.6	4.5	3.7	3.8	3.7
Mexico	3.2	2.4	3.5	4.9	4.5	2.5	4.6	3.6	3.6	3.4
Brazil	7.8	6.8	6.2	6.0	4.0	3.8	4.6	4.9	5.2	5.4

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

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

Foreign Real GDP and Consumer Prices: Selected Countries

(Percent change, Q4 to Q4)

Measure and country	2006	2007	2008	2009	2010	2011	Projected		
							2012	2013	2014
Real GDP¹									
Total foreign	4.2	4.3	-9	.9	4.4	2.8	2.5	2.7	3.2
<i>Previous Tealbook</i>	4.2	4.4	-9	.9	4.4	2.8	2.7	2.7	3.2
Advanced foreign economies	2.6	2.6	-1.9	-1.4	2.8	1.3	.9	1.1	2.0
Canada	1.9	2.5	-7	-1.4	3.3	2.2	1.9	1.9	2.5
Japan	2.1	1.7	-4.8	-6	3.3	-5	2.1	1.1	1.4
United Kingdom	2.0	3.8	-4.6	-9	1.5	.6	-.3	1.8	2.5
Euro area	3.8	2.3	-2.2	-2.3	2.2	.7	-1.0	-.2	1.1
Germany	4.9	2.4	-1.9	-2.2	3.8	2.0	.5	.5	1.7
Emerging market economies	6.3	6.7	.4	3.6	6.2	4.5	4.3	4.4	4.6
Asia	7.8	8.8	.8	8.0	7.7	5.0	5.3	5.6	5.8
Korea	4.6	5.8	-3.2	6.3	5.0	3.4	3.1	3.6	4.2
China	12.8	13.7	7.7	11.3	9.7	9.1	7.3	7.9	8.1
Latin America	4.8	4.4	-.2	-.7	4.6	3.8	3.3	3.2	3.3
Mexico	4.1	3.5	-1.1	-2.1	4.3	3.9	3.5	3.0	3.1
Brazil	4.9	6.6	.9	5.2	5.3	1.4	2.2	3.5	4.0
Consumer prices²									
Total foreign	2.2	3.7	3.3	1.3	3.2	3.4	2.3	2.3	2.5

net	314.9	318.2	323.4	330.2	283.9	270.7	246.8	229.2	220.4	210.5	20
Portfolio, net	-97.1	-85.4	-81.4	-82.8	-86.0	-76.4	-62.9	-51.2	-50.4	-55.6	-
Other income and transfers, net	-148.9	-143.1	-135.3	-136.9	-143.1	-138.1	-141.4	-143.5	-142.0	-138.1	-14

Annual Data

	2006	2007	2008	2009	2010	2011	Projected		
							2012	2013	2014
	<i>Billions of dollars</i>								
U.S. current account balance	-800.6	-710.3	-677.1	-381.9	-442.0	-465.9	-526.4	-575.4	-646.6
<i>Previous Tealbook</i>	-800.6	-710.3	-677.1	-374.4	-465.6	-473.4	-502.3	-549.6	-621.1
Current account as percent of GDP	-6.0	-5.1	-4.7	-2.7	-3.0	-3.1	-3.4	-3.6	-3.8
<i>Previous Tealbook</i>	-6.0	-5.1	-4.7	-2.7	-3.2	-3.1	-3.2	-3.4	-3.7
Net goods & services	-753.3	-696.7	-698.3	-379.2	-494.7	-559.9	-573.4	-583.6	-607.4
Investment income, net	54.7	111.1	157.8	127.6	191.0	235.0	188.5	149.4	102.1
Direct, net	174.0	244.6	284.3	253.0	297.9	321.7	257.6	210.8	205.8
Portfolio, net	-119.4	-133.5	-126.5	-125.4	-106.9	-86.7	-69.1	-61.3	-103.7
Other income and transfers, net	-102.0	-124.7	-136.6	-130.3	-138.2	-141.1	-141.5	-141.3	-141.3

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

Last update: January 5, 2018



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Accessible Material

August 2012 Tealbook B Tables and Charts[†]

Monetary Policy Strategies

Policy Rules and the Staff Projection

Near-Term Prescriptions of Selected Policy Rules

	Constrained Policy		Unconstrained Policy	
	2012Q3	2012Q4	2012Q3	2012Q4
Taylor (1993) rule	1.50	1.55	1.50	1.55
<i>Previous Tealbook</i>	1.52	1.59	1.52	1.59
Taylor (1999) rule	0.13	0.13	-0.88	-0.84
<i>Previous Tealbook</i>	0.13	0.13	-0.73	-0.64
Outcome-based rule	0.13	0.13	-0.02	-0.21
<i>Previous Tealbook</i>	0.13	0.13	0.04	-0.08
First-difference rule	0.13	0.13	-0.15	-0.37
<i>Previous Tealbook</i>	0.13	0.13	-0.07	-0.24
Nominal income targeting rule	0.13	0.13	-0.49	-0.99
<i>Previous Tealbook</i>	0.13	0.13	-0.41	-0.86

Memo: Equilibrium and Actual Real Federal Funds Rate

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Current
Tealbook

Current Quarter Estimate as of Previous
Tealbook

Previous
Tealbook

Tealbook-consistent FRB/US r estimate	-2.79	-2.71	-2.93
Actual real federal funds rate	-1.73		-1.79

Key Elements of the Staff Projection

Figure: GDP Gap

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

Figure: PCE Prices ex. Food and Energy

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

Note: Estimates of r may change at the beginning of a quarter even when the staff outlook is unchanged because the twelve-quarter horizon covered by the calculation has rolled forward one quarter. Therefore, whenever the Tealbook is published early in the quarter, the memo includes a third column labeled "Current Quarter Estimate as of Previous Tealbook."

Policy Rule Simulations

Figure: Nominal Federal Funds Rate

Line chart, by percent, 2012 to 2020. There are five series, "Taylor (1993) rule," "Taylor (1999) rule," "Nominal income targeting rule," "First-difference rule," and "Tealbook baseline." All five series begins at about 0 in 2012:Q1. The Taylor (1993) rule series generally increases to about 1.5 in 2012:Q4. It generally increases to end about 4.25 at 2020:Q4. The other four series remain constant following each other until increasing to end at about 4.5 for the Taylor (1999) rule and Tealbook baseline in 2020:Q4. The nominal income targeting rule ends at about 4.75 in 2020:Q4 and the First-difference rule at about 4 in 2020:Q4.

Figure: Real Federal Funds Rate

Line chart, by percent, 2012 to 2020. There are five series, "Taylor (1993) rule," "Taylor (1999) rule," "Nominal income targeting rule," "First-difference rule," and "Tealbook baseline." All five series begins at about -1.75 in 2012:Q1. The Taylor (1993) rule series generally increases to about 0 in 2012:Q4. It generally increases to end about 2.25 at 2020:Q4 along with the Taylor (1999) rule. The other three series remain constant following each other until increasing to end at about 2.5 for and Tealbook baseline in 2020:Q4. The nominal income targeting rule ends at about 2.6 in 2020:Q4 and the First-difference rule at about 2.1 in 2020:Q4.

Figure: Unemployment Rate

Line chart, by percent, 2012 to 2020. There are five series, "Taylor (1993) rule," "Taylor (1999) rule," "Nominal income targeting rule," "First-difference rule," and "Tealbook baseline." All five series begins at about 8 in 2012:Q1. They follow each other to generally decrease to end at about 5.2 for the nominal income targeting rule in 2020:Q4. The other four series ends at about 5.5 in 2020:Q4.

Figure: PCE Inflation

Line chart, by percent, 2012 to 2020. Data are four-quarter averages. There is a horizontal line at 2. There are five

series, "Taylor (1993) rule," "Taylor (1999) rule," "Nominal income targeting rule," "First-difference rule," and "Tealbook baseline." Taylor (1993) rule begins in 2012 at about 2.4 and generally decrease to about 0.7 by 2013. It then generally increases to end at about 1.99 by 2020. Taylor (1999) rule begins in 2012 at about 2.4 and generally decreases to about 1.0 by 2013. It then generally increases to about 2.1 by 2020. Nominal income targeting rule begins in 2012 at about 2.4 and generally decreases to about 1.3 by 2013. It then generally increases to about 2.1 by 2020. First-difference rule begins in 2012 at about 2.4 and generally decreases to about 0.7 by 2013. It then generally increases to end at about 1.8 by 2020. Tealbook baseline begins in 2012 at about 2.4 and generally decreases to about 1.0 by 2013. It generally increases to end at about 2.0 in 2020.

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

Constrained vs. Unconstrained Optimal Control Policy

Figure: Nominal Federal Funds Rate

Line chart, by percent 2012 to 2020. There are four series, "Current Tealbook: Constrained," "Previous Tealbook: Constrained," "Current Tealbook: Unconstrained," and "Tealbook baseline." Current Tealbook: Constrained begins in 2012 at about 0.1 and remains relatively constant here until 2014. It generally increases to end at about 4.9 in 2020. Previous Tealbook: Constrained generally follows the same exact path as Current Tealbook: Constrained, and ends at about 4.9 in 2020. Current Tealbook: Unconstrained begins in 2012 at about 0.1 and generally decreases to about -2.5 by 2013. It then generally increases to end at about 4.3 by 2020. Tealbook baseline begins in 2012 at about 0.1 where it remains relatively constant until about 2013. It then generally increases to end about 4.25 by 2020.

Figure: Real Federal Funds Rate

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

Figure: Unemployment Rate

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

Figure: PCE Inflation

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

Outcomes under Alternative Policies

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

Measure and scenario	2012		2013	2014	2015	2016
	H1	H2				
<i>Real GDP</i>						
Extended Tealbook baseline	1.4	1.6	2.1	3.2	3.6	3.5
Taylor (1993)	1.4	1.3	1.5	2.9	3.7	3.7
Taylor (1999)	1.4	1.6	2.1	3.2	3.6	3.4
First-difference	1.4	1.5	1.7	2.9	3.5	3.5
Nominal income targeting	1.4	1.9	2.7	3.7	3.9	3.5
Constrained optimal control	1.4	2.0	3.0	4.0	4.2	3.6
<i>Unemployment rate¹</i>						
Extended Tealbook baseline	8.2	8.3	8.1	7.8	7.2	6.5
Taylor (1993)	8.2	8.3	8.4	8.3	7.7	6.9
Taylor (1999)	8.2	8.3	8.1	7.8	7.2	6.5
First-difference	8.2	8.3	8.3	8.2	7.6	7.0
Nominal income targeting	8.2	8.3	7.9	7.3	6.5	5.8
Constrained optimal control	8.2	8.3	7.7	7.0	6.1	5.3
<i>Total PCE prices</i>						
Extended Tealbook baseline	1.6	1.1	1.5	1.4	1.6	1.7
Taylor (1993)	1.6	1.0	1.3	1.2	1.3	1.5
Taylor (1999)	1.6	1.2	1.5	1.4	1.6	1.7
First-difference	1.6	0.9	1.2	1.0	1.2	1.3
Nominal income targeting	1.6	1.5	1.9	1.8	2.0	2.1
Constrained optimal control	1.6	1.6	2.1	2.0	2.1	2.2
<i>Core PCE prices</i>						
Extended Tealbook baseline	2.1	1.5	1.6	1.6	1.7	1.7
Taylor (1993)	2.1	1.4	1.4	1.4	1.4	1.5
Taylor (1999)	2.1	1.6	1.6	1.6	1.7	1.8
First-difference	2.1	1.3	1.3	1.3	1.3	1.4
Nominal income targeting	2.1	1.9	2.0	2.1	2.1	2.2
Constrained optimal control	2.1	2.1	2.2	2.2	2.2	2.3
<i>Federal funds rate¹</i>						
Extended Tealbook baseline	0.2	0.1	0.1	0.4	1.5	2.6
Taylor (1993)	0.2	1.4	0.8	1.2	1.9	2.7
Taylor (1999)	0.2	0.1	0.1	0.2	1.5	2.6
First-difference	0.2	0.1	0.1	0.8	1.8	2.9

Nominal income targeting	0.2	0.1	0.1	0.1	0.8	2.0
Constrained optimal control	0.2	0.1	0.1	0.1	0.1	0.9

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

Monetary Policy Alternatives

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

Selected Elements	June Statement	August Alternatives		
		A	B	C
Balance Sheet				
<i>MEP</i>	continue to purchase at current pace Treasury securities with remaining maturities of 6 to 30 years and sell or redeem equal amount with remaining maturities of approx. 3 years or less through the end of 2012	end the program	continue the program through the end of the year as announced in June	
<i>Additional Purchases</i>	none	<p>\$45 billion of Treasury securities per month and \$30 billion of agency MBS per month, until Committee observes sustained improvement in labor market conditions, as long as projected medium-term inflation is close to its mandate-consistent level and longer-term inflation expectations remain stable</p> <p>OR</p> <p>\$600 billion of longer-term Treasury securities and \$400 billion of agency MBS by end of third quarter of 2013</p>	none	none
<i>Reinvestment Policies</i>	principal payments of agency debt and MBS into agency MBS; suspend Treasury rollovers	reinstitute the policy of rolling over maturing Treasury securities at auction	unchanged	unchanged
Forward Rate Guidance				
<i>Guidance</i>	at least through late 2014	at least through mid-2015	unchanged	<p>at least through late 2013</p> <p>OR</p> <p>unchanged</p> <p>OR</p> <p>consider range of</p>

			at least through mid-2015	factors, including actual and projected labor market conditions, medium-term outlook for inflation, & risks to achievement of Committee objectives
<i>Rationale</i>	economic conditions--including low rates of resource utilization and a subdued outlook for inflation over the medium run--are likely to warrant	to support sustained improvement in labor market conditions and to help ensure that inflation is close to its mandate-consistent level over the medium run, ... as the economic recovery strengthens	unchanged	unchanged OR unchanged OR none
Future Policy Action				
<i>Future Actions</i>	none	regularly review the pace and composition of its securities purchases in light of the economic outlook and its ongoing assessments of the efficacy and costs of the program OR regularly review the size and composition of its balance sheet in light of the outlook for inflation and labor market conditions	closely monitor incoming information on economic and financial developments	regularly review size and composition of securities holdings;
	prepared to take further action as appropriate	prepared to make adjustments as appropriate	will provide additional accommodation as needed	prepared to adjust holdings as necessary
	to promote a stronger economic recovery & sustained improvement in labor market conditions in a context of price stability	unchanged	unchanged	to promote maximum employment and price stability

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

August FOMC Statement--Alternative A

1. Information received since the Federal Open Market Committee met in ~~April~~ **June** suggests that ~~the economy has been expanding moderately~~ **economic activity decelerated somewhat over the first half of this year.** ~~However,~~ Growth in employment has ~~slowed~~ **been slow** in recent months, and the unemployment rate remains elevated. Business fixed investment has continued to advance. Household spending appears to be rising at a somewhat slower pace than earlier in the year. Despite some signs of improvement, the

housing sector remains depressed. Inflation has declined **been subdued in recent months**, mainly reflecting lower prices of crude oil and gasoline, and longer-term inflation expectations have remained stable.

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

3. To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee ~~also decided to continue through the end of the year its program to extend the average maturity of its holdings of securities~~ **begin a new large-scale asset purchase program**. Specifically, the Committee **now** intends to ~~purchase Treasury securities with remaining maturities of 6 years to 30 years at the current pace and to sell or redeem an equal amount of Treasury securities with remaining maturities of approximately 3 years or less~~ **increase its holdings of longer-term Treasury securities at a pace of about [\$45] billion per month and of agency mortgage-backed securities at a pace of about [\$30] billion per month**. The Committee anticipates continuing to add to its holdings at least until it observes sustained improvement in labor market conditions, as long as projected medium-term inflation is close to its mandate-consistent level and longer-term inflation expectations remain stable. ~~This continuation of the maturity extension program~~ **The increase in the Committee's securities holdings** should put downward pressure on longer-term interest rates, **support mortgage markets**, and help to make broader financial conditions more accommodative. **This new purchase program replaces the previously announced maturity extension program; therefore, the Committee is ending its sales of shorter-term Treasury securities and reinstating its policy of rolling over maturing Treasury securities at auction**. The Committee is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities. The Committee **will regularly review the pace and composition of its securities purchases in light of the economic outlook and its ongoing assessments of the efficacy and costs of the program**, and is prepared to ~~take further action~~ **make adjustments** as appropriate to promote a stronger economic recovery and sustained improvement in labor market conditions in a context of price stability.

OR

3'. To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee ~~also decided to continue through the end of the year its program to extend the average maturity of its holdings of securities~~ **begin a new large-scale asset purchase program**. Specifically, the Committee **now** intends to ~~purchase Treasury securities with remaining maturities of 6 years to 30 years at the current pace and to sell or redeem an equal amount of Treasury securities with remaining maturities of approximately 3 years or less~~ **[\$600 billion] of longer-term Treasury securities and [\$400 billion] of agency mortgage-backed securities by the end of the third quarter of 2013, a combined pace of about [\$75] billion a month**. ~~This continuation of the maturity extension program~~ **This action** should put downward pressure on longer-term interest rates, **support mortgage markets**, and help to make broader financial conditions more accommodative. **This new purchase program replaces the previously announced maturity extension program; therefore, the Committee is ending its sales of shorter-term Treasury securities and reinstating its policy of rolling over maturing Treasury securities at auction**. The Committee is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities. The Committee **will regularly review the size and composition of its balance sheet in light of the outlook for inflation and labor market conditions** and is prepared to ~~take further action~~ **make adjustments** as appropriate to promote a stronger economic recovery and sustained improvement in labor market conditions in a context of price stability.

4. The Committee **also** decided today to keep the target range for the federal funds rate at 0 to 1/4 percent

~~and~~. To support sustained improvement in labor market conditions and to help ensure that inflation is close to its mandate-consistent level over the medium run, the Committee expects to maintain a highly accommodative stance for monetary policy **as the economic recovery strengthens**. In particular, **the Committee** currently anticipates that ~~economic conditions—including low rates of resource utilization and a subdued outlook for inflation over the medium run—are likely to warrant~~ exceptionally low levels for the federal funds rate **are likely to be warranted** at least through ~~late 2014~~ **mid-2015**.

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

In a related action, the Board of Governors voted today to reduce the interest rate paid on required and excess reserve balances from 25 basis points to 15 basis points effective with the reserve maintenance period that begins on August 9, 2012.

August FOMC Statement--Alternative B

1. Information received since the Federal Open Market Committee met in ~~April~~ **June** suggests that the economy has been expanding moderately **economic activity decelerated somewhat over the first half of** this year. ~~However,~~ Growth in employment has ~~slowed~~ **been slow** in recent months, and the unemployment rate remains elevated. Business fixed investment has continued to advance. Household spending appears to be rising at a somewhat slower pace than earlier in the year. Despite some **further** signs of improvement, the housing sector remains depressed. Inflation has declined **since earlier this year**, mainly reflecting lower prices of crude oil and gasoline, and longer-term inflation expectations have remained stable.

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

3. To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee expects to maintain a highly accommodative stance for monetary policy. In particular, the Committee decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that economic conditions--including low rates of resource utilization and a subdued outlook for inflation over the medium run--are likely to warrant exceptionally low levels for the federal funds rate at least through [late 2014 | **mid-2015**].

4. The Committee also decided to continue through the end of the year its program to extend the average maturity of its holdings of securities **as announced in June**, ~~Specifically, the Committee intends to purchase Treasury securities with remaining maturities of 6 years to 30 years at the current pace and to sell or redeem an equal amount of Treasury securities with remaining maturities of approximately 3 years or less. This continuation of the maturity extension program should put downward pressure on longer term interest rates and help to make broader financial conditions more accommodative. The Committee~~ **and it** is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities. The Committee ~~is prepared to take further action as appropriate~~ **will closely monitor incoming information on economic and financial developments and will provide additional accommodation as needed** to promote a stronger economic recovery and sustained improvement in labor market conditions in a context of price stability.

August FOMC Statement--Alternative C

1. Information received since the Federal Open Market Committee met in April **June** suggests that the economy has been expanding moderately this year. ~~However, growth in employment has slowed in recent months, and the unemployment rate remains elevated.~~ **Employment has shown further gains.** ~~Business fixed investment~~ **Private domestic demand** has continued to advance, ~~Household spending appears to be rising at a somewhat slower pace than earlier in the year.~~ ~~Despite~~ **and** the housing sector remains depressed **has shown** some signs of improvement. Inflation has declined **since earlier this year**, mainly reflecting lower prices of crude oil and gasoline, and longer-term inflation expectations have remained stable.

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

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

OR

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

4. The Committee also decided to continue through the end of the year its program to extend the average maturity of its holdings of securities **as announced in June** ~~Specifically, the Committee intends to purchase Treasury securities with remaining maturities of 6 years to 30 years at the current pace and to sell or redeem an equal amount of Treasury securities with remaining maturities of approximately 3 years or less. This continuation of the maturity extension program should put downward pressure on longer term interest rates and help to make broader financial conditions more accommodative. The Committee is maintaining~~ **and to maintain** its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities. The Committee **will regularly review the size and composition of its securities holdings and** is prepared to ~~take further action as appropriate~~ **adjust those holdings as necessary** to promote **maximum employment and** ~~a stronger economic recovery and sustained improvement in labor market conditions in a context of price stability.~~

Long-Run Projections of the Balance Sheet and Monetary Base

Figure: Total Assets

Line chart, by billions of dollars, 2006 to 2020. Data are monthly. There are four series, "Alt A," "Alt B," "Alt C," and "June Alt B." All four series begin at about 900 in 2006. They all follow the same path to generally increase to about

2500 in 2012. The Alt A series generally increases to about 4000 in 2014. It then generally decreases to end at about 2000 in 2020. The Alt B and June Alt B series generally increases to about 2500 in 2013. It then generally decreases to end at about 2000 in 2020. The Alt C series generally decreases to about 1500 in 2018. It then generally increases to end at about 2000 in 2020.

Growth Rates for the Monetary Base

Date	Alternative B	Alternative A	Alternative C	June Alt B
	Percent, annual rate			
	Monthly			
Apr-12	-12.2	-12.2	-12.2	-12.2
May-12	-8.7	-8.7	-8.7	-8.8
Jun-12	-4.6	-4.6	-4.6	7.9
Jul-12	6.2	6.9	6.2	22.5
Aug-12	12.2	21.6	12.0	10.7
Sep-12	-4.3	15.8	-4.4	-3.4
Oct-12	-11.9	14.5	-12.1	-10.0
Nov-12	8.8	38.5	8.6	7.9
Dec-12	1.2	31.3	1.1	5.8
	Quarterly			
2011 Q3	21.0	21.0	21.0	21.0
2011 Q4	-5.9	-5.9	-5.9	-5.9
2012 Q1	5.5	5.5	5.5	5.5
2012 Q2	-3.9	-3.9	-3.9	-2.5
2012 Q3	2.3	6.9	2.2	10.3
2012 Q4	-1.5	23.3	-1.7	-0.5
2013 Q1	-2.2	28.9	-2.2	-1.0
2013 Q2	-2.4	27.5	-2.4	-2.8
	Annual - Q4 to Q4			
2010	0.9	0.9	0.9	0.9
2011	32.9	32.9	32.9	32.9
2012	0.6	8.1	0.5	3.2
2013	0.6	28.9	-1.6	0.2
2014	-1.8	-0.2	-5.0	-1.0
2015	-4.4	-6.9	-7.9	-6.6
2016	-16.6	-17.7	-17.6	-16.6
2017	-18.0	-19.8	-18.6	-18.1
2018	-7.3	-27.4	3.7	-6.3

Note: Not seasonally adjusted.

Growth Rates for M2

(Percent, seasonally adjusted annual rate)

Tealbook Forecast *		
Monthly Growth Rates		
Jan-12		16.4
Feb-12		3.7
Mar-12		4.3
Apr-12		5.8
May-12		4.3
Jun-12		5.7
Jul-12		6.2
Aug-12		4.1
Sep-12		4.2
Oct-12		3.9
Nov-12		4.0
Dec-12		4.0
Quarterly Growth Rates		
2012 Q1		8.7
2012 Q2		4.9
2012 Q3		5.2
2012 Q4		4.0
2013 Q1		1.8
2013 Q2		2.3
2013 Q3		3.1
2013 Q4		3.4
2014 Q1		3.5
2014 Q2		3.5
2014 Q3		3.5
2014 Q4		0.6
Annual Growth Rates		
2012		5.8
2013		2.7
2014		2.8

* This forecast is consistent with nominal GDP and interest rates in the Tealbook forecast. Actual data through July 16, 2012; projections thereafter. [Return to table](#)

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

August 2012 Directive--Alternative A

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to ~~continue the maturity extension program it began in September to purchase, by the end of June 2012, Treasury securities with remaining maturities of 6 years to 30 years with a total face value of \$400 billion, and to sell Treasury securities with remaining maturities of 3 years or less with a total face value of \$400 billion. Following the conclusion of these purchases, the Committee directs the Desk to purchase Treasury securities with remaining maturities of 6 years to 30 years with a total face value of about \$267 billion by the end of December 2012, and to sell or redeem Treasury securities with remaining maturities of approximately 3 years or less with a total face value of about \$267 billion~~ **begin a new large-scale asset purchase program. This program replaces the previously announced maturity extension program. Specifically, [the Desk is directed to purchase longer-term Treasury securities at a pace of about \$45 billion per month and to purchase agency mortgage-backed securities at a pace of about \$30 billion per month.] the Desk is directed to purchase \$600 billion of longer-term Treasury securities and \$400 billion of agency mortgage-backed securities by the end of the third quarter of 2013.]** For the duration of this program, the Committee directs the Desk to suspend its current **The desk is also directed to reinstate the** policy of rolling over maturing Treasury securities into new issues. The Committee directs the Desk to maintain its existing policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities. ~~These actions should maintain the total face value of domestic securities at approximately \$2.6 trillion.~~ The Committee directs the Desk to engage in dollar roll **and coupon swap** transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

August 2012 Directive--Alternative B

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to continue the maturity extension program it began **announced in June** ~~September to purchase, by the end of June 2012, Treasury securities with remaining maturities of 6 years to 30 years with a total face value of \$400 billion, and to sell or redeem Treasury securities with remaining maturities of 3 years or less with a total face value of \$400 billion. Following the conclusion of these purchases, the Committee directs the Desk to purchase Treasury securities with remaining maturities of 6 years to 30 years with a total face value of about \$267 billion by the end of December 2012, and to sell or redeem Treasury securities with remaining maturities of approximately 3 years or less with a total face value of about \$267 billion.~~ For the duration of this program, the Committee directs the Desk to suspend its current policy of rolling over maturing Treasury securities into new issues. The Committee directs the Desk to maintain its existing policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities. These actions should maintain the total face value of domestic securities at approximately \$2.6 trillion. The Committee directs the Desk to engage in dollar roll transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

August 2012 Directive--Alternative C

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to continue the maturity extension program it ~~began~~ **announced** in ~~June~~ ~~September to purchase, by the end of June 2012, Treasury securities with remaining maturities of 6 years to 30 years with a total face value of \$400 billion, and to sell or redeem Treasury securities with remaining maturities of 3 years or less with a total face value of \$400 billion.~~ Following the conclusion of these purchases, the Committee directs the Desk to purchase Treasury securities with remaining maturities of 6 years to 30 years with a total face value of about \$267 billion by the end of December 2012, and to sell or redeem Treasury securities with remaining maturities of approximately 3 years or less with a total face value of about \$267 billion. For the duration of this program, the Committee directs the Desk to suspend its current policy of rolling over maturing Treasury securities into new issues. The Committee directs the Desk to maintain its existing policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities. These actions should maintain the total face value of domestic securities at approximately \$2.6 trillion. The Committee directs the Desk to engage in dollar roll transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

Explanatory Notes

A. Policy Rules Used in "Monetary Policy Strategies"

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

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

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

10-Year Treasury Term Premium Effect

Date	Alternative B	Alternative A	Alternative C	June Alternative B
	Basis Points Quarterly Averages			
2012 Q3	-70	-89	-63	-68
2012 Q4	-66	-86	-60	-65
2013 Q1	-63	-82	-56	-62
2013 Q2	-59	-78	-52	-58
2013 Q3	-55	-74	-47	-54
2013 Q4	-51	-69	-44	-50
2014 Q1	-47	-64	-40	-47
2014 Q2	-43	-59	-36	-43
2014 Q3	-40	-54	-33	-40
2014 Q4	-36	-50	-30	-37
2015 Q1	-33	-45	-27	-34
2015 Q2	-29	-40	-24	-31
2015 Q3	-26	-36	-21	-28
2015 Q4	-24	-32	-19	-26
2016 Q1	-21	-29	-17	-24
2016 Q2	-19	-25	-15	-22
2016 Q3	-17	-22	-13	-20
2016 Q4	-15	-20	-11	-18
2017 Q1	-13	-17	-10	-16
2017 Q2	-11	-15	-9	-15
2017 Q3	-10	-13	-8	-14
2017 Q4	-9	-11	-7	-13
2018 Q1	-8	-9	-6	-12
2018 Q2	-7	-8	-6	-11
2018 Q3	-7	-7	-6	-10
2018 Q4	-6	-6	-5	-10
2019 Q1	-6	-5	-5	-9
2019 Q2	-6	-5	-5	-9
2019 Q3	-5	-5	-5	-8
2019 Q4	-5	-4	-5	-8
2020 Q1	-5	-4	-4	-7
2020 Q2	-4	-4	-4	-7

2020 Q3	-4	-3	-4	-6
2020 Q4	-4	-3	-3	-6

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

Billions of dollars

	Jun 29, 2012	2012	2014	2016	2018	2020
Total assets	2,862	2,841	2,790	2,201	1,796	1,993
Selected assets						
Liquidity programs for financial firms	28	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	28	0	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	6	3	1	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	15	2	0	0	0	0
Securities held outright	2,606	2,594	2,570	2,022	1,652	1,873
U.S. Treasury securities	1,660	1,654	1,654	1,435	1,413	1,873
Agency debt securities	91	77	39	16	2	0
Agency mortgage-backed securities	855	863	878	571	237	0
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	206	242	218	178	144	120
Total liabilities	2,808	2,779	2,708	2,092	1,653	1,804
Selected liabilities						
Federal Reserve notes in circulation	1,070	1,108	1,250	1,390	1,535	1,687
Reverse repurchase agreements	70	70	70	70	70	70
Deposits with Federal Reserve Banks	1,647	1,584	1,372	616	32	32
Reserve balances held by depository institutions	1,524	1,492	1,365	610	25	25
U.S. Treasury, General Account	91	90	5	5	5	5
Other Deposits	32	2	2	2	2	2
Interest of Federal Reserve Notes due to U.S. Treasury	3	0	0	0	0	0
Total capital	55	62	82	108	143	189

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

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

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

Billions of dollars

	Jun 29, 2012	2012	2014	2016	2018	2020
Total assets	2,862	3,144	3,856	2,899	1,798	1,995
Selected assets						
Liquidity programs for financial firms	28	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	28	0	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	6	3	1	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	15	2	0	0	0	0
Securities held outright	2,606	2,901	3,617	2,714	1,656	1,884
U.S. Treasury securities	1,660	1,868	2,249	1,751	1,190	1,884
Agency debt securities	91	77	39	16	2	0
Agency mortgage-backed securities	855	956	1,329	947	463	0
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	206	238	237	185	142	111
Total liabilities	2,808	3,082	3,774	2,791	1,655	1,805
Selected liabilities						
Federal Reserve notes in circulation	1,070	1,108	1,250	1,390	1,535	1,687
Reverse repurchase agreements	70	70	70	70	70	70
Deposits with Federal Reserve Banks	1,647	1,886	2,435	1,312	32	32
Reserve balances held by depository institutions	1,524	1,794	2,344	1,306	25	25
U.S. Treasury, General Account	91	90	90	5	5	5
Other Deposits	32	2	2	2	2	2
Interest of Federal Reserve Notes due to U.S. Treasury	3	0	0	0	0	0
Total capital	55	62	82	108	143	189

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

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

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

Billions of dollars

	Jun 29, 2012	2012	2014	2016	2018	2020
Total assets	2,862	2,839	2,587	1,995	1,796	1,993
Selected assets						
Liquidity programs for financial firms	28	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0

Central bank liquidity swaps	28	0	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	6	3	1	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	15	2	0	0	0	0
Securities held outright	2,606	2,594	2,376	1,825	1,658	1,874
U.S. Treasury securities	1,660	1,654	1,654	1,435	1,592	1,874
Agency debt securities	91	77	39	16	2	0
Agency mortgage-backed securities	855	863	683	374	64	0
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	206	240	209	170	138	119
Total liabilities	2,808	2,777	2,505	1,887	1,653	1,804
Selected liabilities						
Federal Reserve notes in circulation	1,070	1,108	1,250	1,390	1,535	1,687
Reverse repurchase agreements	70	70	70	70	70	70
Deposits with Federal Reserve Banks	1,647	1,582	1,168	411	32	32
Reserve balances held by depository institutions	1,524	1,490	1,162	405	25	25
U.S. Treasury, General Account	91	90	5	5	5	5
Other Deposits	32	2	2	2	2	2
Interest of Federal Reserve Notes due to U.S. Treasury	3	0	0	0	0	0
Total capital	55	62	82	108	143	189

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

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

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

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